ANALYTICAL REPORT

Job Number: 500-136523-1

Job Description: Ellsworth Industrial Park

For:
Ramboll Environ US Corporation
333 W Wacker Drive
Suite 2700
Chicago, IL 60606

Attention: Ross Jones

Approved for release.
Therese M Hargraves
Project Manager I
11/9/2017 8:05 AM

Designee for
Jim D Knapp, Project Manager II
2417 Bond Street, University Park, IL, 60484
(630)758-0262
jim.knapp@testamericainc.com
11/09/2017

These test results meet all the requirements of NELAC for accredited parameters.

The Lab Certification ID# is 100201.

All questions regarding this test report should be directed to the TestAmerica Project Manager whose signature appears on this report. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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
500-136523-1

Comments
No additional comments.

Receipt
The samples were received on 10/31/2017 11:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

Receipt Exceptions
Received 1 VOA vial for sample 1 with headpsace.

GC/MS VOA
Method(s) 8260B: The following sample detected Acetone above the reporting limit: EIP-TB09-103017 (500-136523-1). The method blank 408477 associated with the sample did not detect Acetone. Since Acetone is a known lab contaminant and the results are below 3X the repoting limit; the results have been flagged with a "cn" flag to denote the possible lab contamination.

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

GC VOA
Method(s) RSK-175: Parent sample for the client-specific MS/MSD had low surrogate recovery and the analyte Methane was out of the calibration range. Data results were set to acceptable. Parent sample, MS and MSD will be rerun at a dilution: OMW3D-GW-103017 (500-136523-2), OMW4D-GW-103017 (500-136523-4), (240-87253-L-1), (240-87253-O-1 MS) and (240-87253-R-1 MSD)

Method(s) RSK-175: The associated RSK samples were analyzed following the requirements of a revised RSK SOP. Samples were analyzed to avoid hold time violations while the SOP is still waiting final approval signatures.

OMW3D-GW-103017 (500-136523-2), OMW4D-GW-103017 (500-136523-4), (CCV 240-301727/19), (LCS 240-301727/5), (240-87253-L-1), (240-87253-O-1 MS) and (240-87253-R-1 MSD)

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

General Chemistry
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: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: EIP-TB09-103017 — Lab Sample ID: 500-136523-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0064	cn	0.0050	0.0017	mg/L	1		8260B	Total/NA

Client Sample ID: OMW3D-GW-103017 — Lab Sample ID: 500-136523-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.00077	J	0.0010	0.00037	mg/L	1		8260B	Total/NA
Toluene	0.00043	J	0.00050	0.00015	mg/L	1		8260B	Total/NA
Trichloroethene	0.0013		0.00050	0.00016	mg/L	1		8260B	Total/NA
Chloride	200		10	8.5	mg/L	50		9056A	Total/NA
Nitrate as N	1.0		0.20	0.068	mg/L	1		9056A	Total/NA
Sulfate	110		4.0	1.9	mg/L	20		9056A	Total/NA
Total Organic Carbon - Duplicates	2.4		1.0	0.47	mg/L	1		9060A	Total/NA

Client Sample ID: EIP-EB-103017 — Lab Sample ID: 500-136523-3

No Detections.

Client Sample ID: OMW4D-GW-103017 — Lab Sample ID: 500-136523-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0019		0.0010	0.00037	mg/L	1		8260B	Total/NA
Toluene	0.00051		0.00050	0.00015	mg/L	1		8260B	Total/NA
Trichloroethene	0.0017		0.00050	0.00016	mg/L	1		8260B	Total/NA
Chloride	220		10	8.5	mg/L	50		9056A	Total/NA
Nitrate as N	1.7		0.20	0.068	mg/L	1		9056A	Total/NA
Sulfate	120		4.0	1.9	mg/L	20		9056A	Total/NA
Total Organic Carbon - Duplicates	1.4		1.0	0.47	mg/L	1		9060A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: EIP-TB09-103017

Date Collected: 10/30/17 00:00
Date Received: 10/31/17 11:50

Lab Sample ID: 500-136523-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046	mg/L			11/05/17 13:55	1
1,1,1-Trichloroethane	ND		0.0010	0.00038	mg/L			11/05/17 13:55	1
1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040	mg/L			11/05/17 13:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046	mg/L			11/05/17 13:55	1
1,1,2-Trichloroethane	ND		0.0010	0.00035	mg/L			11/05/17 13:55	1
1,1-Dichloroethane	ND		0.0010	0.00041	mg/L			11/05/17 13:55	1
1,1-Dichloroethene	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
1,1-Dichloropropene	ND		0.0010	0.00030	mg/L			11/05/17 13:55	1
1,2,3-Trichlorobenzene	ND		0.0010	0.00046	mg/L			11/05/17 13:55	1
1,2,3-Trichloropropane	ND		0.0010	0.00041	mg/L			11/05/17 13:55	1
1,2,4-Trichlorobenzene	ND		0.0010	0.00034	mg/L			11/05/17 13:55	1
1,2,4-Trimethylbenzene	ND		0.0010	0.00036	mg/L			11/05/17 13:55	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020	mg/L			11/05/17 13:55	1
1,2-Dibromoethane	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
1,2-Dichlorobenzene	ND		0.0010	0.00033	mg/L			11/05/17 13:55	1
1,2-Dichloroethane	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
1,2-Dichloropropane	ND		0.0010	0.00043	mg/L			11/05/17 13:55	1
1,3,5-Trimethylbenzene	ND		0.0010	0.00025	mg/L			11/05/17 13:55	1
1,3-Dichlorobenzene	ND		0.0010	0.00040	mg/L			11/05/17 13:55	1
1,3-Dichloropropane	ND		0.0010	0.00036	mg/L			11/05/17 13:55	1
1,4-Dichlorobenzene	ND		0.0010	0.00036	mg/L			11/05/17 13:55	1
1,4-Dioxane	ND		0.10	0.041	mg/L			11/05/17 13:55	1
2,2-Dichloropropane	ND		0.0010	0.00044	mg/L			11/05/17 13:55	1
2-Chloroethyl vinyl ether	ND		0.0020	0.00077	mg/L			11/05/17 13:55	1
2-Chlorotoluene	ND		0.0010	0.00031	mg/L			11/05/17 13:55	1
2-Hexanone	ND		0.0050	0.0016	mg/L			11/05/17 13:55	1
4-Chlorotoluene	ND		0.0010	0.00035	mg/L			11/05/17 13:55	1
Acetone	**0.0064**	**cn**	0.0050	0.0017	mg/L			11/05/17 13:55	1
Acrolein	ND		0.10	0.023	mg/L			11/05/17 13:55	1
Acrylonitrile	ND		0.020	0.0045	mg/L			11/05/17 13:55	1
Benzene	ND		0.00050	0.00015	mg/L			11/05/17 13:55	1
Bromobenzene	ND		0.0010	0.00036	mg/L			11/05/17 13:55	1
Bromochloromethane	ND		0.0010	0.00043	mg/L			11/05/17 13:55	1
Bromodichloromethane	ND		0.0010	0.00037	mg/L			11/05/17 13:55	1
Bromoform	ND		0.0010	0.00048	mg/L			11/05/17 13:55	1
Bromomethane	ND		0.0020	0.00080	mg/L			11/05/17 13:55	1
Carbon disulfide	ND		0.0020	0.00045	mg/L			11/05/17 13:55	1
Carbon tetrachloride	ND		0.0010	0.00038	mg/L			11/05/17 13:55	1
Chlorobenzene	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
Chloroethane	ND		0.0010	0.00051	mg/L			11/05/17 13:55	1
Chloroform	ND		0.0020	0.00037	mg/L			11/05/17 13:55	1
Chloromethane	ND		0.0010	0.00032	mg/L			11/05/17 13:55	1
cis-1,2-Dichloroethene	ND		0.0010	0.00041	mg/L			11/05/17 13:55	1
cis-1,3-Dichloropropene	ND		0.0010	0.00042	mg/L			11/05/17 13:55	1
Cyclohexane	ND		0.0010	0.00049	mg/L			11/05/17 13:55	1
Dibromochloromethane	ND		0.0010	0.00049	mg/L			11/05/17 13:55	1
Dibromomethane	ND		0.0010	0.00027	mg/L			11/05/17 13:55	1
Dichlorodifluoromethane	ND		0.0020	0.00067	mg/L			11/05/17 13:55	1
Ethylbenzene	ND		0.00050	0.00018	mg/L			11/05/17 13:55	1

Client Sample ID: EIP-TB09-103017

Date Collected: 10/30/17 00:00
Date Received: 10/31/17 11:50

Lab Sample ID: 500-136523-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		0.0025	0.00066	mg/L			11/05/17 13:55	1
Isopropyl ether	ND		0.0010	0.00028	mg/L			11/05/17 13:55	1
Isopropylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
Methyl acetate	ND		0.0050	0.0020	mg/L			11/05/17 13:55	1
Methyl Ethyl Ketone	ND		0.0050	0.0021	mg/L			11/05/17 13:55	1
methyl isobutyl ketone	ND		0.0050	0.0022	mg/L			11/05/17 13:55	1
Methyl tert-butyl ether	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
Methylcyclohexane	ND		0.0010	0.00032	mg/L			11/05/17 13:55	1
Methylene Chloride	ND		0.0050	0.0016	mg/L			11/05/17 13:55	1
Naphthalene	ND		0.0010	0.00034	mg/L			11/05/17 13:55	1
n-Butylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
N-Propylbenzene	ND		0.0010	0.00041	mg/L			11/05/17 13:55	1
p-Isopropyltoluene	ND		0.0010	0.00036	mg/L			11/05/17 13:55	1
sec-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 13:55	1
Styrene	ND		0.0010	0.00039	mg/L			11/05/17 13:55	1
Tert-amyl methyl ether	ND		0.0010	0.00040	mg/L			11/05/17 13:55	1
tert-Butyl alcohol	ND		0.050	0.012	mg/L			11/05/17 13:55	1
Tert-butyl ethyl ether	ND		0.0010	0.00026	mg/L			11/05/17 13:55	1
tert-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 13:55	1
Tetrachloroethene	ND		0.0010	0.00037	mg/L			11/05/17 13:55	1
Toluene	ND		0.00050	0.00015	mg/L			11/05/17 13:55	1
trans-1,2-Dichloroethene	ND		0.0010	0.00035	mg/L			11/05/17 13:55	1
trans-1,3-Dichloropropene	ND		0.0010	0.00036	mg/L			11/05/17 13:55	1
trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012	mg/L			11/05/17 13:55	1
Trichloroethene	ND		0.00050	0.00016	mg/L			11/05/17 13:55	1
Trichlorofluoromethane	ND		0.0010	0.00043	mg/L			11/05/17 13:55	1
Vinyl acetate	ND		0.0020	0.00091	mg/L			11/05/17 13:55	1
Vinyl chloride	ND		0.00050	0.00020	mg/L			11/05/17 13:55	1
Xylenes, Total	ND		0.0010	0.00022	mg/L			11/05/17 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 126*		*11/05/17 13:55*	*1*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*		*11/05/17 13:55*	*1*
Dibromofluoromethane	*90*		*75 - 120*		*11/05/17 13:55*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*11/05/17 13:55*	*1*

Client Sample Results

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: OMW3D-GW-103017

Lab Sample ID: 500-136523-2

Date Collected: 10/30/17 09:45

Matrix: Water

Date Received: 10/31/17 11:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		2.0	0.24	ug/L			11/02/17 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 125*		*11/02/17 13:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046	mg/L			11/05/17 14:23	1
1,1,1-Trichloroethane	ND		0.0010	0.00038	mg/L			11/05/17 14:23	1
1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040	mg/L			11/05/17 14:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046	mg/L			11/05/17 14:23	1
1,1,2-Trichloroethane	ND		0.0010	0.00035	mg/L			11/05/17 14:23	1
1,1-Dichloroethane	ND		0.0010	0.00041	mg/L			11/05/17 14:23	1
1,1-Dichloroethene	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
1,1-Dichloropropene	ND		0.0010	0.00030	mg/L			11/05/17 14:23	1
1,2,3-Trichlorobenzene	ND		0.0010	0.00046	mg/L			11/05/17 14:23	1
1,2,3-Trichloropropane	ND		0.0010	0.00041	mg/L			11/05/17 14:23	1
1,2,4-Trichlorobenzene	ND		0.0010	0.00034	mg/L			11/05/17 14:23	1
1,2,4-Trimethylbenzene	ND		0.0010	0.00036	mg/L			11/05/17 14:23	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020	mg/L			11/05/17 14:23	1
1,2-Dibromoethane	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
1,2-Dichlorobenzene	ND		0.0010	0.00033	mg/L			11/05/17 14:23	1
1,2-Dichloroethane	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
1,2-Dichloropropane	ND		0.0010	0.00043	mg/L			11/05/17 14:23	1
1,3,5-Trimethylbenzene	ND		0.0010	0.00025	mg/L			11/05/17 14:23	1
1,3-Dichlorobenzene	ND		0.0010	0.00040	mg/L			11/05/17 14:23	1
1,3-Dichloropropane	ND		0.0010	0.00036	mg/L			11/05/17 14:23	1
1,4-Dichlorobenzene	ND		0.0010	0.00036	mg/L			11/05/17 14:23	1
1,4-Dioxane	ND		0.10	0.041	mg/L			11/05/17 14:23	1
2,2-Dichloropropane	ND		0.0010	0.00044	mg/L			11/05/17 14:23	1
2-Chloroethyl vinyl ether	ND		0.0020	0.00077	mg/L			11/05/17 14:23	1
2-Chlorotoluene	ND		0.0010	0.00031	mg/L			11/05/17 14:23	1
2-Hexanone	ND		0.0050	0.0016	mg/L			11/05/17 14:23	1
4-Chlorotoluene	ND		0.0010	0.00035	mg/L			11/05/17 14:23	1
Acetone	ND		0.0050	0.0017	mg/L			11/05/17 14:23	1
Acrolein	ND		0.10	0.023	mg/L			11/05/17 14:23	1
Acrylonitrile	ND		0.020	0.0045	mg/L			11/05/17 14:23	1
Benzene	ND		0.00050	0.00015	mg/L			11/05/17 14:23	1
Bromobenzene	ND		0.0010	0.00036	mg/L			11/05/17 14:23	1
Bromochloromethane	ND		0.0010	0.00043	mg/L			11/05/17 14:23	1
Bromodichloromethane	ND		0.0010	0.00037	mg/L			11/05/17 14:23	1
Bromoform	ND		0.0010	0.00048	mg/L			11/05/17 14:23	1
Bromomethane	ND		0.0020	0.00080	mg/L			11/05/17 14:23	1
Carbon disulfide	ND		0.0020	0.00045	mg/L			11/05/17 14:23	1
Carbon tetrachloride	ND		0.0010	0.00038	mg/L			11/05/17 14:23	1
Chlorobenzene	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
Chloroethane	ND		0.0010	0.00051	mg/L			11/05/17 14:23	1
Chloroform	ND		0.0020	0.00037	mg/L			11/05/17 14:23	1
Chloromethane	ND		0.0010	0.00032	mg/L			11/05/17 14:23	1
cis-1,2-Dichloroethene	ND		0.0010	0.00041	mg/L			11/05/17 14:23	1

Client Sample ID: OMW3D-GW-103017

Lab Sample ID: 500-136523-2

Date Collected: 10/30/17 09:45

Matrix: Water

Date Received: 10/31/17 11:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.0010	0.00042	mg/L			11/05/17 14:23	1
Cyclohexane	ND		0.0010	0.00049	mg/L			11/05/17 14:23	1
Dibromochloromethane	ND		0.0010	0.00049	mg/L			11/05/17 14:23	1
Dibromomethane	ND		0.0010	0.00027	mg/L			11/05/17 14:23	1
Dichlorodifluoromethane	ND		0.0020	0.00067	mg/L			11/05/17 14:23	1
Ethylbenzene	ND		0.00050	0.00018	mg/L			11/05/17 14:23	1
Iodomethane	ND		0.0025	0.00066	mg/L			11/05/17 14:23	1
Isopropyl ether	ND		0.0010	0.00028	mg/L			11/05/17 14:23	1
Isopropylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
Methyl acetate	ND		0.0050	0.0020	mg/L			11/05/17 14:23	1
Methyl Ethyl Ketone	ND		0.0050	0.0021	mg/L			11/05/17 14:23	1
methyl isobutyl ketone	ND		0.0050	0.0022	mg/L			11/05/17 14:23	1
Methyl tert-butyl ether	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
Methylcyclohexane	ND		0.0010	0.00032	mg/L			11/05/17 14:23	1
Methylene Chloride	ND		0.0050	0.0016	mg/L			11/05/17 14:23	1
Naphthalene	ND		0.0010	0.00034	mg/L			11/05/17 14:23	1
n-Butylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
N-Propylbenzene	ND		0.0010	0.00041	mg/L			11/05/17 14:23	1
p-Isopropyltoluene	ND		0.0010	0.00036	mg/L			11/05/17 14:23	1
sec-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 14:23	1
Styrene	ND		0.0010	0.00039	mg/L			11/05/17 14:23	1
Tert-amyl methyl ether	ND		0.0010	0.00040	mg/L			11/05/17 14:23	1
tert-Butyl alcohol	ND		0.050	0.012	mg/L			11/05/17 14:23	1
Tert-butyl ethyl ether	ND		0.0010	0.00026	mg/L			11/05/17 14:23	1
tert-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 14:23	1
Tetrachloroethene	**0.00077**	**J**	0.0010	0.00037	mg/L			11/05/17 14:23	1
Toluene	**0.00043**	**J**	0.00050	0.00015	mg/L			11/05/17 14:23	1
trans-1,2-Dichloroethene	ND		0.0010	0.00035	mg/L			11/05/17 14:23	1
trans-1,3-Dichloropropene	ND		0.0010	0.00036	mg/L			11/05/17 14:23	1
trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012	mg/L			11/05/17 14:23	1
Trichloroethene	**0.0013**		0.00050	0.00016	mg/L			11/05/17 14:23	1
Trichlorofluoromethane	ND		0.0010	0.00043	mg/L			11/05/17 14:23	1
Vinyl acetate	ND		0.0020	0.00091	mg/L			11/05/17 14:23	1
Vinyl chloride	ND		0.00050	0.00020	mg/L			11/05/17 14:23	1
Xylenes, Total	ND		0.0010	0.00022	mg/L			11/05/17 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 126*		*11/05/17 14:23*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*		*11/05/17 14:23*	*1*
Dibromofluoromethane	*91*		*75 - 120*		*11/05/17 14:23*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*11/05/17 14:23*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		1.0	0.17	ug/L			11/02/17 12:36	1
Ethane	ND		1.0	0.10	ug/L			11/02/17 12:36	1
Ethylene	ND		1.0	0.11	ug/L			11/02/17 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*85*		*60 - 140*		*11/02/17 12:36*	*1*

Client Sample Results

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: OMW3D-GW-103017

Lab Sample ID: 500-136523-2

Date Collected: 10/30/17 09:45

Matrix: Water

Date Received: 10/31/17 11:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		10	8.5	mg/L			11/01/17 16:55	50
Nitrate as N	**1.0**		0.20	0.068	mg/L			11/01/17 09:41	1
Sulfate	**110**		4.0	1.9	mg/L			11/01/17 16:43	20
Total Organic Carbon - Duplicates	**2.4**		1.0	0.47	mg/L			11/07/17 23:34	1
Sulfide	ND		1.0	0.23	mg/L			11/02/17 07:03	1

Client Sample Results

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: EIP-EB-103017

Lab Sample ID: 500-136523-3

Date Collected: 10/30/17 11:30

Matrix: Water

Date Received: 10/31/17 11:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046	mg/L			11/05/17 15:21	1
1,1,1-Trichloroethane	ND		0.0010	0.00038	mg/L			11/05/17 15:21	1
1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040	mg/L			11/05/17 15:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046	mg/L			11/05/17 15:21	1
1,1,2-Trichloroethane	ND		0.0010	0.00035	mg/L			11/05/17 15:21	1
1,1-Dichloroethane	ND		0.0010	0.00041	mg/L			11/05/17 15:21	1
1,1-Dichloroethene	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
1,1-Dichloropropene	ND		0.0010	0.00030	mg/L			11/05/17 15:21	1
1,2,3-Trichlorobenzene	ND		0.0010	0.00046	mg/L			11/05/17 15:21	1
1,2,3-Trichloropropane	ND		0.0010	0.00041	mg/L			11/05/17 15:21	1
1,2,4-Trichlorobenzene	ND		0.0010	0.00034	mg/L			11/05/17 15:21	1
1,2,4-Trimethylbenzene	ND		0.0010	0.00036	mg/L			11/05/17 15:21	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020	mg/L			11/05/17 15:21	1
1,2-Dibromoethane	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
1,2-Dichlorobenzene	ND		0.0010	0.00033	mg/L			11/05/17 15:21	1
1,2-Dichloroethane	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
1,2-Dichloropropane	ND		0.0010	0.00043	mg/L			11/05/17 15:21	1
1,3,5-Trimethylbenzene	ND		0.0010	0.00025	mg/L			11/05/17 15:21	1
1,3-Dichlorobenzene	ND		0.0010	0.00040	mg/L			11/05/17 15:21	1
1,3-Dichloropropane	ND		0.0010	0.00036	mg/L			11/05/17 15:21	1
1,4-Dichlorobenzene	ND		0.0010	0.00036	mg/L			11/05/17 15:21	1
1,4-Dioxane	ND		0.10	0.041	mg/L			11/05/17 15:21	1
2,2-Dichloropropane	ND		0.0010	0.00044	mg/L			11/05/17 15:21	1
2-Chloroethyl vinyl ether	ND		0.0020	0.00077	mg/L			11/05/17 15:21	1
2-Chlorotoluene	ND		0.0010	0.00031	mg/L			11/05/17 15:21	1
2-Hexanone	ND		0.0050	0.0016	mg/L			11/05/17 15:21	1
4-Chlorotoluene	ND		0.0010	0.00035	mg/L			11/05/17 15:21	1
Acetone	ND		0.0050	0.0017	mg/L			11/05/17 15:21	1
Acrolein	ND		0.10	0.023	mg/L			11/05/17 15:21	1
Acrylonitrile	ND		0.020	0.0045	mg/L			11/05/17 15:21	1
Benzene	ND		0.00050	0.00015	mg/L			11/05/17 15:21	1
Bromobenzene	ND		0.0010	0.00036	mg/L			11/05/17 15:21	1
Bromochloromethane	ND		0.0010	0.00043	mg/L			11/05/17 15:21	1
Bromodichloromethane	ND		0.0010	0.00037	mg/L			11/05/17 15:21	1
Bromoform	ND		0.0010	0.00048	mg/L			11/05/17 15:21	1
Bromomethane	ND		0.0020	0.00080	mg/L			11/05/17 15:21	1
Carbon disulfide	ND		0.0020	0.00045	mg/L			11/05/17 15:21	1
Carbon tetrachloride	ND		0.0010	0.00038	mg/L			11/05/17 15:21	1
Chlorobenzene	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
Chloroethane	ND		0.0010	0.00051	mg/L			11/05/17 15:21	1
Chloroform	ND		0.0020	0.00037	mg/L			11/05/17 15:21	1
Chloromethane	ND		0.0010	0.00032	mg/L			11/05/17 15:21	1
cis-1,2-Dichloroethene	ND		0.0010	0.00041	mg/L			11/05/17 15:21	1
cis-1,3-Dichloropropene	ND		0.0010	0.00042	mg/L			11/05/17 15:21	1
Cyclohexane	ND		0.0010	0.00049	mg/L			11/05/17 15:21	1
Dibromochloromethane	ND		0.0010	0.00049	mg/L			11/05/17 15:21	1
Dibromomethane	ND		0.0010	0.00027	mg/L			11/05/17 15:21	1
Dichlorodifluoromethane	ND		0.0020	0.00067	mg/L			11/05/17 15:21	1
Ethylbenzene	ND		0.00050	0.00018	mg/L			11/05/17 15:21	1

Client Sample ID: EIP-EB-103017

Date Collected: 10/30/17 11:30
Date Received: 10/31/17 11:50

Lab Sample ID: 500-136523-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		0.0025	0.00066	mg/L			11/05/17 15:21	1
Isopropyl ether	ND		0.0010	0.00028	mg/L			11/05/17 15:21	1
Isopropylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
Methyl acetate	ND		0.0050	0.0020	mg/L			11/05/17 15:21	1
Methyl Ethyl Ketone	ND		0.0050	0.0021	mg/L			11/05/17 15:21	1
methyl isobutyl ketone	ND		0.0050	0.0022	mg/L			11/05/17 15:21	1
Methyl tert-butyl ether	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
Methylcyclohexane	ND		0.0010	0.00032	mg/L			11/05/17 15:21	1
Methylene Chloride	ND		0.0050	0.0016	mg/L			11/05/17 15:21	1
Naphthalene	ND		0.0010	0.00034	mg/L			11/05/17 15:21	1
n-Butylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
N-Propylbenzene	ND		0.0010	0.00041	mg/L			11/05/17 15:21	1
p-Isopropyltoluene	ND		0.0010	0.00036	mg/L			11/05/17 15:21	1
sec-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 15:21	1
Styrene	ND		0.0010	0.00039	mg/L			11/05/17 15:21	1
Tert-amyl methyl ether	ND		0.0010	0.00040	mg/L			11/05/17 15:21	1
tert-Butyl alcohol	ND		0.050	0.012	mg/L			11/05/17 15:21	1
Tert-butyl ethyl ether	ND		0.0010	0.00026	mg/L			11/05/17 15:21	1
tert-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 15:21	1
Tetrachloroethene	ND		0.0010	0.00037	mg/L			11/05/17 15:21	1
Toluene	ND		0.00050	0.00015	mg/L			11/05/17 15:21	1
trans-1,2-Dichloroethene	ND		0.0010	0.00035	mg/L			11/05/17 15:21	1
trans-1,3-Dichloropropene	ND		0.0010	0.00036	mg/L			11/05/17 15:21	1
trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012	mg/L			11/05/17 15:21	1
Trichloroethene	ND		0.00050	0.00016	mg/L			11/05/17 15:21	1
Trichlorofluoromethane	ND		0.0010	0.00043	mg/L			11/05/17 15:21	1
Vinyl acetate	ND		0.0020	0.00091	mg/L			11/05/17 15:21	1
Vinyl chloride	ND		0.00050	0.00020	mg/L			11/05/17 15:21	1
Xylenes, Total	ND		0.0010	0.00022	mg/L			11/05/17 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 126*		*11/05/17 15:21*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*		*11/05/17 15:21*	*1*
Dibromofluoromethane	*92*		*75 - 120*		*11/05/17 15:21*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*11/05/17 15:21*	*1*

Client Sample Results

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: OMW4D-GW-103017

Lab Sample ID: 500-136523-4

Date Collected: 10/30/17 12:20

Matrix: Water

Date Received: 10/31/17 11:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		2.0	0.24	ug/L			11/02/17 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 125*		*11/02/17 13:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046	mg/L			11/05/17 14:52	1
1,1,1-Trichloroethane	ND		0.0010	0.00038	mg/L			11/05/17 14:52	1
1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040	mg/L			11/05/17 14:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046	mg/L			11/05/17 14:52	1
1,1,2-Trichloroethane	ND		0.0010	0.00035	mg/L			11/05/17 14:52	1
1,1-Dichloroethane	ND		0.0010	0.00041	mg/L			11/05/17 14:52	1
1,1-Dichloroethene	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
1,1-Dichloropropene	ND		0.0010	0.00030	mg/L			11/05/17 14:52	1
1,2,3-Trichlorobenzene	ND		0.0010	0.00046	mg/L			11/05/17 14:52	1
1,2,3-Trichloropropane	ND		0.0010	0.00041	mg/L			11/05/17 14:52	1
1,2,4-Trichlorobenzene	ND		0.0010	0.00034	mg/L			11/05/17 14:52	1
1,2,4-Trimethylbenzene	ND		0.0010	0.00036	mg/L			11/05/17 14:52	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020	mg/L			11/05/17 14:52	1
1,2-Dibromoethane	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
1,2-Dichlorobenzene	ND		0.0010	0.00033	mg/L			11/05/17 14:52	1
1,2-Dichloroethane	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
1,2-Dichloropropane	ND		0.0010	0.00043	mg/L			11/05/17 14:52	1
1,3,5-Trimethylbenzene	ND		0.0010	0.00025	mg/L			11/05/17 14:52	1
1,3-Dichlorobenzene	ND		0.0010	0.00040	mg/L			11/05/17 14:52	1
1,3-Dichloropropane	ND		0.0010	0.00036	mg/L			11/05/17 14:52	1
1,4-Dichlorobenzene	ND		0.0010	0.00036	mg/L			11/05/17 14:52	1
1,4-Dioxane	ND		0.10	0.041	mg/L			11/05/17 14:52	1
2,2-Dichloropropane	ND		0.0010	0.00044	mg/L			11/05/17 14:52	1
2-Chloroethyl vinyl ether	ND		0.0020	0.00077	mg/L			11/05/17 14:52	1
2-Chlorotoluene	ND		0.0010	0.00031	mg/L			11/05/17 14:52	1
2-Hexanone	ND		0.0050	0.0016	mg/L			11/05/17 14:52	1
4-Chlorotoluene	ND		0.0010	0.00035	mg/L			11/05/17 14:52	1
Acetone	ND		0.0050	0.0017	mg/L			11/05/17 14:52	1
Acrolein	ND		0.10	0.023	mg/L			11/05/17 14:52	1
Acrylonitrile	ND		0.020	0.0045	mg/L			11/05/17 14:52	1
Benzene	ND		0.00050	0.00015	mg/L			11/05/17 14:52	1
Bromobenzene	ND		0.0010	0.00036	mg/L			11/05/17 14:52	1
Bromochloromethane	ND		0.0010	0.00043	mg/L			11/05/17 14:52	1
Bromodichloromethane	ND		0.0010	0.00037	mg/L			11/05/17 14:52	1
Bromoform	ND		0.0010	0.00048	mg/L			11/05/17 14:52	1
Bromomethane	ND		0.0020	0.00080	mg/L			11/05/17 14:52	1
Carbon disulfide	ND		0.0020	0.00045	mg/L			11/05/17 14:52	1
Carbon tetrachloride	ND		0.0010	0.00038	mg/L			11/05/17 14:52	1
Chlorobenzene	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
Chloroethane	ND		0.0010	0.00051	mg/L			11/05/17 14:52	1
Chloroform	ND		0.0020	0.00037	mg/L			11/05/17 14:52	1
Chloromethane	ND		0.0010	0.00032	mg/L			11/05/17 14:52	1
cis-1,2-Dichloroethene	ND		0.0010	0.00041	mg/L			11/05/17 14:52	1

Client Sample ID: OMW4D-GW-103017

Lab Sample ID: 500-136523-4

Date Collected: 10/30/17 12:20

Matrix: Water

Date Received: 10/31/17 11:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.0010	0.00042	mg/L			11/05/17 14:52	1
Cyclohexane	ND		0.0010	0.00049	mg/L			11/05/17 14:52	1
Dibromochloromethane	ND		0.0010	0.00049	mg/L			11/05/17 14:52	1
Dibromomethane	ND		0.0010	0.00027	mg/L			11/05/17 14:52	1
Dichlorodifluoromethane	ND		0.0020	0.00067	mg/L			11/05/17 14:52	1
Ethylbenzene	ND		0.00050	0.00018	mg/L			11/05/17 14:52	1
Iodomethane	ND		0.0025	0.00066	mg/L			11/05/17 14:52	1
Isopropyl ether	ND		0.0010	0.00028	mg/L			11/05/17 14:52	1
Isopropylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
Methyl acetate	ND		0.0050	0.0020	mg/L			11/05/17 14:52	1
Methyl Ethyl Ketone	ND		0.0050	0.0021	mg/L			11/05/17 14:52	1
methyl isobutyl ketone	ND		0.0050	0.0022	mg/L			11/05/17 14:52	1
Methyl tert-butyl ether	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
Methylcyclohexane	ND		0.0010	0.00032	mg/L			11/05/17 14:52	1
Methylene Chloride	ND		0.0050	0.0016	mg/L			11/05/17 14:52	1
Naphthalene	ND		0.0010	0.00034	mg/L			11/05/17 14:52	1
n-Butylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
N-Propylbenzene	ND		0.0010	0.00041	mg/L			11/05/17 14:52	1
p-Isopropyltoluene	ND		0.0010	0.00036	mg/L			11/05/17 14:52	1
sec-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 14:52	1
Styrene	ND		0.0010	0.00039	mg/L			11/05/17 14:52	1
Tert-amyl methyl ether	ND		0.0010	0.00040	mg/L			11/05/17 14:52	1
tert-Butyl alcohol	ND		0.050	0.012	mg/L			11/05/17 14:52	1
Tert-butyl ethyl ether	ND		0.0010	0.00026	mg/L			11/05/17 14:52	1
tert-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 14:52	1
Tetrachloroethene	**0.0019**		0.0010	0.00037	mg/L			11/05/17 14:52	1
Toluene	**0.00051**		0.00050	0.00015	mg/L			11/05/17 14:52	1
trans-1,2-Dichloroethene	ND		0.0010	0.00035	mg/L			11/05/17 14:52	1
trans-1,3-Dichloropropene	ND		0.0010	0.00036	mg/L			11/05/17 14:52	1
trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012	mg/L			11/05/17 14:52	1
Trichloroethene	**0.0017**		0.00050	0.00016	mg/L			11/05/17 14:52	1
Trichlorofluoromethane	ND		0.0010	0.00043	mg/L			11/05/17 14:52	1
Vinyl acetate	ND		0.0020	0.00091	mg/L			11/05/17 14:52	1
Vinyl chloride	ND		0.00050	0.00020	mg/L			11/05/17 14:52	1
Xylenes, Total	ND		0.0010	0.00022	mg/L			11/05/17 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 126*		*11/05/17 14:52*	*1*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*		*11/05/17 14:52*	*1*
Dibromofluoromethane	*90*		*75 - 120*		*11/05/17 14:52*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*11/05/17 14:52*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		1.0	0.17	ug/L			11/02/17 12:54	1
Ethane	ND		1.0	0.10	ug/L			11/02/17 12:54	1
Ethylene	ND		1.0	0.11	ug/L			11/02/17 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*85*		*60 - 140*		*11/02/17 12:54*	*1*

Client Sample Results

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: OMW4D-GW-103017

Lab Sample ID: 500-136523-4

Date Collected: 10/30/17 12:20

Matrix: Water

Date Received: 10/31/17 11:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**220**		10	8.5	mg/L			11/01/17 17:20	50
Nitrate as N	**1.7**		0.20	0.068	mg/L			11/01/17 10:06	1
Sulfate	**120**		4.0	1.9	mg/L			11/01/17 17:07	20
Total Organic Carbon - Duplicates	**1.4**		1.0	0.47	mg/L			11/08/17 00:31	1
Sulfide	ND		1.0	0.23	mg/L			11/02/17 07:06	1

Default Detection Limits

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

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

Analyte	RL	MDL	Units	Method
1,4-Dioxane	2.0	0.24	ug/L	8260B SIM

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

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	0.0010	0.00046	mg/L	8260B
1,1,1-Trichloroethane	0.0010	0.00038	mg/L	8260B
1,1,2,2-Tetrachloroethane	0.0010	0.00040	mg/L	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	0.00046	mg/L	8260B
1,1,2-Trichloroethane	0.0010	0.00035	mg/L	8260B
1,1-Dichloroethane	0.0010	0.00041	mg/L	8260B
1,1-Dichloroethene	0.0010	0.00039	mg/L	8260B
1,1-Dichloropropene	0.0010	0.00030	mg/L	8260B
1,2,3-Trichlorobenzene	0.0010	0.00046	mg/L	8260B
1,2,3-Trichloropropane	0.0010	0.00041	mg/L	8260B
1,2,4-Trichlorobenzene	0.0010	0.00034	mg/L	8260B
1,2,4-Trimethylbenzene	0.0010	0.00036	mg/L	8260B
1,2-Dibromo-3-Chloropropane	0.0050	0.0020	mg/L	8260B
1,2-Dibromoethane	0.0010	0.00039	mg/L	8260B
1,2-Dichlorobenzene	0.0010	0.00033	mg/L	8260B
1,2-Dichloroethane	0.0010	0.00039	mg/L	8260B
1,2-Dichloropropane	0.0010	0.00043	mg/L	8260B
1,3,5-Trimethylbenzene	0.0010	0.00025	mg/L	8260B
1,3-Dichlorobenzene	0.0010	0.00040	mg/L	8260B
1,3-Dichloropropane	0.0010	0.00036	mg/L	8260B
1,4-Dichlorobenzene	0.0010	0.00036	mg/L	8260B
1,4-Dioxane	0.10	0.041	mg/L	8260B
2,2-Dichloropropane	0.0010	0.00044	mg/L	8260B
2-Chloroethyl vinyl ether	0.0020	0.00077	mg/L	8260B
2-Chlorotoluene	0.0010	0.00031	mg/L	8260B
2-Hexanone	0.0050	0.0016	mg/L	8260B
4-Chlorotoluene	0.0010	0.00035	mg/L	8260B
Acetone	0.0050	0.0017	mg/L	8260B
Acrolein	0.10	0.023	mg/L	8260B
Acrylonitrile	0.020	0.0045	mg/L	8260B
Benzene	0.00050	0.00015	mg/L	8260B
Bromobenzene	0.0010	0.00036	mg/L	8260B
Bromochloromethane	0.0010	0.00043	mg/L	8260B
Bromodichloromethane	0.0010	0.00037	mg/L	8260B
Bromoform	0.0010	0.00048	mg/L	8260B
Bromomethane	0.0020	0.00080	mg/L	8260B
Carbon disulfide	0.0020	0.00045	mg/L	8260B
Carbon tetrachloride	0.0010	0.00038	mg/L	8260B
Chlorobenzene	0.0010	0.00039	mg/L	8260B
Chloroethane	0.0010	0.00051	mg/L	8260B
Chloroform	0.0020	0.00037	mg/L	8260B
Chloromethane	0.0010	0.00032	mg/L	8260B
cis-1,2-Dichloroethene	0.0010	0.00041	mg/L	8260B
cis-1,3-Dichloropropene	0.0010	0.00042	mg/L	8260B
Cyclohexane	0.0010	0.00049	mg/L	8260B
Dibromochloromethane	0.0010	0.00049	mg/L	8260B
Dibromomethane	0.0010	0.00027	mg/L	8260B

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

Analyte	RL	MDL	Units	Method
Dichlorodifluoromethane	0.0020	0.00067	mg/L	8260B
Ethylbenzene	0.00050	0.00018	mg/L	8260B
Iodomethane	0.0025	0.00066	mg/L	8260B
Isopropyl ether	0.0010	0.00028	mg/L	8260B
Isopropylbenzene	0.0010	0.00039	mg/L	8260B
Methyl acetate	0.0050	0.0020	mg/L	8260B
Methyl Ethyl Ketone	0.0050	0.0021	mg/L	8260B
methyl isobutyl ketone	0.0050	0.0022	mg/L	8260B
Methyl tert-butyl ether	0.0010	0.00039	mg/L	8260B
Methylcyclohexane	0.0010	0.00032	mg/L	8260B
Methylene Chloride	0.0050	0.0016	mg/L	8260B
Naphthalene	0.0010	0.00034	mg/L	8260B
n-Butylbenzene	0.0010	0.00039	mg/L	8260B
N-Propylbenzene	0.0010	0.00041	mg/L	8260B
p-Isopropyltoluene	0.0010	0.00036	mg/L	8260B
sec-Butylbenzene	0.0010	0.00040	mg/L	8260B
Styrene	0.0010	0.00039	mg/L	8260B
Tert-amyl methyl ether	0.0010	0.00040	mg/L	8260B
tert-Butyl alcohol	0.050	0.012	mg/L	8260B
Tert-butyl ethyl ether	0.0010	0.00026	mg/L	8260B
tert-Butylbenzene	0.0010	0.00040	mg/L	8260B
Tetrachloroethene	0.0010	0.00037	mg/L	8260B
Toluene	0.00050	0.00015	mg/L	8260B
trans-1,2-Dichloroethene	0.0010	0.00035	mg/L	8260B
trans-1,3-Dichloropropene	0.0010	0.00036	mg/L	8260B
trans-1,4-Dichloro-2-butene	0.0050	0.0012	mg/L	8260B
Trichloroethene	0.00050	0.00016	mg/L	8260B
Trichlorofluoromethane	0.0010	0.00043	mg/L	8260B
Vinyl acetate	0.0020	0.00091	mg/L	8260B
Vinyl chloride	0.00050	0.00020	mg/L	8260B
Xylenes, Total	0.0010	0.00022	mg/L	8260B

Method: RSK-175 - Dissolved Gases (GC)

Analyte	RL	MDL	Units	Method
Ethane	1.0	0.10	ug/L	RSK-175
Ethylene	1.0	0.11	ug/L	RSK-175
Methane	1.0	0.17	ug/L	RSK-175

General Chemistry

Analyte	RL	MDL	Units	Method
Chloride	0.20	0.17	mg/L	9056A
Nitrate as N	0.20	0.068	mg/L	9056A
Sulfate	0.20	0.095	mg/L	9056A
Total Organic Carbon - Duplicates	1.0	0.47	mg/L	9060A
Sulfide	1.0	0.23	mg/L	SM 4500 S2 F

Surrogate Summary

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-126)	(72-124)	(75-120)	(75-120)
500-136523-1	EIP-TB09-103017	88	91	90	94
500-136523-2	OMW3D-GW-103017	89	92	91	94
500-136523-3	EIP-EB-103017	89	92	92	94
500-136523-4	OMW4D-GW-103017	88	90	90	95
LCS 500-408477/4	Lab Control Sample	88	84	92	94
MB 500-408477/6	Method Blank	88	92	90	93

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		12DCE
Lab Sample ID	Client Sample ID	(63-125)
500-136523-2	OMW3D-GW-103017	100
500-136523-4	OMW4D-GW-103017	100
500-136523-4 MS	OMW4D-GW-103017	100
500-136523-4 MSD	OMW4D-GW-103017	101
LCS 240-301775/4	Lab Control Sample	98
MB 240-301775/5	Method Blank	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: RSK-175 - Dissolved Gases (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		'rifluoroet
Lab Sample ID	Client Sample ID	(60-140)
500-136523-2	OMW3D-GW-103017	85
500-136523-4	OMW4D-GW-103017	85
LCS 240-301727/5	Lab Control Sample	88
MB 240-301727/4	Method Blank	88

Surrogate Legend

1,1,1-Trifluoroethane = 1,1,1-Trifluoroethane

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

Lab Sample ID: MB 500-408477/6
Matrix: Water
Analysis Batch: 408477

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046	mg/L			11/05/17 13:27	1
1,1,1-Trichloroethane	ND		0.0010	0.00038	mg/L			11/05/17 13:27	1
1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040	mg/L			11/05/17 13:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046	mg/L			11/05/17 13:27	1
1,1,2-Trichloroethane	ND		0.0010	0.00035	mg/L			11/05/17 13:27	1
1,1-Dichloroethane	ND		0.0010	0.00041	mg/L			11/05/17 13:27	1
1,1-Dichloroethene	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
1,1-Dichloropropene	ND		0.0010	0.00030	mg/L			11/05/17 13:27	1
1,2,3-Trichlorobenzene	ND		0.0010	0.00046	mg/L			11/05/17 13:27	1
1,2,3-Trichloropropane	ND		0.0010	0.00041	mg/L			11/05/17 13:27	1
1,2,4-Trichlorobenzene	ND		0.0010	0.00034	mg/L			11/05/17 13:27	1
1,2,4-Trimethylbenzene	ND		0.0010	0.00036	mg/L			11/05/17 13:27	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020	mg/L			11/05/17 13:27	1
1,2-Dibromoethane	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
1,2-Dichlorobenzene	ND		0.0010	0.00033	mg/L			11/05/17 13:27	1
1,2-Dichloroethane	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
1,2-Dichloropropane	ND		0.0010	0.00043	mg/L			11/05/17 13:27	1
1,3,5-Trimethylbenzene	ND		0.0010	0.00025	mg/L			11/05/17 13:27	1
1,3-Dichlorobenzene	ND		0.0010	0.00040	mg/L			11/05/17 13:27	1
1,3-Dichloropropane	ND		0.0010	0.00036	mg/L			11/05/17 13:27	1
1,4-Dichlorobenzene	ND		0.0010	0.00036	mg/L			11/05/17 13:27	1
1,4-Dioxane	ND		0.10	0.041	mg/L			11/05/17 13:27	1
2,2-Dichloropropane	ND		0.0010	0.00044	mg/L			11/05/17 13:27	1
2-Chloroethyl vinyl ether	ND		0.0020	0.00077	mg/L			11/05/17 13:27	1
2-Chlorotoluene	ND		0.0010	0.00031	mg/L			11/05/17 13:27	1
2-Hexanone	ND		0.0050	0.0016	mg/L			11/05/17 13:27	1
4-Chlorotoluene	ND		0.0010	0.00035	mg/L			11/05/17 13:27	1
Acetone	ND		0.0050	0.0017	mg/L			11/05/17 13:27	1
Acrolein	ND		0.10	0.023	mg/L			11/05/17 13:27	1
Acrylonitrile	ND		0.020	0.0045	mg/L			11/05/17 13:27	1
Benzene	ND		0.00050	0.00015	mg/L			11/05/17 13:27	1
Bromobenzene	ND		0.0010	0.00036	mg/L			11/05/17 13:27	1
Bromochloromethane	ND		0.0010	0.00043	mg/L			11/05/17 13:27	1
Bromodichloromethane	ND		0.0010	0.00037	mg/L			11/05/17 13:27	1
Bromoform	ND		0.0010	0.00048	mg/L			11/05/17 13:27	1
Bromomethane	ND		0.0020	0.00080	mg/L			11/05/17 13:27	1
Carbon disulfide	ND		0.0020	0.00045	mg/L			11/05/17 13:27	1
Carbon tetrachloride	ND		0.0010	0.00038	mg/L			11/05/17 13:27	1
Chlorobenzene	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
Chloroethane	ND		0.0010	0.00051	mg/L			11/05/17 13:27	1
Chloroform	ND		0.0020	0.00037	mg/L			11/05/17 13:27	1
Chloromethane	ND		0.0010	0.00032	mg/L			11/05/17 13:27	1
cis-1,2-Dichloroethene	ND		0.0010	0.00041	mg/L			11/05/17 13:27	1
cis-1,3-Dichloropropene	ND		0.0010	0.00042	mg/L			11/05/17 13:27	1
Cyclohexane	ND		0.0010	0.00049	mg/L			11/05/17 13:27	1
Dibromochloromethane	ND		0.0010	0.00049	mg/L			11/05/17 13:27	1
Dibromomethane	ND		0.0010	0.00027	mg/L			11/05/17 13:27	1
Dichlorodifluoromethane	ND		0.0020	0.00067	mg/L			11/05/17 13:27	1

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

Lab Sample ID: MB 500-408477/6
Matrix: Water
Analysis Batch: 408477

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.00050	0.00018	mg/L			11/05/17 13:27	1
Iodomethane	ND		0.0025	0.00066	mg/L			11/05/17 13:27	1
Isopropyl ether	ND		0.0010	0.00028	mg/L			11/05/17 13:27	1
Isopropylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
Methyl acetate	ND		0.0050	0.0020	mg/L			11/05/17 13:27	1
Methyl Ethyl Ketone	ND		0.0050	0.0021	mg/L			11/05/17 13:27	1
methyl isobutyl ketone	ND		0.0050	0.0022	mg/L			11/05/17 13:27	1
Methyl tert-butyl ether	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
Methylcyclohexane	ND		0.0010	0.00032	mg/L			11/05/17 13:27	1
Methylene Chloride	ND		0.0050	0.0016	mg/L			11/05/17 13:27	1
Naphthalene	ND		0.0010	0.00034	mg/L			11/05/17 13:27	1
n-Butylbenzene	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
N-Propylbenzene	ND		0.0010	0.00041	mg/L			11/05/17 13:27	1
p-Isopropyltoluene	ND		0.0010	0.00036	mg/L			11/05/17 13:27	1
sec-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 13:27	1
Styrene	ND		0.0010	0.00039	mg/L			11/05/17 13:27	1
Tert-amyl methyl ether	ND		0.0010	0.00040	mg/L			11/05/17 13:27	1
tert-Butyl alcohol	ND		0.050	0.012	mg/L			11/05/17 13:27	1
Tert-butyl ethyl ether	ND		0.0010	0.00026	mg/L			11/05/17 13:27	1
tert-Butylbenzene	ND		0.0010	0.00040	mg/L			11/05/17 13:27	1
Tetrachloroethene	ND		0.0010	0.00037	mg/L			11/05/17 13:27	1
Toluene	ND		0.00050	0.00015	mg/L			11/05/17 13:27	1
trans-1,2-Dichloroethene	ND		0.0010	0.00035	mg/L			11/05/17 13:27	1
trans-1,3-Dichloropropene	ND		0.0010	0.00036	mg/L			11/05/17 13:27	1
trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012	mg/L			11/05/17 13:27	1
Trichloroethene	ND		0.00050	0.00016	mg/L			11/05/17 13:27	1
Trichlorofluoromethane	ND		0.0010	0.00043	mg/L			11/05/17 13:27	1
Vinyl acetate	ND		0.0020	0.00091	mg/L			11/05/17 13:27	1
Vinyl chloride	ND		0.00050	0.00020	mg/L			11/05/17 13:27	1
Xylenes, Total	ND		0.0010	0.00022	mg/L			11/05/17 13:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 126*		*11/05/17 13:27*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*		*11/05/17 13:27*	*1*
Dibromofluoromethane	*90*		*75 - 120*		*11/05/17 13:27*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/05/17 13:27*	*1*

Lab Sample ID: LCS 500-408477/4
Matrix: Water
Analysis Batch: 408477

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.0469		mg/L		94	70 - 125
1,1,1-Trichloroethane	0.0500	0.0463		mg/L		93	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0433		mg/L		87	67 - 127
1,1,2-Trichloro-1,2,2-trifluoroetha ne	0.0500	0.0459		mg/L		92	70 - 123
1,1,2-Trichloroethane	0.0500	0.0469		mg/L		94	70 - 122

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

Lab Sample ID: LCS 500-408477/4
Matrix: Water
Analysis Batch: 408477

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.0500	0.0476		mg/L		95	70 - 125
1,1-Dichloroethene	0.0500	0.0466		mg/L		93	67 - 122
1,1-Dichloropropene	0.0500	0.0476		mg/L		95	70 - 121
1,2,3-Trichlorobenzene	0.0500	0.0512		mg/L		102	55 - 140
1,2,3-Trichloropropane	0.0500	0.0429		mg/L		86	50 - 133
1,2,4-Trichlorobenzene	0.0500	0.0505		mg/L		101	66 - 127
1,2,4-Trimethylbenzene	0.0500	0.0447		mg/L		89	70 - 123
1,2-Dibromo-3-Chloropropane	0.0500	0.0447		mg/L		89	56 - 123
1,2-Dibromoethane	0.0500	0.0450		mg/L		90	70 - 125
1,2-Dichlorobenzene	0.0500	0.0469		mg/L		94	70 - 125
1,2-Dichloroethane	0.0500	0.0451		mg/L		90	68 - 127
1,2-Dichloropropane	0.0500	0.0473		mg/L		95	67 - 130
1,3,5-Trimethylbenzene	0.0500	0.0448		mg/L		90	70 - 123
1,3-Dichlorobenzene	0.0500	0.0460		mg/L		92	70 - 125
1,3-Dichloropropane	0.0500	0.0463		mg/L		93	62 - 136
1,4-Dichlorobenzene	0.0500	0.0464		mg/L		93	70 - 120
1,4-Dioxane	1.00	0.962		mg/L		96	70 - 129
2,2-Dichloropropane	0.0500	0.0458		mg/L		92	58 - 129
2-Chloroethyl vinyl ether	0.0500	0.0374		mg/L		75	52 - 136
2-Chlorotoluene	0.0500	0.0434		mg/L		87	70 - 125
2-Hexanone	0.0500	0.0405		mg/L		81	56 - 135
4-Chlorotoluene	0.0500	0.0437		mg/L		87	68 - 124
Acetone	0.0500	0.0381		mg/L		76	40 - 143
Acrolein	2.00	1.69		mg/L		85	40 - 150
Acrylonitrile	0.500	0.517		mg/L		103	67 - 140
Benzene	0.0500	0.0473		mg/L		95	70 - 120
Bromobenzene	0.0500	0.0449		mg/L		90	70 - 122
Bromochloromethane	0.0500	0.0463		mg/L		93	65 - 122
Bromodichloromethane	0.0500	0.0455		mg/L		91	69 - 120
Bromoform	0.0500	0.0524		mg/L		105	56 - 132
Bromomethane	0.0500	0.0325		mg/L		65	40 - 130
Carbon disulfide	0.0500	0.0491		mg/L		98	66 - 120
Carbon tetrachloride	0.0500	0.0466		mg/L		93	65 - 122
Chlorobenzene	0.0500	0.0479		mg/L		96	70 - 120
Chloroethane	0.0500	0.0379		mg/L		76	45 - 127
Chloroform	0.0500	0.0447		mg/L		89	70 - 120
Chloromethane	0.0500	0.0340		mg/L		68	54 - 147
cis-1,2-Dichloroethene	0.0500	0.0465		mg/L		93	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0463		mg/L		93	64 - 127
Cyclohexane	0.0500	0.0502		mg/L		100	69 - 142
Dibromochloromethane	0.0500	0.0484		mg/L		97	68 - 125
Dibromomethane	0.0500	0.0456		mg/L		91	70 - 120
Dichlorodifluoromethane	0.0500	0.0312		mg/L		62	40 - 150
Ethylbenzene	0.0500	0.0478		mg/L		96	70 - 120
Iodomethane	0.0500	0.0459		mg/L		92	61 - 136
Isopropylbenzene	0.0500	0.0430		mg/L		86	70 - 126
Methyl acetate	0.100	0.0888		mg/L		89	56 - 150
Methyl Ethyl Ketone	0.0500	0.0419		mg/L		84	53 - 141

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

Lab Sample ID: LCS 500-408477/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408477

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
methyl isobutyl ketone	0.0500	0.0408		mg/L		82	56 - 133
Methyl tert-butyl ether	0.0500	0.0482		mg/L		96	70 - 120
Methylcyclohexane	0.0500	0.0482		mg/L		96	70 - 120
Methylene Chloride	0.0500	0.0479		mg/L		96	69 - 125
Naphthalene	0.0500	0.0474		mg/L		95	59 - 130
n-Butylbenzene	0.0500	0.0464		mg/L		93	68 - 125
N-Propylbenzene	0.0500	0.0428		mg/L		86	69 - 127
p-Isopropyltoluene	0.0500	0.0462		mg/L		92	70 - 125
sec-Butylbenzene	0.0500	0.0443		mg/L		89	70 - 123
Styrene	0.0500	0.0488		mg/L		98	70 - 120
tert-Butyl alcohol	0.500	0.478		mg/L		96	70 - 125
tert-Butylbenzene	0.0500	0.0446		mg/L		89	70 - 121
Tetrachloroethene	0.0500	0.0503		mg/L		101	70 - 128
Toluene	0.0500	0.0497		mg/L		99	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0459		mg/L		92	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0457		mg/L		91	62 - 128
trans-1,4-Dichloro-2-butene	0.0500	0.0452		mg/L		90	60 - 130
Trichloroethene	0.0500	0.0455		mg/L		91	70 - 125
Trichlorofluoromethane	0.0500	0.0391		mg/L		78	70 - 126
Vinyl acetate	0.0500	0.0462		mg/L		92	43 - 133
Vinyl chloride	0.0500	0.0403		mg/L		81	64 - 126
Xylenes, Total	0.100	0.0955		mg/L		95	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 126*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*
Dibromofluoromethane	*92*		*75 - 120*
Toluene-d8 (Surr)	*94*		*75 - 120*

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

Lab Sample ID: MB 240-301775/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301775

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		2.0	0.24	ug/L			11/02/17 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 125*		*11/02/17 12:23*	*1*

Lab Sample ID: LCS 240-301775/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	10.7		ug/L		107	59 - 131

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

Lab Sample ID: LCS 240-301775/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301775

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 125*

Lab Sample ID: 500-136523-4 MS — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301775

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		10.0	10.9		ug/L		109	52 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 125*

Lab Sample ID: 500-136523-4 MSD — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301775

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		10.0	11.1		ug/L		111	52 - 129	1	13

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 125*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 240-301727/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301727

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		1.0	0.17	ug/L			11/02/17 12:02	1
Ethane	ND		1.0	0.10	ug/L			11/02/17 12:02	1
Ethylene	ND		1.0	0.11	ug/L			11/02/17 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1-Trifluoroethane	*88*		*60 - 140*		*11/02/17 12:02*	*1*

Lab Sample ID: LCS 240-301727/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301727

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	285	287		ug/L		101	80 - 120
Ethane	536	566		ug/L		106	80 - 120
Ethylene	501	529		ug/L		106	80 - 120

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCS 240-301727/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 301727

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1-Trifluoroethane	*88*		*60 - 140*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 500-407999/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.20	0.17	mg/L			11/01/17 10:30	1
Nitrate as N	ND		0.20	0.068	mg/L			11/01/17 10:30	1
Sulfate	ND		0.20	0.095	mg/L			11/01/17 10:30	1

Lab Sample ID: LCS 500-407999/8 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.00	2.88		mg/L		96	80 - 120
Nitrate as N	2.00	1.86		mg/L		93	80 - 120
Sulfate	5.00	5.00		mg/L		100	80 - 120

Lab Sample ID: 500-136523-4 MS — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.7		1.00	2.71		mg/L		99	80 - 120

Lab Sample ID: 500-136523-4 MS — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	120		50.0	176		mg/L		111	80 - 120

Lab Sample ID: 500-136523-4 MS — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	220		50.0	263	4	mg/L		89	80 - 120

Lab Sample ID: 500-136523-4 MSD — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	1.7		1.00	2.72		mg/L		100	80 - 120	0	15

Lab Sample ID: 500-136523-4 MSD — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	120		50.0	174		mg/L		107	80 - 120	1	15

Lab Sample ID: 500-136523-4 MSD — **Client Sample ID: OMW4D-GW-103017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407999

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	220		50.0	270	4	mg/L		103	80 - 120	2	15

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 500-409001/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 409001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		1.0	0.47	mg/L			11/07/17 17:47	1

Lab Sample ID: LCS 500-409001/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 409001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	9.61		mg/L		96	80 - 120
TOC Result 1	10.0	9.59		mg/L		96	80 - 120
TOC Result 2	10.0	9.63		mg/L		96	80 - 120

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 500-408045/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		1.0	0.23	mg/L			11/02/17 06:35	1

Lab Sample ID: LCS 500-408045/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	3.28	3.06		mg/L		94	85 - 115

QC Association Summary

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

GC/MS VOA

Analysis Batch: 301775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-136523-2	OMW3D-GW-103017	Total/NA	Water	8260B SIM	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	8260B SIM	
MB 240-301775/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-301775/4	Lab Control Sample	Total/NA	Water	8260B SIM	
500-136523-4 MS	OMW4D-GW-103017	Total/NA	Water	8260B SIM	
500-136523-4 MSD	OMW4D-GW-103017	Total/NA	Water	8260B SIM	

Analysis Batch: 408477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-136523-1	EIP-TB09-103017	Total/NA	Water	8260B	
500-136523-2	OMW3D-GW-103017	Total/NA	Water	8260B	
500-136523-3	EIP-EB-103017	Total/NA	Water	8260B	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	8260B	
MB 500-408477/6	Method Blank	Total/NA	Water	8260B	
LCS 500-408477/4	Lab Control Sample	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 301727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-136523-2	OMW3D-GW-103017	Total/NA	Water	RSK-175	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	RSK-175	
MB 240-301727/4	Method Blank	Total/NA	Water	RSK-175	
LCS 240-301727/5	Lab Control Sample	Total/NA	Water	RSK-175	

General Chemistry

Analysis Batch: 407999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-136523-2	OMW3D-GW-103017	Total/NA	Water	9056A	
500-136523-2	OMW3D-GW-103017	Total/NA	Water	9056A	
500-136523-2	OMW3D-GW-103017	Total/NA	Water	9056A	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	9056A	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	9056A	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	9056A	
MB 500-407999/7	Method Blank	Total/NA	Water	9056A	
LCS 500-407999/8	Lab Control Sample	Total/NA	Water	9056A	
500-136523-4 MS	OMW4D-GW-103017	Total/NA	Water	9056A	
500-136523-4 MS	OMW4D-GW-103017	Total/NA	Water	9056A	
500-136523-4 MS	OMW4D-GW-103017	Total/NA	Water	9056A	
500-136523-4 MSD	OMW4D-GW-103017	Total/NA	Water	9056A	
500-136523-4 MSD	OMW4D-GW-103017	Total/NA	Water	9056A	
500-136523-4 MSD	OMW4D-GW-103017	Total/NA	Water	9056A	

Analysis Batch: 408045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-136523-2	OMW3D-GW-103017	Total/NA	Water	SM 4500 S2 F	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	SM 4500 S2 F	
MB 500-408045/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 500-408045/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

General Chemistry (Continued)

Analysis Batch: 409001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-136523-2	OMW3D-GW-103017	Total/NA	Water	9060A	
500-136523-4	OMW4D-GW-103017	Total/NA	Water	9060A	
MB 500-409001/4	Method Blank	Total/NA	Water	9060A	
LCS 500-409001/5	Lab Control Sample	Total/NA	Water	9060A	

Lab Chronicle

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Client Sample ID: EIP-TB09-103017 — Lab Sample ID: 500-136523-1

Date Collected: 10/30/17 00:00
Date Received: 10/31/17 11:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	408477	11/05/17 13:55	JMP	TAL CHI

Client Sample ID: OMW3D-GW-103017 — Lab Sample ID: 500-136523-2

Date Collected: 10/30/17 09:45
Date Received: 10/31/17 11:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	408477	11/05/17 14:23	JMP	TAL CHI
Total/NA	Analysis	8260B SIM		1	301775	11/02/17 13:12	SAM	TAL CAN
Total/NA	Analysis	RSK-175		1	301727	11/02/17 12:36	SEM	TAL CAN
Total/NA	Analysis	9056A		1	407999	11/01/17 09:41	CCK	TAL CHI
Total/NA	Analysis	9056A		20	407999	11/01/17 16:43	CCK	TAL CHI
Total/NA	Analysis	9056A		50	407999	11/01/17 16:55	CCK	TAL CHI
Total/NA	Analysis	9060A		1	409001	11/07/17 23:34	HMW	TAL CHI
Total/NA	Analysis	SM 4500 S2 F		1	408045		CLB	TAL CHI
					(Start)	11/02/17 07:03		
					(End)	11/02/17 07:06		

Client Sample ID: EIP-EB-103017 — Lab Sample ID: 500-136523-3

Date Collected: 10/30/17 11:30
Date Received: 10/31/17 11:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	408477	11/05/17 15:21	JMP	TAL CHI

Client Sample ID: OMW4D-GW-103017 — Lab Sample ID: 500-136523-4

Date Collected: 10/30/17 12:20
Date Received: 10/31/17 11:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	408477	11/05/17 14:52	JMP	TAL CHI
Total/NA	Analysis	8260B SIM		1	301775	11/02/17 13:37	SAM	TAL CAN
Total/NA	Analysis	RSK-175		1	301727	11/02/17 12:54	SEM	TAL CAN
Total/NA	Analysis	9056A		1	407999	11/01/17 10:06	CCK	TAL CHI
Total/NA	Analysis	9056A		20	407999	11/01/17 17:07	CCK	TAL CHI
Total/NA	Analysis	9056A		50	407999	11/01/17 17:20	CCK	TAL CHI
Total/NA	Analysis	9060A		1	409001	11/08/17 00:31	HMW	TAL CHI
Total/NA	Analysis	SM 4500 S2 F		1	408045		CLB	TAL CHI
					(Start)	11/02/17 07:06		
					(End)	11/02/17 07:08		

Laboratory References:

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

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	1,4-Dioxane
8260B		Water	Cyclohexane
8260B		Water	Methyl acetate
8260B		Water	Methylcyclohexane
8260B		Water	Tert-amyl methyl ether
8260B		Water	tert-Butyl alcohol
8260B		Water	Tert-butyl ethyl ether

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	02-23-18
Connecticut	State Program	1	PH-0590	12-31-17 *
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-18 *
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17 *
Minnesota	NELAP	5	039-999-348	12-31-17 *
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-18 *
West Virginia DEP	State Program	3	210	12-31-17 *

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

Method Summary

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
RSK-175	Dissolved Gases (GC)	RSK	TAL CAN
9056A	Anions, Ion Chromatography	SW846	TAL CHI
9060A	Organic Carbon, Total (TOC)	SW846	TAL CHI
SM 4500 S2 F	Sulfide, Total	SM	TAL CHI

Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab
SM = "Standard Methods For The Examination Of Water And Wastewater",
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
TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Ramboll Environ US Corporation
Project/Site: Ellsworth Industrial Park

TestAmerica Job ID: 500-136523-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-136523-1	EIP-TB09-103017	Water	10/30/17 00:00	10/31/17 11:50
500-136523-2	OMW3D-GW-103017	Water	10/30/17 09:45	10/31/17 11:50
500-136523-3	EIP-EB-103017	Water	10/30/17 11:30	10/31/17 11:50
500-136523-4	OMW4D-GW-103017	Water	10/30/17 12:20	10/31/17 11:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Instrument ID: CMS22 Analysis Batch Number: 404536

Lab Sample ID: STD03AP 500-404536/15 I Client Sample ID:

Date Analyzed: 10/09/17 18:55 Lab File ID: 22J1009C.D GC Column: DB624 ID: 0.2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl acetate	5.81	Missed Peak	alikpalae	10/10/17 10:13
2-Nitropropane	8.23	Missed Peak	alikpalae	10/10/17 10:15

Lab Sample ID: STD05AP 500-404536/17 I Client Sample ID:

Date Analyzed: 10/09/17 19:47 Lab File ID: 22J1009E.D GC Column: DB624 ID: 0.2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	3.28	Split Peak	alikpalae	10/10/17 10:09

Lab Sample ID: ICV 500-404536/24 Client Sample ID:

Date Analyzed: 10/09/17 22:50 Lab File ID: 22S1009ICV1.D GC Column: DB624 ID: 0.2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.68	Split Peak	alikpalae	10/10/17 10:32
Methyl Ethyl Ketone	5.73	Baseline	alikpalae	10/10/17 10:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Instrument ID: A3UX2 Analysis Batch Number: 297993

Lab Sample ID: ICIS 240-297993/6 Client Sample ID:

Date Analyzed: 10/06/17 16:31 Lab File ID: X21220.D GC Column: ZB-624 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	6.07	Poor chromatography	macenczaks	10/09/17 08:48

8260B SIM

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Instrument ID: A3UX2 Analysis Batch Number: 301775

Lab Sample ID: 500-136523-4 MS Client Sample ID: OMW4D-GW-103017 MS

Date Analyzed: 11/02/17 14:02 Lab File ID: X21355.D GC Column: ZB-624 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	6.08	Poor chromatography	macenczak s	11/02/17 15:04

Lab Sample ID: 500-136523-4 MSD Client Sample ID: OMW4D-GW-103017 MSD

Date Analyzed: 11/02/17 14:26 Lab File ID: X21356.D GC Column: ZB-624 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	6.08	Poor chromatography	macenczak s	11/02/17 15:05

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Instrument ID: ZPID Analysis Batch Number: 299071

Lab Sample ID: STD1 240-299071/3 IC Client Sample ID:

Date Analyzed: 10/15/17 12:40 Lab File ID: RSK1015003.D GC Column: HP-PLOT/Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propane	4.56	Incomplete Integration	matthewsb	10/16/17 07:07

Lab Sample ID: STD2 240-299071/4 IC Client Sample ID:

Date Analyzed: 10/15/17 12:57 Lab File ID: RSK1015004.D GC Column: HP-PLOT/Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propane	4.56	Incomplete Integration	matthewsb	10/16/17 07:08

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
2ETTOL WK STD_00039	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	2ETTOL PT STD_00012	200 uL	2-Ethyltoluene	100 ug/mL
.2ETTOL PT STD_00012	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	2ETHYLTOL STD_00002	1 mL	2-Ethyltoluene	1000 ug/mL
..2ETHYLTOL STD_00002	07/01/21	ABSOLUTE STD, Lot 070116			(Purchased Reagent)		2-Ethyltoluene	1000 ug/mL
8260 23DCP WK_00104	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260 23DCP PT_00029	200 uL	2,3-Dichloro-1-propene	100 ug/mL
.8260 23DCP PT_00029	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	2,3DICL1PRPEN_00005	1 mL	2,3-Dichloro-1-propene	1000 ug/mL
..2,3DICL1PRPEN_00005	08/14/20	ABSOLUTE STD, Lot 081417			(Purchased Reagent)		2,3-Dichloro-1-propene	1000 ug/mL
8260 ACR SPK_00133	10/12/17	10/05/17	Water, Lot NA	1 mL	8260 ACRPTSPK_00037	100 uL	Acrolein	2000 ug/mL
.8260 ACRPTSPK_00037	01/05/18	10/05/17	Water, Lot NA	1 mL	ACROLN SK STK_00027	1 mL	Acrolein	20000 ug/mL
..ACROLN SK STK_00027	01/31/18	Restek, Lot A0129054			(Purchased Reagent)		Acrolein	20000 ug/mL
8260 GAS SPK_00133	10/12/17	10/05/17	METHANOL, Lot 177891	2 mL	8260 GASSPKPT_00036	40 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.8260 GASSPKPT_00036	01/05/18	10/05/17	METHANOL, Lot NA	1 mL	GASES SPK STK_00011	1 mL	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
..GASES SPK STK_00011	11/30/18	Restek, Lot A0115484			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
8260 KET SPK_00104	10/19/17	10/05/17	METHANOL, Lot 177891	2 mL	8260KETSPKPT_00031	8 uL	2-Hexanone	50 ug/mL
							Acetone	50 ug/mL
							Methyl Ethyl Ketone	50 ug/mL
							methyl isobutyl ketone	50 ug/mL
.8260KETSPKPT_00031	01/05/18	10/05/17	METHANOL, Lot NA	1 mL	KET SPK STK_00011	1 mL	2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL
							methyl isobutyl ketone	12500 ug/mL
..KET SPK STK_00011	01/31/20	Restek, Lot A0123880			(Purchased Reagent)		2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL
							methyl isobutyl ketone	12500 ug/mL
8260 LOWIS1_00112	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	1,4DIOX-d8 IS_00012	1000 uL	1,4-Dioxane-d8	1000 ug/mL
					8260A IS PT_00029	40 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
					T-BUOH-d9 PT_00028	100 uL	TBA-d9 (IS)	1000 ug/mL
.1,4DIOX-d8 IS_00012	06/30/19	Restek, Lot A0120108			(Purchased Reagent)		1,4-Dioxane-d8	2000 ug/mL
.8260A IS PT_00029	12/08/17	09/08/17	n/a, Lot NA	1 mL	8260A IS SK_00006	1 mL	1,4-Dichlorobenzene-d4	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
..8260A IS SK_00006	02/28/21		Restek, Lot A0117358		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
.T-BUOH-d9 PT_00028	12/08/17	09/08/17	n/a, Lot NA	1 mL	T-BUOH-d9 IS_00006	1 mL	TBA-d9 (IS)	20000 ug/mL
..T-BUOH-d9 IS_00006	03/31/19		Restek, Lot A0117777		(Purchased Reagent)		TBA-d9 (IS)	20000 ug/mL
8260 LOWSS1_00137	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624 SSPT_00004	40 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.8260/624 SSPT_00004	12/08/17	09/08/17	na, Lot NA	5 mL	8260 SS PT_00040	5 mL	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
..8260 SS PT_00040	10/31/20		Restek, Lot A0114901		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
8260 MEGA SPK_00108	10/19/17	10/05/17	METHANOL, Lot 177891	2 mL	8260MEGASPKPT_00033	40 uL	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-trifluor oethane	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-Dibromoethane	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
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	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
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Iodomethane	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	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
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.8260MEGASPKPT_00033	01/05/18	10/05/17	METHANOL, Lot NA	1 mL	MEGA SPK STK_00011	1 mL	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-trifluor oethane	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

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	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	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
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Xylenes, Total	5000 ug/mL
..MEGA SPK STK_00011	07/31/18		Restek, Lot A0120604		(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-trifluor oethane	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-Dibromoethane	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
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iodomethane	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	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
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
8260/624ACRWK_00356	10/11/17	10/04/17	Water, Lot NA	2 mL	8260/624ACRPT_00135	400 uL	Acrolein	4000 ug/mL
.8260/624ACRPT_00135	11/30/17	10/02/17	Water, Lot NA	1 mL	8260 ACROLEIN_00038	1 mL	Acrolein	20000 ug/mL
..8260 ACROLEIN_00038	11/30/17	Restek, Lot A0127476			(Purchased Reagent)		Acrolein	20000 ug/mL
8260/624ACRWK_00360	11/11/17	11/04/17	Water, Lot NA	2 mL	8260/624ACRPT_00136	400 uL	Acrolein	4000 ug/mL
.8260/624ACRPT_00136	11/30/17	10/20/17	Water, Lot NA	1 mL	8260 ACROLEIN_00038	1 mL	Acrolein	20000 ug/mL
..8260 ACROLEIN_00038	11/30/17	Restek, Lot A0127476			(Purchased Reagent)		Acrolein	20000 ug/mL
8260/624GASWK_00472	10/11/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624GASPT_00088	80 uL	Bromomethane	100 ug/mL
							Butadiene	100 ug/mL
							Chloroethane	100 ug/mL
							Chloromethane	100 ug/mL
							Dichlorodifluoromethane	100 ug/mL
							Dichlorofluoromethane	100 ug/mL
							Trichlorofluoromethane	100 ug/mL
							Vinyl chloride	100 ug/mL
.8260/624GASPT_00088	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 GAS_00015	1 mL	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
..8260/624 GAS_00015	01/31/20	Restek, Lot A0124278			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
8260/624GASWK_00478	11/08/17	11/01/17	METHANOL, Lot 177891	2 mL	8260/624GASPT_00089	80 uL	Bromomethane	100 ug/mL
							Chloroethane	100 ug/mL
							Chloromethane	100 ug/mL
							Dichlorodifluoromethane	100 ug/mL
							Trichlorofluoromethane	100 ug/mL
							Vinyl chloride	100 ug/mL
.8260/624GASPT_00089	01/27/18	10/27/17	na, Lot na	1 mL	8260/624 GAS_00016	1 mL	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
..8260/624 GAS_00016	01/31/20		Restek, Lot A0124278		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
8260/624KETWK_00281	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624KETPT_00051	16 uL	2-Hexanone	100 ug/mL
							Acetone	100 ug/mL
							Methyl Ethyl Ketone	100 ug/mL
							methyl isobutyl ketone	100 ug/mL
.8260/624KETPT_00051	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 KET_00013	1 mL	2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL
							methyl isobutyl ketone	12500 ug/mL
..8260/624 KET_00013	01/31/20		Restek, Lot A0123890		(Purchased Reagent)		2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL
							methyl isobutyl ketone	12500 ug/mL
8260/624KETWK_00284	11/08/17	10/25/17	METHANOL, Lot 177891	2 mL	8260/624KETPT_00051	16 uL	2-Hexanone	100 ug/mL
							Acetone	100 ug/mL
							Methyl Ethyl Ketone	100 ug/mL
							methyl isobutyl ketone	100 ug/mL
.8260/624KETPT_00051	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 KET_00013	1 mL	2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL
							methyl isobutyl ketone	12500 ug/mL
..8260/624 KET_00013	01/31/20		Restek, Lot A0123890		(Purchased Reagent)		2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							methyl isobutyl ketone	12500 ug/mL
8260/624MEGWK_00411	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624MEGPT_00077	80 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL
							Dibromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							n-Heptane	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							p-Isopropyltoluene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butyl alcohol	1000 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
.8260/624MEGPT_00077	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 Mega_00017	1 mL	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-trifluor oethane	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-Dibromoethane	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	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
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	2500 ug/mL
..8260/624 Mega_00017	12/31/18		Restek, Lot A01237		(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-trifluor oethane	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-Dibromoethane	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
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 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
8260/624MEGWK_00411	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624MEGPT_00077	80 uL	Xylenes, Total	200 ug/mL
.8260/624MEGPT_00077	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 Mega_00017	1 mL	Xylenes, Total	5000 ug/mL
..8260/624 Mega_00017	12/31/18		Restek, Lot A01237		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
8260/624MEGWK_00417	11/16/17	11/02/17	METHANOL, Lot 177891	2 mL	8260/624MEGPT_00078	80 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL
							Dibromomethane	100 ug/mL
							Ethylbenzene	100 ug/mL
							Iodomethane	100 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							p-Isopropyltoluene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butyl alcohol	1000 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
							Xylenes, Total	200 ug/mL
.8260/624MEGPT_00078	01/23/18	10/23/17	na, Lot na	1 mL	8260/624 Mega_00017	1 mL	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-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-Dibromoethane	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
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Iodomethane	2500 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-Propylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	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
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
..8260/624 Mega_00017	12/31/18		Restek, Lot A01237		(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-trifluor oethane	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-Dibromoethane	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
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Iodomethane	2500 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-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	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
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
8260/624STD2_00170	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260 MENAP PT_00015	80 uL	1-Methylnaphthalene	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
					8260PENTCLEPT_00014	80 uL	Pentachloroethane	100 ug/mL
.8260 MENAP PT_00015	12/31/17	10/04/17	METHANOL, Lot NA	1 mL	8260 MENAPH_00002	1 mL	1-Methylnaphthalene	2500 ug/mL
							2-Methylnaphthalene	2500 ug/mL
..8260 MENAPH_00002	12/31/17		Restek, Lot A0116084		(Purchased Reagent)		1-Methylnaphthalene	2500 ug/mL
							2-Methylnaphthalene	2500 ug/mL
.8260PENTCLEPT_00014	12/31/17	10/04/17	METHANOL, Lot NA	1 mL	8260 PENTACLE_00002	1 mL	Pentachloroethane	2500 ug/mL
..8260 PENTACLE_00002	12/31/17		Restek, Lot A0116076		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
8260ADDS 2016_00054	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260LIST2/6PT_00014	80 uL	1,2,3-Trimethylbenzene	100 ug/mL
							1,3,5-Trichlorobenzene	100 ug/mL
							1-Chlorohexane	100 ug/mL
							2-Chloro-1,3-butadiene	100 ug/mL
							2-Nitropropane	200 ug/mL
							Benzyl chloride	100 ug/mL
							Isooctane	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	1000 ug/mL
							Methacrylonitrile	1000 ug/mL
							n-Butanol	2500 ug/mL
					8260LIST2/7PT_00014	80 uL	Ethyl acetate	200 ug/mL
							Ethyl acrylate	100 ug/mL
							Methyl methacrylate	200 ug/mL
							n-Butyl acetate	100 ug/mL
.8260LIST2/6PT_00014	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	8260 LIST2/#6_00002	1 mL	1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Isooctane	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..8260 LIST2/#6_00002	06/30/18		Restek, Lot A01123685		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Isooctane	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.8260LIST2/7PT_00014	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	8260 LIST2/#7_00002	1 mL	Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
..8260 LIST2/#7_00002	01/31/18		Restek, Lot A0120639		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
8260CYCHXWK_00175	10/18/17	10/04/17	Water, Lot NA	2 mL	8260 CYCHX PT_00034	800 uL	Cyclohexanone	10000 ug/mL
.8260 CYCHX PT_00034	03/31/19		Restek, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
8260LOW IS/SS_00153	10/11/17	09/27/17	METHANOL, Lot 177891	20 mL	8260 IS/SS SK_00036	4000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							1,4-Dioxane-d8	1000 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							TBA-d9 (IS)	1000 ug/mL
.8260 IS/SS SK_00036	04/30/22		Restek, Lot A0126559		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							1,4-Dioxane-d8	5000 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8260LOW IS/SS_00153	10/11/17	09/27/17	METHANOL, Lot 177891	20 mL	8260 IS/SS SK_00036	4000 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.8260 IS/SS SK_00036	04/30/22		Restek, Lot A0126559		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
8260LOW IS/SS_00155	11/06/17	10/23/17	METHANOL, Lot 177891	20 mL	8260 IS/SS SK_00037	4000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							1,4-Dioxane-d8	1000 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							TBA-d9 (IS)	1000 ug/mL
.8260 IS/SS SK_00037	04/30/22		Restek, Lot A0126559		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							1,4-Dioxane-d8	5000 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
8260LOW IS/SS_00155	11/06/17	10/23/17	METHANOL, Lot 177891	20 mL	8260 IS/SS SK_00037	4000 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.8260 IS/SS SK_00037	04/30/22		Restek, Lot A0126559		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
8260POLR ADDS_00129	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260 ETOH PT_00001	80 uL	Ethanol	4000 ug/mL
					8260POLRADDPT_00029	80 uL	Acetonitrile	1000 ug/mL
							Isopropyl ether	100 ug/mL
							Propionitrile	1000 ug/mL
							Tert-amyl methyl ether	100 ug/mL
							Tert-butyl ethyl ether	100 ug/mL
.8260 ETOH PT_00001	01/01/18	10/04/17	METHANOL, Lot NA	1 mL	8260 ETOH STD_00001	1 mL	Ethanol	100000 ug/mL
..8260 ETOH STD_00001	12/31/19		Restek, Lot A0123787		(Purchased Reagent)		Ethanol	100000 ug/mL
.8260POLRADDPT_00029	01/01/18	10/04/17	METHANOL, Lot NA	1 mL	8260POLARADDS_00007	1 mL	Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
..8260POLARADDS_00007	12/31/18		Restek, Lot A0123796		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
8260POLR ADDS_00131	11/15/17	11/01/17	METHANOL, Lot 177891	2 mL	8260POLRADDPT_00029	80 uL	Isopropyl ether	100 ug/mL
							Tert-amyl methyl ether	100 ug/mL
							Tert-butyl ethyl ether	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8260POLRADDPT_00029	01/01/18	10/04/17	METHANOL, Lot NA	1 mL	8260POLARADDS_00007	1 mL	Isopropyl ether	2500 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
..8260POLARADDS_00007	12/31/18		Restek, Lot A0123796		(Purchased Reagent)		Isopropyl ether	2500 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
8260VA/2CEVE_00294	10/11/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624 VAPT_00056	40 uL	Vinyl acetate	100 ug/mL
					8260/624CEVPT_00048	80 uL	2-Chloroethyl vinyl ether	100 ug/mL
.8260/624 VAPT_00056	12/31/17	10/04/17	METHANOL, Lot NA	1 mL	8260/624 VA_00024	1 mL	Vinyl acetate	5000 ug/mL
..8260/624 VA_00024	12/31/17		Restek, Lot A0128793		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.8260/624CEVPT_00048	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	8260/624 CEVE_00011	1 mL	2-Chloroethyl vinyl ether	2500 ug/mL
..8260/624 CEVE_00011	11/30/18		Restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
8260VA/2CEVE_00298	11/16/17	11/02/17	METHANOL, Lot 177891	2 mL	8260/624 VAPT_00056	40 uL	Vinyl acetate	100 ug/mL
					8260/624CEVPT_00048	80 uL	2-Chloroethyl vinyl ether	100 ug/mL
.8260/624 VAPT_00056	12/31/17	10/04/17	METHANOL, Lot NA	1 mL	8260/624 VA_00024	1 mL	Vinyl acetate	5000 ug/mL
..8260/624 VA_00024	12/31/17		Restek, Lot A0128793		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.8260/624CEVPT_00048	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	8260/624 CEVE_00011	1 mL	2-Chloroethyl vinyl ether	2500 ug/mL
..8260/624 CEVE_00011	11/30/18		Restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
BFB STD WK_00165							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethanes, Total	
							Trimethylbenzene, Total	
							Xylenes, Total	
					BFB WK PT_00043	25 uL	BFB	25 ug/mL
.BFB WK PT_00043	11/30/17	10/08/17	1, Lot NA	1 mL	BFB STD SK_00008	1 mL	BFB	2000 ug/mL
..BFB STD SK_00008	11/30/17		ultra scientific, Lot CH-3248A		(Purchased Reagent)		BFB	2000 ug/mL
BFB STD WK_00168							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethanes, Total	
							Trimethylbenzene, Total	
							Xylenes, Total	
					BFB WK PT_00043	25 uL	BFB	25 ug/mL
.BFB WK PT_00043	11/30/17	10/08/17	1, Lot NA	1 mL	BFB STD SK_00008	1 mL	BFB	2000 ug/mL
..BFB STD SK_00008	11/30/17		ultra scientific, Lot CH-3248A		(Purchased Reagent)		BFB	2000 ug/mL
LEVEL1 8260_00003	12/31/17	07/06/15	1, Lot DH247	1 mL	8260/624STD_00001	5 uL	Vinyl chloride	0.5 ug/mL
							Benzene	0.5 ug/mL
							Ethylbenzene	0.5 ug/mL
							m-Xylene & p-Xylene	0.5 ug/mL
							o-Xylene	0.5 ug/mL
							Toluene	0.5 ug/mL
							Trichloroethene	0.5 ug/mL
.8260/624STD_00001	12/31/17	01/15/13	METHANOL, Lot DH247	2 mL	8260/624L1GAS_00001	100 uL	Vinyl chloride	100 ug/mL
					8260/624L1MEG_00001	100 uL	Benzene	100 ug/mL
							Ethylbenzene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

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	100 ug/mL
							o-Xylene	100 ug/mL
							Toluene	100 ug/mL
							Trichloroethene	100 ug/mL
..8260/624L1GAS_00001	12/31/17		Restek, Lot A092242		(Purchased Reagent)		Vinyl chloride	2000 ug/mL
..8260/624L1MEG_00001	12/31/17		Restek, Lot A092262		(Purchased Reagent)		Benzene	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							o-Xylene	2000 ug/mL
							Toluene	2000 ug/mL
							Trichloroethene	2000 ug/mL
LO8260/624STD_00264	10/11/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624GASWK_00472	100 uL	Bromomethane	5 ug/mL
							Butadiene	5 ug/mL
							Chloroethane	5 ug/mL
							Chloromethane	5 ug/mL
							Dichlorodifluoromethane	5 ug/mL
							Dichlorofluoromethane	5 ug/mL
							Trichlorofluoromethane	5 ug/mL
							Vinyl chloride	5 ug/mL
					8260/624KETWK_00281	100 uL	2-Hexanone	5 ug/mL
							Acetone	5 ug/mL
							Methyl Ethyl Ketone	5 ug/mL
							methyl isobutyl ketone	5 ug/mL
					8260/624MEGWK_00411	100 uL	1,1,1,2-Tetrachloroethane	5 ug/mL
							1,1,1-Trichloroethane	5 ug/mL
							1,1,2,2-Tetrachloroethane	5 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	5 ug/mL
							1,1,2-Trichloroethane	5 ug/mL
							1,1-Dichloroethane	5 ug/mL
							1,1-Dichloroethene	5 ug/mL
							1,1-Dichloropropene	5 ug/mL
							1,2,3-Trichlorobenzene	5 ug/mL
							1,2,3-Trichloropropane	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2,4-Trimethylbenzene	5 ug/mL
							1,2-Dibromo-3-Chloropropane	5 ug/mL
							1,2-Dibromoethane	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Dichloroethane	5 ug/mL
							1,2-Dichloropropane	5 ug/mL
							1,3,5-Trimethylbenzene	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dichloropropane	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	100 ug/mL
							2,2-Dichloropropane	5 ug/mL
							2-Chlorotoluene	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

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	5 ug/mL
							4-Chlorotoluene	5 ug/mL
							Acrylonitrile	50 ug/mL
							Benzene	5 ug/mL
							Bromobenzene	5 ug/mL
							Bromochloromethane	5 ug/mL
							Bromodichloromethane	5 ug/mL
							Bromoform	5 ug/mL
							Carbon disulfide	5 ug/mL
							Carbon tetrachloride	5 ug/mL
							Chlorobenzene	5 ug/mL
							Chloroform	5 ug/mL
							cis-1,2-Dichloroethene	5 ug/mL
							cis-1,3-Dichloropropene	5 ug/mL
							Cyclohexane	5 ug/mL
							Dibromochloromethane	5 ug/mL
							Dibromomethane	5 ug/mL
							Ethyl ether	5 ug/mL
							Ethyl methacrylate	5 ug/mL
							Ethylbenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexane	5 ug/mL
							Iodomethane	5 ug/mL
							Isobutyl alcohol	125 ug/mL
							Isopropylbenzene	5 ug/mL
							m-Xylene & p-Xylene	5 ug/mL
							Methyl acetate	10 ug/mL
							Methyl tert-butyl ether	5 ug/mL
							Methylcyclohexane	5 ug/mL
							Methylene Chloride	5 ug/mL
							n-Butylbenzene	5 ug/mL
							n-Heptane	5 ug/mL
							N-Propylbenzene	5 ug/mL
							Naphthalene	5 ug/mL
							o-Xylene	5 ug/mL
							p-Isopropyltoluene	5 ug/mL
							sec-Butylbenzene	5 ug/mL
							Styrene	5 ug/mL
							tert-Butyl alcohol	50 ug/mL
							tert-Butylbenzene	5 ug/mL
							Tetrachloroethene	5 ug/mL
							Tetrahydrofuran	10 ug/mL
							Toluene	5 ug/mL
							trans-1,2-Dichloroethene	5 ug/mL
							trans-1,3-Dichloropropene	5 ug/mL
							trans-1,4-Dichloro-2-butene	5 ug/mL
							Trichloroethene	5 ug/mL
					8260VA/2CEVE_00294	100 uL	Vinyl acetate	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloroethyl vinyl ether	5 ug/mL
.8260/624GASWK_00472	10/11/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624GASPT_00088	80 uL	Bromomethane	100 ug/mL
							Butadiene	100 ug/mL
							Chloroethane	100 ug/mL
							Chloromethane	100 ug/mL
							Dichlorodifluoromethane	100 ug/mL
							Dichlorofluoromethane	100 ug/mL
							Trichlorofluoromethane	100 ug/mL
							Vinyl chloride	100 ug/mL
..8260/624GASPT_00088	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 GAS_00015	1 mL	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
...8260/624 GAS_00015	01/31/20	Restek, Lot A0124278			(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
.8260/624KETWK_00281	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624KETPT_00051	16 uL	2-Hexanone	100 ug/mL
							Acetone	100 ug/mL
							Methyl Ethyl Ketone	100 ug/mL
							methyl isobutyl ketone	100 ug/mL
..8260/624KETPT_00051	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 KET_00013	1 mL	2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL
							methyl isobutyl ketone	12500 ug/mL
...8260/624 KET_00013	01/31/20	Restek, Lot A0123890			(Purchased Reagent)		2-Hexanone	12500 ug/mL
							Acetone	12500 ug/mL
							Methyl Ethyl Ketone	12500 ug/mL
							methyl isobutyl ketone	12500 ug/mL
.8260/624MEGWK_00411	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624MEGPT_00077	80 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

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	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL
							Dibromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							n-Heptane	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Xylene	100 ug/mL
							p-Isopropyltoluene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butyl alcohol	1000 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
..8260/624MEGPT_00077	01/04/18	10/04/17	na, Lot na	1 mL	8260/624 Mega_00017	1 mL	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-trifluor oethane	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-Dibromoethane	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
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	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
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 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
...8260/624 Mega_00017	12/31/18	Restek, Lot A01237			(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-trifluor oethane	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

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	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	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
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	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
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 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
.8260VA/2CEVE_00294	10/11/17	10/04/17	METHANOL, Lot 177891	2 mL	8260/624 VAPT_00056	40 uL	Vinyl acetate	100 ug/mL
					8260/624CEVPT_00048	80 uL	2-Chloroethyl vinyl ether	100 ug/mL
..8260/624 VAPT_00056	12/31/17	10/04/17	METHANOL, Lot NA	1 mL	8260/624 VA_00024	1 mL	Vinyl acetate	5000 ug/mL
...8260/624 VA_00024	12/31/17		Restek, Lot A0128793		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..8260/624CEVPT_00048	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	8260/624 CEVE_00011	1 mL	2-Chloroethyl vinyl ether	2500 ug/mL
...8260/624 CEVE_00011	11/30/18		Restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
LO8260ADDS_00034	10/18/17	10/04/17	METHANOL, Lot 177891	1 mL	8260ADDS 2016_00054	50 uL	1,2,3-Trimethylbenzene	5 ug/mL
							1,3,5-Trichlorobenzene	5 ug/mL
							1-Chlorohexane	5 ug/mL
							2-Chloro-1,3-butadiene	5 ug/mL
							2-Nitropropane	10 ug/mL
							Benzyl chloride	5 ug/mL
							Isooctane	5 ug/mL
							Isopropyl alcohol	50 ug/mL
							Methacrylonitrile	50 ug/mL
							n-Butanol	125 ug/mL
							Ethyl acetate	10 ug/mL
							Ethyl acrylate	5 ug/mL
							Methyl methacrylate	10 ug/mL
							n-Butyl acetate	5 ug/mL
.8260ADDS 2016_00054	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260LIST2/6PT_00014	80 uL	1,2,3-Trimethylbenzene	100 ug/mL
							1,3,5-Trichlorobenzene	100 ug/mL
							1-Chlorohexane	100 ug/mL
							2-Chloro-1,3-butadiene	100 ug/mL
							2-Nitropropane	200 ug/mL
							Benzyl chloride	100 ug/mL
							Isooctane	100 ug/mL
							Isopropyl alcohol	1000 ug/mL
							Methacrylonitrile	1000 ug/mL
							n-Butanol	2500 ug/mL
					8260LIST2/7PT_00014	80 uL	Ethyl acetate	200 ug/mL
							Ethyl acrylate	100 ug/mL
							Methyl methacrylate	200 ug/mL
							n-Butyl acetate	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..8260LIST2/6PT_00014	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	8260 LIST2/#6_00002	1 mL	1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Isooctane	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
...8260 LIST2/#6_00002	06/30/18		Restek, Lot A01123685		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Isooctane	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..8260LIST2/7PT_00014	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	8260 LIST2/#7_00002	1 mL	Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
...8260 LIST2/#7_00002	01/31/18		Restek, Lot A0120639		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
LO8260POLRADD_00093	10/18/17	10/04/17	METHANOL, Lot 177891	1 mL	8260POLR ADDS_00129	50 uL	Ethanol	200 ug/mL
							Acetonitrile	50 ug/mL
							Isopropyl ether	5 ug/mL
							Propionitrile	50 ug/mL
							Tert-amyl methyl ether	5 ug/mL
							Tert-butyl ethyl ether	5 ug/mL
.8260POLR ADDS_00129	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260 ETOH PT_00001	80 uL	Ethanol	4000 ug/mL
					8260POLRADDPT_00029	80 uL	Acetonitrile	1000 ug/mL
							Isopropyl ether	100 ug/mL
							Propionitrile	1000 ug/mL
							Tert-amyl methyl ether	100 ug/mL
							Tert-butyl ethyl ether	100 ug/mL
..8260 ETOH PT_00001	01/01/18	10/04/17	METHANOL, Lot NA	1 mL	8260 ETOH STD_00001	1 mL	Ethanol	100000 ug/mL
...8260 ETOH STD_00001	12/31/19		Restek, Lot A0123787		(Purchased Reagent)		Ethanol	100000 ug/mL
..8260POLRADDPT_00029	01/01/18	10/04/17	METHANOL, Lot NA	1 mL	8260POLARADDS_00007	1 mL	Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...8260POLARADDS_00007	12/31/18		Restek, Lot A0123796		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
LOW2,3-DICP_00063	10/18/17	10/04/17	METHANOL, Lot 177891	1 mL	8260 23DCP WK_00104	50 uL	2,3-Dichloro-1-propene	5 ug/mL
.8260 23DCP WK_00104	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260 23DCP PT_00029	200 uL	2,3-Dichloro-1-propene	100 ug/mL
..8260 23DCP PT_00029	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	2,3DICL1PRPEN_00005	1 mL	2,3-Dichloro-1-propene	1000 ug/mL
...2,3DICL1PRPEN_00005	08/14/20		ABSOLUTE STD, Lot 081417		(Purchased Reagent)		2,3-Dichloro-1-propene	1000 ug/mL
LOW2ETTOL STD_00018	10/18/17	10/04/17	METHANOL, Lot 177891	1 mL	2ETTOL WK STD_00039	50 uL	2-Ethyltoluene	5 ug/mL
.2ETTOL WK STD_00039	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	2ETTOL PT STD_00012	200 uL	2-Ethyltoluene	100 ug/mL
..2ETTOL PT STD_00012	01/04/18	10/04/17	METHANOL, Lot NA	1 mL	2ETHYLTOL STD_00002	1 mL	2-Ethyltoluene	1000 ug/mL
...2ETHYLTOL STD_00002	07/01/21		ABSOLUTE STD, Lot 070116		(Purchased Reagent)		2-Ethyltoluene	1000 ug/mL
LOW8260ACR_00177	10/11/17	10/04/17	Water, Lot NA	1 mL	8260/624ACRWK_00356	50 uL	Acrolein	200 ug/mL
.8260/624ACRWK_00356	10/11/17	10/04/17	Water, Lot NA	2 mL	8260/624ACRPT_00135	400 uL	Acrolein	4000 ug/mL
..8260/624ACRPT_00135	11/30/17	10/02/17	Water, Lot NA	1 mL	8260 ACROLEIN_00038	1 mL	Acrolein	20000 ug/mL
...8260 ACROLEIN_00038	11/30/17		Restek, Lot A0127476		(Purchased Reagent)		Acrolein	20000 ug/mL
LOW8260STD2_00151	10/18/17	10/04/17	METHANOL, Lot 177891	1 mL	8260/624STD2_00170	50 uL	1-Methylnaphthalene	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							Pentachloroethane	5 ug/mL
.8260/624STD2_00170	10/18/17	10/04/17	METHANOL, Lot 177891	2 mL	8260 MENAP PT_00015	80 uL	1-Methylnaphthalene	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
					8260PENTCLEPT_00014	80 uL	Pentachloroethane	100 ug/mL
..8260 MENAP PT_00015	12/31/17	10/04/17	METHANOL, Lot NA	1 mL	8260 MENAPH_00002	1 mL	1-Methylnaphthalene	2500 ug/mL
							2-Methylnaphthalene	2500 ug/mL
...8260 MENAPH_00002	12/31/17		Restek, Lot A0116084		(Purchased Reagent)		1-Methylnaphthalene	2500 ug/mL
							2-Methylnaphthalene	2500 ug/mL
..8260PENTCLEPT_00014	12/31/17	10/04/17	METHANOL, Lot NA	1 mL	8260 PENTACLE_00002	1 mL	Pentachloroethane	2500 ug/mL
...8260 PENTACLE_00002	12/31/17		Restek, Lot A0116076		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
LOWCYCHXWK_00153	10/18/17	10/04/17	Water, Lot NA	1 mL	8260CYCHXWK_00175	50 uL	Cyclohexanone	500 ug/mL
.8260CYCHXWK_00175	10/18/17	10/04/17	Water, Lot NA	2 mL	8260 CYCHX PT_00034	800 uL	Cyclohexanone	10000 ug/mL
..8260 CYCHX PT_00034	03/31/19		Restek, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
POLRADDSSPK_00074	10/19/17	10/05/17	METHANOL, Lot 177891	2 mL	POLRADDSPKPT_00025	40 uL	Isopropyl ether	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
.POLRADDSPKPT_00025	01/05/18	10/05/17	METHANOL, Lot NA	1 mL	8260 PolarSPK_00007	1 mL	Isopropyl ether	2500 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
..8260 PolarSPK_00007	12/31/18		Restek, Lot A0123771		(Purchased Reagent)		Isopropyl ether	2500 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
VA/2CEVE SPK_00118	10/12/17	10/05/17	METHANOL, Lot 177891	2 mL	8260 VASPKPT_00042	20 uL	Vinyl acetate	50 ug/mL
					8260CEVESPKPT_00030	40 uL	2-Chloroethyl vinyl ether	50 ug/mL
.8260 VASPKPT_00042	11/30/17	10/05/17	METHANOL, Lot NA	1 mL	VA SPK STK_00020	1 mL	Vinyl acetate	5000 ug/mL
..VA SPK STK_00020	11/30/17		Restek, Lot A0127537		(Purchased Reagent)		Vinyl acetate	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8260CEVESPKPT_00030	01/05/18	10/05/17	METHANOL, Lot NA	1 mL	CEVE SPK STK_00010	1 mL	2-Chloroethyl vinyl ether	2500 ug/mL
..CEVE SPK STK_00010	01/31/20		Restek, Lot A0123884		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
WCSTTC1_00122	11/09/17		Macron, Lot 0000123337		(Purchased Reagent)		TOC Result 1	2000 mg/L
							TOC Result 2	2000 mg/L
							Total Organic Carbon - Duplicates	2000 mg/L
WCSTTC2_00132	11/09/17		J.T Baker, Lot 0000123024		(Purchased Reagent)		TOC Result 1	2000 mg/L
							TOC Result 2	2000 mg/L
							Total Organic Carbon - Duplicates	2000 mg/L
WSTICCL1_00016	05/31/18		ERA, Lot 180516		(Purchased Reagent)		Chloride	1000 mg/L
WSTICCL2_00016	03/31/19		RICCA, Lot 1703J22		(Purchased Reagent)		Chloride	1000 mg/L
WSTICN031_00007	11/30/17		ERA, Lot 031115		(Purchased Reagent)		Nitrate as N	1000 mg/L
WSTICNO32_00014	11/30/18		RICCA, Lot 2705D50		(Purchased Reagent)		Nitrate as N	1000 mg/L
WSTICS1_00010	06/30/19		ERA, Lot 210617		(Purchased Reagent)		Sulfate	1000 mg/L
WSTICS2_00012	08/31/18		RICCA, Lot 2603747		(Purchased Reagent)		Sulfate	1000 mg/L
WSTSF1_00070	10/13/18		Na2Scrystal_3/1.5g, Lot 0.5MZnAcetat_34/20mL		(Purchased Reagent)		Sulfide	163.84 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SAICALSURR_00012	10/03/18	Matheson Trigas, Lot 109-46-10609			(Purchased Reagent)		1,1,1-Trifluoroethane	172158 ug/L
SARSK2NDSRCE_00010	10/13/18	Air Liquide-Scott Specialty gases, Lot 403-120156			(Purchased Reagent)		Ethane	12338 ug/L
							Ethylene	11518 ug/L
							Methane	6558 ug/L
SARSKHIGHCALP_00008	10/08/18	Matheson Trigas, Lot 109-66-14469			(Purchased Reagent)		Acetylene	10657 ug/L
							Ethane	12338 ug/L
							Ethylene	11518 ug/L
							Methane	6558 ug/L
							Propane	18077 ug/L
SARSKLOWCAL_00009	09/27/18	MATHESON TRI-GAS INC., Lot 109-56-13136			(Purchased Reagent)		Acetylene	1066 ug/L
							Ethane	1234 ug/L
							Ethylene	1152 ug/L
							Methane	656 ug/L
							Propane	1808 ug/L
SARSKSURR_00010	11/22/17	Matheson Trigas, Lot 9302603973			(Purchased Reagent)		1,1,1-Trifluoroethane	11190 ug/L
vm150is_00060	11/01/17	09/01/17	MEOH, Lot +191720000177891JR	5 mL	VM568718_00008	3 mL	Dioxane-d8 (IS)	3000 ug/mL
							Fluorobenzene	150 ug/mL
.VM568718_00008	03/31/21	restek, Lot A0118105			(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150is_00062	01/05/18	10/05/17	MEOH, Lot +191720000177891JR	5 mL	VM568718_00008	3 mL	Dioxane-d8 (IS)	3000 ug/mL
							Fluorobenzene	150 ug/mL
.VM568718_00008	03/31/21	restek, Lot A0118105			(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150is_00066	02/02/18	11/02/17	MEOH, Lot +191720000177891JR	5 mL	VM568718_00009	3 mL	Dioxane-d8 (IS)	3000 ug/mL
							Fluorobenzene	150 ug/mL
.VM568718_00009	03/31/21	restek, Lot A0118105			(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150ss_00006	12/06/17	07/06/17	MEOH, Lot +181520000147462JF	100 mL	VM567650_00026	6 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00026	12/31/20	Restek, Lot A0115812			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm150ss_00007	01/22/18	10/22/17	MEOH, Lot +191720000177891JR	50 mL	VM567650_00027	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00027	07/31/21	Restek, Lot A0120212			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm50ss_00299	10/10/17	10/03/17	MEOH, Lot na	4 mL	vm50ss_stk_00075	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
.vm50ss_stk_00075	03/08/18	09/08/17	MEOH, Lot 0000136118	200 mL	VM567650_00024	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
..VM567650_00024	07/31/20	Restek, Lot A0112455			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vmbfb_00018							Tentatively Identified Compound	
					vm30026_00001	1.25 mL	BFB	50 ug/mL
.vm30026_00001	03/31/20	restek, Lot A0109427			(Purchased Reagent)		BFB	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vmdiox_spike_00121	10/12/17	10/05/17	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00010	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00010	02/01/18	08/01/17	MEOH, Lot +181520000147462JF	100 mL	VMNSIMIX2_00006	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00006	06/30/18	NSI Soln, Inc., Lot 062217			(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00124	11/09/17	11/02/17	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00010	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00010	02/01/18	08/01/17	MEOH, Lot +181520000147462JF	100 mL	VMNSIMIX2_00006	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00006	06/30/18	NSI Soln, Inc., Lot 062217			(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdioxanew_00108	10/12/17	10/05/17	MEOH, Lot na	1 mL	vmdioxane_00021	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00021	12/18/17	06/18/17	MEOH, Lot +181520000147462JF	50 mL	VM30287_00014	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00014	02/28/21	Restek, Lot A0117572			(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00111	11/09/17	11/02/17	MEOH, Lot na	1 mL	vmdioxane_00021	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00021	12/18/17	06/18/17	MEOH, Lot +181520000147462JF	50 mL	VM30287_00014	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00014	02/28/21	Restek, Lot A0117572			(Purchased Reagent)		1,4-Dioxane	2000 ug/mL

Reagent

SARSK2NDSRCE_00010

Scott™

2357148
ID: SARSK2NDSRCE_00010
Exp:10/13/18 Prpd:BPM Opn:01/08/16
1%,20% varluos gases

Shipped From: 6141 Easton Road
Plumsteadville, PA 18949
Phone: 215-766-8860
Fax: 215-766-7226

CERTIFICATE OF ANALYSIS

TESTAMERICA
TESTAMERICA-1
4101 Shuffel St NW
NORTH CANTON, OH 44720-6900
US

Sales Order # : 505422
P.O. #.: 2621142
Item No.: A0911317
Date: 14Oct2015

Cylinder #: ST0000153189
Fill Pressure: 240 PSIG
CGA: 600

Product Expiration: 13Oct2018
Lot #: 403-120156

Blend Type: CERTIFIED SCOTTY

Component Name	Requested Gas Conc (Moles)	Analysis (Mole)	Accuracy (+ / - %)
ACETYLENE	1.00 %	1.00 %	5
ETHANE	1.00 %	1.01 %	5
ETHYLENE	1.00 %	1.01 %	5
METHANE	1.00 %	0.990 %	5
PROPANE	1.00 %	0.998 %	5
HELIUM	BALANCE	BALANCE	

APPROVED BY: Lynn Matonis
Lynn Matonis

DATE: 12Oct2015

AIR LIQUIDE

Reagent

SARSKHIGHCALP_00008

MATHESON TRI-GAS INC
1650 Enterprise Pkwy
Twinsburg, OH 44087
1-215-648-4000

RCVD
10/14/16

CERTIFICATE OF ANALYSIS

Test America

Ref Po# 092916TB

17 LITER DISPOSABLE

LOT NUMBER: 109-66-14469

COMPONENT	CONCENTRATION	
ethane	1.00	%
propane	0.999	%
ethylene	0.999	%
acetylene	1.00	%
methane	1.00	%
helium	BAL	

ITEM NUMBER: GMT2690244TB

CGA: 600

PSIG: 240

FILL DATE: 10/07/16

EXPIRATION DATE: 10/08/18

Above are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixture accuracy is ± 2%. NIST traceable by weights or gaseous standards.

Amanda Miller, Lab Technician

10/10/2016
DATE

Reagent

---

vm30026_00001

Rec: 8/10/25

VM30026-00001

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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. : 30026 **Lot No.:** A0109427

Description : 4-Bromofluorobenzene Mixture

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

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

Expiration Date : March 31, 2020 **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) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,009.0 µg/mL	+/- 11.7899 µg/mL +/- 22.7110 µg/mL +/- 26.1178 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VM30287_00014

VM 30287_00014 Rec: 7/8/16 (10)

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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. : 30287 **Lot No.:** A0117572

Description : 1,4-Dioxane Standard

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

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

Expiration Date : February 28, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane	2,014.4 µg/mL	+/- 11.8216 µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBG1461V)		+/- 43.1585 µg/mL	Unstressed
	Purity 99%		+/- 44.4114 µg/mL	Stressed

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

Reagent

VM567650_00024

VM567650_00024

Rec: 9/16/15

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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.:** A0112455

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 : July 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,509.6 µg/mL	+/- 14.5910	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 022012)		+/- 28.2993	µg/mL	Unstressed
	Purity 99%			+/- 32.5644	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,507.5 µg/mL	+/- 14.5788	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot 14C-191)		+/- 28.2757	µg/mL	Unstressed
	Purity 99%			+/- 32.5371	µg/mL	Stressed
3	Toluene-d8		2,509.0 µg/mL	+/- 14.5875	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-26282)		+/- 28.2926	µg/mL	Unstressed
	Purity 99%			+/- 32.5566	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,506.0 µg/mL	+/- 14.5701	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 28.2587	µg/mL	Unstressed
	Purity 99%			+/- 32.5176	µg/mL	Stressed

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

Reagent

VM567650_00026

VM567650-00026

Rec: 1/26/16

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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.

33

Catalog No. : 567650 **Lot No.:** A0115812

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 : December 31, 2020 **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 022012) **Purity** 99%	2,503.1 µg/mL	+/- 14.5534 µg/mL +/- 140.3482 µg/mL +/- 143.6322 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot 14C-191) **Purity** 99%	2,500.1 µg/mL	+/- 14.5360 µg/mL +/- 140.1800 µg/mL +/- 143.4600 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-26282) **Purity** 99%	2,505.0 µg/mL	+/- 14.5643 µg/mL +/- 140.4529 µg/mL +/- 143.7393 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 140.2361 µg/mL +/- 143.5174 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VM567650_00027

VM567650-00027 Rec: 4/10/17 (39)

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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.:** A0120212

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 : 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	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 032015) **Purity** 99%	2,521.3 µg/mL	+/- 14.6591 µg/mL +/- 141.3668 µg/mL +/- 144.6746 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot 14C-191) **Purity** 99%	2,523.7 µg/mL	+/- 14.6730 µg/mL +/- 141.5014 µg/mL +/- 144.8123 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-26623) **Purity** 99%	2,523.6 µg/mL	+/- 14.6724 µg/mL +/- 141.4957 µg/mL +/- 144.8066 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,510.9 µg/mL	+/- 14.5986 µg/mL +/- 140.7837 µg/mL +/- 144.0778 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VM568718_00008

VM568718_00008 Rec: 7/12/16

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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.:** A0118105

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 : March 31, 2021 **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 I201P6) Purity 99%	5,023.8 µg/mL	+/- 29.2073 µg/mL +/- 107.5597 µg/mL +/- 110.6867 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone-d5 CAS # 24313-50-6 (Lot M276) Purity 99%	1,251.1 µg/mL	+/- 7.2740 µg/mL +/- 26.7862 µg/mL +/- 27.5649 µg/mL		Gravimetric Unstressed Stressed
3	Fluorobenzene CAS # 462-06-6 (Lot BCBK8171V) Purity 99%	250.2 µg/mL	+/- 1.4578 µg/mL +/- 5.3567 µg/mL +/- 5.5123 µg/mL		Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 CAS # 17647-74-4 (Lot I-19239) Purity 99%	5,005.7 µg/mL	+/- 29.1020 µg/mL +/- 107.1722 µg/mL +/- 110.2879 µg/mL		Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-23926) Purity 99%	250.1 µg/mL	+/- 1.4575 µg/mL +/- 5.3556 µg/mL +/- 5.5112 µg/mL		Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	250.0 µg/mL	+/- 1.4566 µg/mL +/- 5.3524 µg/mL +/- 5.5079 µg/mL		Gravimetric Unstressed Stressed

Reagent

VM568718_00009

VM568718_00009

Rec: 9/28/16

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis

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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. : 568718 **Lot No.:** A0118105

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 : March 31, 2021 **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 I201P6) **Purity** 99%	5,023.8 µg/mL	+/- 29.2073 µg/mL +/- 107.5597 µg/mL +/- 110.6867 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M276) **Purity** 99%	1,251.1 µg/mL	+/- 7.2740 µg/mL +/- 26.7862 µg/mL +/- 27.5649 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	250.2 µg/mL	+/- 1.4578 µg/mL +/- 5.3567 µg/mL +/- 5.5123 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19239) **Purity** 99%	5,005.7 µg/mL	+/- 29.1020 µg/mL +/- 107.1722 µg/mL +/- 110.2879 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.1 µg/mL	+/- 1.4575 µg/mL +/- 5.3556 µg/mL +/- 5.5112 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	250.0 µg/mL	+/- 1.4566 µg/mL +/- 5.3524 µg/mL +/- 5.5079 µg/mL	Gravimetric Unstressed Stressed

Reagent

VMNSIMIX2_00006

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Certificate of Analysis

8260 Extras Mix 2

Catalog Number: Q-3383
Lot Number: 062217
Manufacture Date: 06/22/17

Expiration: 06/30/2018
Solvent: Methanol/Water
Hazards: Irritant, Toxic

Analyte	CAS	Analyte Purity	Gravimetric Concentration (ug/mL)
Ethylene oxide	75-21-8	99.0%	25000.0 ± 176
Epichlorohydrin	106-89-8	99.9%	9998.2 ± 70
Propylene oxide	75-56-9	99.0%	10000.8 ± 71
1,4-Dioxane	123-91-1	100%	50001.9 ± 353

Packaging, Storage, Instructions For Use

This standard is packaged in a flame-sealed ampule and **must be stored at -15 to -30°C.** To use this standard, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This standard was verified gravimetrically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Method 8260B

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB624 ID: 0.2 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
EIP-TB09-103017	500-136523-1	90	88	94	91
OMW3D-GW-103017	500-136523-2	91	89	94	92
EIP-EB-103017	500-136523-3	92	89	94	92
OMW4D-GW-103017	500-136523-4	90	88	95	90
	MB 500-408477/6	90	88	93	92
	LCS 500-408477/4	92	88	94	84

	QC LIMITS
DBFM = Dibromofluoromethane	75-120
DCA = 1,2-Dichloroethane-d4 (Surr)	75-126
TOL = Toluene-d8 (Surr)	75-120
BFB = 4-Bromofluorobenzene (Surr)	72-124

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 22S1105.D

Lab ID: LCS 500-408477/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	0.0500	0.0469	94	70-125	
1,1,1-Trichloroethane	0.0500	0.0463	93	70-125	
1,1,2,2-Tetrachloroethane	0.0500	0.0433	87	67-127	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0459	92	70-123	
1,1,2-Trichloroethane	0.0500	0.0469	94	70-122	
1,1-Dichloroethane	0.0500	0.0476	95	70-125	
1,1-Dichloroethene	0.0500	0.0466	93	67-122	
1,1-Dichloropropene	0.0500	0.0476	95	70-121	
1,2,3-Trichlorobenzene	0.0500	0.0512	102	55-140	
1,2,3-Trichloropropane	0.0500	0.0429	86	50-133	
1,2,4-Trichlorobenzene	0.0500	0.0505	101	66-127	
1,2,4-Trimethylbenzene	0.0500	0.0447	89	70-123	
1,2-Dibromo-3-Chloropropane	0.0500	0.0447	89	56-123	
1,2-Dibromoethane	0.0500	0.0450	90	70-125	
1,2-Dichlorobenzene	0.0500	0.0469	94	70-125	
1,2-Dichloroethane	0.0500	0.0451	90	68-127	
1,2-Dichloropropane	0.0500	0.0473	95	67-130	
1,3,5-Trimethylbenzene	0.0500	0.0448	90	70-123	
1,3-Dichlorobenzene	0.0500	0.0460	92	70-125	
1,3-Dichloropropane	0.0500	0.0463	93	62-136	
1,4-Dichlorobenzene	0.0500	0.0464	93	70-120	
1,4-Dioxane	1.00	0.962	96	70-129	
2,2-Dichloropropane	0.0500	0.0458	92	58-129	
2-Chloroethyl vinyl ether	0.0500	0.0374	75	52-136	
2-Chlorotoluene	0.0500	0.0434	87	70-125	
2-Hexanone	0.0500	0.0405	81	56-135	
4-Chlorotoluene	0.0500	0.0437	87	68-124	
Acetone	0.0500	0.0381	76	40-143	
Acrolein	2.00	1.69	85	40-150	
Acrylonitrile	0.500	0.517	103	67-140	
Benzene	0.0500	0.0473	95	70-120	
Bromobenzene	0.0500	0.0449	90	70-122	
Bromochloromethane	0.0500	0.0463	93	65-122	
Bromodichloromethane	0.0500	0.0455	91	69-120	
Bromoform	0.0500	0.0524	105	56-132	
Bromomethane	0.0500	0.0325	65	40-130	
Carbon disulfide	0.0500	0.0491	98	66-120	
Carbon tetrachloride	0.0500	0.0466	93	65-122	
Chlorobenzene	0.0500	0.0479	96	70-120	
Chloroethane	0.0500	0.0379	76	45-127	
Chloroform	0.0500	0.0447	89	70-120	

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 Chicago Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 22S1105.D

Lab ID: LCS 500-408477/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	0.0500	0.0340	68	54-147	
cis-1,2-Dichloroethene	0.0500	0.0465	93	70-125	
cis-1,3-Dichloropropene	0.0500	0.0463	93	64-127	
Cyclohexane	0.0500	0.0502	100	69-142	
Dibromochloromethane	0.0500	0.0484	97	68-125	
Dibromomethane	0.0500	0.0456	91	70-120	
Dichlorodifluoromethane	0.0500	0.0312	62	40-150	
Ethylbenzene	0.0500	0.0478	96	70-120	
Iodomethane	0.0500	0.0459	92	61-136	
Isopropylbenzene	0.0500	0.0430	86	70-126	
Methyl acetate	0.100	0.0888	89	56-150	
Methyl Ethyl Ketone	0.0500	0.0419	84	53-141	
methyl isobutyl ketone	0.0500	0.0408	82	56-133	
Methyl tert-butyl ether	0.0500	0.0482	96	70-120	
Methylcyclohexane	0.0500	0.0482	96	70-120	
Methylene Chloride	0.0500	0.0479	96	69-125	
Naphthalene	0.0500	0.0474	95	59-130	
n-Butylbenzene	0.0500	0.0464	93	68-125	
N-Propylbenzene	0.0500	0.0428	86	69-127	
p-Isopropyltoluene	0.0500	0.0462	92	70-125	
sec-Butylbenzene	0.0500	0.0443	89	70-123	
Styrene	0.0500	0.0488	98	70-120	
tert-Butyl alcohol	0.500	0.478	96	70-125	
tert-Butylbenzene	0.0500	0.0446	89	70-121	
Tetrachloroethene	0.0500	0.0503	101	70-128	
Toluene	0.0500	0.0497	99	70-125	
trans-1,2-Dichloroethene	0.0500	0.0459	92	70-125	
trans-1,3-Dichloropropene	0.0500	0.0457	91	62-128	
trans-1,4-Dichloro-2-butene	0.0500	0.0452	90	60-130	
Trichloroethene	0.0500	0.0455	91	70-125	
Trichlorofluoromethane	0.0500	0.0391	78	70-126	
Vinyl acetate	0.0500	0.0462	92	43-133	
Vinyl chloride	0.0500	0.0403	81	64-126	
Xylenes, Total	0.100	0.0955	95	70-125	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab File ID: 22M1105.D Lab Sample ID: MB 500-408477/6

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

Instrument ID: CMS22 Date Analyzed: 11/05/2017 13:27

GC Column: DB624 ID: 0.2(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 500-408477/4	22S1105.D	11/05/2017 12:30
EIP-TB09-103017	500-136523-1	500-136523-a-1.D	11/05/2017 13:55
OMW3D-GW-103017	500-136523-2	500-136523-g-2.D	11/05/2017 14:23
OMW4D-GW-103017	500-136523-4	500-136523-g-4.D	11/05/2017 14:52
EIP-EB-103017	500-136523-3	500-136523-a-3.D	11/05/2017 15:21

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

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab File ID: 22B1009.D BFB Injection Date: 10/09/2017

Instrument ID: CMS22 BFB Injection Time: 13:27

Analysis Batch No.: 404536

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.3	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.2	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	50.0 - 120.00 % of mass 95	94.1	
175	5.0 - 9.0 % of mass 174	7.3	(7.7) 1
176	95.0 - 101.0 % of mass 174	90.8	(96.5) 1
177	5.0 - 9.0 % of mass 176	6.0	(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
	STD01 500-404536/4	22I1009A.D	10/09/2017	14:05
	STD02 500-404536/5	22I1009B.D	10/09/2017	14:30
	STD03 500-404536/6	22I1009C.D	10/09/2017	14:58
	STD04 500-404536/7	22I1009D.D	10/09/2017	15:24
	STD05 500-404536/8	22I1009E.D	10/09/2017	15:50
	STD06 500-404536/9	22I1009F.D	10/09/2017	16:17
	STD07 500-404536/10	22I1009G.D	10/09/2017	16:43
	STD08 500-404536/11	22I1009H.D	10/09/2017	17:09
	STD09 500-404536/12	22I1009I.D	10/09/2017	17:36
	STD10 500-404536/13	22I1009J.D	10/09/2017	18:02
	STD03AP 500-404536/15	22J1009C.D	10/09/2017	18:55
	STD04AP 500-404536/16	22J1009D.D	10/09/2017	19:21
	STD05AP 500-404536/17	22J1009E.D	10/09/2017	19:47
	STD06AP 500-404536/18	22J1009F.D	10/09/2017	20:13
	STD07AP 500-404536/19	22J1009G.D	10/09/2017	20:40
	STD08AP 500-404536/20	22J1009H.D	10/09/2017	21:06
	STD09AP 500-404536/21	22J1009I.D	10/09/2017	21:32
	STD10AP 500-404536/22	22J1009J.D	10/09/2017	21:58
	ICV 500-404536/24	22S1009ICV1.D	10/09/2017	22:50
	ICV 500-404536/25	22S1009ICV2.D	10/09/2017	23:16

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

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab File ID: 22B1105.D BFB Injection Date: 11/05/2017

Instrument ID: CMS22 BFB Injection Time: 11:05

Analysis Batch No.: 408477

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.4	
75	30.0 - 60.0 % of mass 95	42.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.3	(0.3) 1
174	50.0 - 120.00 % of mass 95	95.6	
175	5.0 - 9.0 % of mass 174	6.2	(6.4) 1
176	95.0 - 101.0 % of mass 174	93.4	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.4	(5.8) 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 500-408477/2	22C1105.D	11/05/2017	11:33
	CCV 500-408477/3	22D1105.D	11/05/2017	12:02
	LCS 500-408477/4	22S1105.D	11/05/2017	12:30
	MB 500-408477/6	22M1105.D	11/05/2017	13:27
EIP-TB09-103017	500-136523-1	500-136523-a -1.D	11/05/2017	13:55
OMW3D-GW-103017	500-136523-2	500-136523-g -2.D	11/05/2017	14:23
OMW4D-GW-103017	500-136523-4	500-136523-g -4.D	11/05/2017	14:52
EIP-EB-103017	500-136523-3	500-136523-a -3.D	11/05/2017	15:21

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

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Sample No.: STD07 500-404536/10 Date Analyzed: 10/09/2017 16:43

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm)

Lab File ID (Standard): 22I1009G.D Heated Purge: (Y/N) N

Calibration ID: 25582

		TBAd9		FB		DXE	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		118225	4.29	622746	6.99	13643	7.76
UPPER LIMIT		236450	4.79	1245492	7.49	27286	8.26
LOWER LIMIT		59113	3.79	311373	6.49	6822	7.26
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 500-404536/24		121316	4.29	623740	6.99	15504	7.76
ICV 500-404536/25		121200	4.28	623453	6.99	15641	7.76
CCVIS 500-408477/2		119592	4.28	643512	6.99	13698	7.76
CCV 500-408477/3		129203	4.27	654710	6.99	13664	7.75
LCS 500-408477/4		133395	4.28	651112	6.99	16141	7.76
MB 500-408477/6		133355	4.28	666392	6.99	14306	7.76
500-136523-1	EIP-TB09-103017	117740	4.28	610365	6.99	14154	7.76
500-136523-2	OMW3D-GW-103017	105512	4.28	551430	6.99	11472	7.76
500-136523-4	OMW4D-GW-103017	115265	4.28	577872	6.99	12966	7.76
500-136523-3	EIP-EB-103017	104211	4.28	553773	6.99	11686	7.76

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
DXE = 1,4-Dioxane-d8

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 Chicago Job No.: 500-136523-1

SDG No.:

Sample No.: STD07 500-404536/10 Date Analyzed: 10/09/2017 16:43

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm)

Lab File ID (Standard): 22I1009G.D Heated Purge: (Y/N) N

Calibration ID: 25582

		CBNZd5		DCBd4			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		470845	10.44	233491	13.90		
UPPER LIMIT		941690	10.94	466982	14.40		
LOWER LIMIT		235423	9.94	116746	13.40		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 500-404536/24		477275	10.44	239545	13.90		
ICV 500-404536/25		471866	10.44	237043	13.90		
CCVIS 500-408477/2		465247	10.44	254162	13.90		
CCV 500-408477/3		493125	10.44	250610	13.90		
LCS 500-408477/4		487764	10.44	266198	13.90		
MB 500-408477/6		512107	10.44	250282	13.90		
500-136523-1	EIP-TB09-103017	462751	10.44	228181	13.90		
500-136523-2	OMW3D-GW-103017	415058	10.44	206180	13.90		
500-136523-4	OMW4D-GW-103017	432391	10.44	218373	13.90		
500-136523-3	EIP-EB-103017	414847	10.44	206356	13.90		

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 Chicago Job No.: 500-136523-1

SDG No.:

Sample No.: CCVIS 500-408477/2 Date Analyzed: 11/05/2017 11:33

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm)

Lab File ID (Standard): 22C1105.D Heated Purge: (Y/N) N

Calibration ID: 25585

		TBAd9		FB		DXE	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		119592	4.28	643512	6.99	13698	7.76
UPPER LIMIT		239184	4.78	1287024	7.49	27396	8.26
LOWER LIMIT		59796	3.78	321756	6.49	6849	7.26
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 500-408477/3		129203	4.27	654710	6.99	13664	7.75
LCS 500-408477/4		133395	4.28	651112	6.99	16141	7.76
MB 500-408477/6		133355	4.28	666392	6.99	14306	7.76
500-136523-1	EIP-TB09-103017	117740	4.28	610365	6.99	14154	7.76
500-136523-2	OMW3D-GW-103017	105512	4.28	551430	6.99	11472	7.76
500-136523-4	OMW4D-GW-103017	115265	4.28	577872	6.99	12966	7.76
500-136523-3	EIP-EB-103017	104211	4.28	553773	6.99	11686	7.76

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
DXE = 1,4-Dioxane-d8

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 Chicago Job No.: 500-136523-1

SDG No.:

Sample No.: CCVIS 500-408477/2 Date Analyzed: 11/05/2017 11:33

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm)

Lab File ID (Standard): 22C1105.D Heated Purge: (Y/N) N

Calibration ID: 25585

		CBNZd5		DCBd4			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		465247	10.44	254162	13.90		
UPPER LIMIT		930494	10.94	508324	14.40		
LOWER LIMIT		232624	9.94	127081	13.40		
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 500-408477/3		493125	10.44	250610	13.90		
LCS 500-408477/4		487764	10.44	266198	13.90		
MB 500-408477/6		512107	10.44	250282	13.90		
500-136523-1	EIP-TB09-103017	462751	10.44	228181	13.90		
500-136523-2	OMW3D-GW-103017	415058	10.44	206180	13.90		
500-136523-4	OMW4D-GW-103017	432391	10.44	218373	13.90		
500-136523-3	EIP-EB-103017	414847	10.44	206356	13.90		

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 Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: EIP-TB09-103017 | Lab Sample ID: 500-136523-1
Matrix: Water | Lab File ID: 500-136523-a-1.D
Analysis Method: 8260B | Date Collected: 10/30/2017 00:00
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 13:55
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046
71-55-6	1,1,1-Trichloroethane	ND		0.0010	0.00038
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046
79-00-5	1,1,2-Trichloroethane	ND		0.0010	0.00035
75-34-3	1,1-Dichloroethane	ND		0.0010	0.00041
75-35-4	1,1-Dichloroethene	ND		0.0010	0.00039
563-58-6	1,1-Dichloropropene	ND		0.0010	0.00030
87-61-6	1,2,3-Trichlorobenzene	ND		0.0010	0.00046
96-18-4	1,2,3-Trichloropropane	ND		0.0010	0.00041
120-82-1	1,2,4-Trichlorobenzene	ND		0.0010	0.00034
95-63-6	1,2,4-Trimethylbenzene	ND		0.0010	0.00036
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020
106-93-4	1,2-Dibromoethane	ND		0.0010	0.00039
95-50-1	1,2-Dichlorobenzene	ND		0.0010	0.00033
107-06-2	1,2-Dichloroethane	ND		0.0010	0.00039
78-87-5	1,2-Dichloropropane	ND		0.0010	0.00043
108-67-8	1,3,5-Trimethylbenzene	ND		0.0010	0.00025
541-73-1	1,3-Dichlorobenzene	ND		0.0010	0.00040
142-28-9	1,3-Dichloropropane	ND		0.0010	0.00036
106-46-7	1,4-Dichlorobenzene	ND		0.0010	0.00036
123-91-1	1,4-Dioxane	ND		0.10	0.041
594-20-7	2,2-Dichloropropane	ND		0.0010	0.00044
110-75-8	2-Chloroethyl vinyl ether	ND		0.0020	0.00077
95-49-8	2-Chlorotoluene	ND		0.0010	0.00031
591-78-6	2-Hexanone	ND		0.0050	0.0016
106-43-4	4-Chlorotoluene	ND		0.0010	0.00035
67-64-1	Acetone	0.0064	cn	0.0050	0.0017
107-02-8	Acrolein	ND		0.10	0.023
107-13-1	Acrylonitrile	ND		0.020	0.0045
71-43-2	Benzene	ND		0.00050	0.00015
108-86-1	Bromobenzene	ND		0.0010	0.00036
74-97-5	Bromochloromethane	ND		0.0010	0.00043
75-27-4	Bromodichloromethane	ND		0.0010	0.00037
75-25-2	Bromoform	ND		0.0010	0.00048

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1

SDG No.:

Client Sample ID: EIP-TB09-103017 | Lab Sample ID: 500-136523-1

Matrix: Water | Lab File ID: 500-136523-a-1.D

Analysis Method: 8260B | Date Collected: 10/30/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 13:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-83-9	Bromomethane	ND		0.0020	0.00080
75-15-0	Carbon disulfide	ND		0.0020	0.00045
56-23-5	Carbon tetrachloride	ND		0.0010	0.00038
108-90-7	Chlorobenzene	ND		0.0010	0.00039
75-00-3	Chloroethane	ND		0.0010	0.00051
67-66-3	Chloroform	ND		0.0020	0.00037
74-87-3	Chloromethane	ND		0.0010	0.00032
156-59-2	cis-1,2-Dichloroethene	ND		0.0010	0.00041
10061-01-5	cis-1,3-Dichloropropene	ND		0.0010	0.00042
110-82-7	Cyclohexane	ND		0.0010	0.00049
124-48-1	Dibromochloromethane	ND		0.0010	0.00049
74-95-3	Dibromomethane	ND		0.0010	0.00027
75-71-8	Dichlorodifluoromethane	ND		0.0020	0.00067
100-41-4	Ethylbenzene	ND		0.00050	0.00018
74-88-4	Iodomethane	ND		0.0025	0.00066
108-20-3	Isopropyl ether	ND		0.0010	0.00028
98-82-8	Isopropylbenzene	ND		0.0010	0.00039
79-20-9	Methyl acetate	ND		0.0050	0.0020
78-93-3	Methyl Ethyl Ketone	ND		0.0050	0.0021
108-10-1	methyl isobutyl ketone	ND		0.0050	0.0022
1634-04-4	Methyl tert-butyl ether	ND		0.0010	0.00039
108-87-2	Methylcyclohexane	ND		0.0010	0.00032
75-09-2	Methylene Chloride	ND		0.0050	0.0016
91-20-3	Naphthalene	ND		0.0010	0.00034
104-51-8	n-Butylbenzene	ND		0.0010	0.00039
103-65-1	N-Propylbenzene	ND		0.0010	0.00041
99-87-6	p-Isopropyltoluene	ND		0.0010	0.00036
135-98-8	sec-Butylbenzene	ND		0.0010	0.00040
100-42-5	Styrene	ND		0.0010	0.00039
994-05-8	Tert-amyl methyl ether	ND		0.0010	0.00040
75-65-0	tert-Butyl alcohol	ND		0.050	0.012
637-92-3	Tert-butyl ethyl ether	ND		0.0010	0.00026
98-06-6	tert-Butylbenzene	ND		0.0010	0.00040
127-18-4	Tetrachloroethene	ND		0.0010	0.00037
108-88-3	Toluene	ND		0.00050	0.00015
156-60-5	trans-1,2-Dichloroethene	ND		0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1

SDG No.:

Client Sample ID: EIP-TB09-103017 | Lab Sample ID: 500-136523-1

Matrix: Water | Lab File ID: 500-136523-a-1.D

Analysis Method: 8260B | Date Collected: 10/30/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 13:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.0010	0.00036
110-57-6	trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012
79-01-6	Trichloroethene	ND		0.00050	0.00016
75-69-4	Trichlorofluoromethane	ND		0.0010	0.00043
108-05-4	Vinyl acetate	ND		0.0020	0.00091
75-01-4	Vinyl chloride	ND		0.00050	0.00020
1330-20-7	Xylenes, Total	ND		0.0010	0.00022

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		75-126
460-00-4	4-Bromofluorobenzene (Surr)	91		72-124
1868-53-7	Dibromofluoromethane	90		75-120
2037-26-5	Toluene-d8 (Surr)	94		75-120

TestAmerica Chicago
Target Compound Quantitation Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-a-1.D				
Lims ID:	500-136523-A-1				
Client ID:	EIP-TB09-103017				
Sample Type:	Client				
Inject. Date:	05-Nov-2017 13:55:30	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-a-1				
Misc. Info.:	500-0048838-007				
Operator ID:	JH	Instrument ID:	CMS22		
Raw Data:	Smoothed				
Method:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m				
Limit Group:	MSVOA_8260_ICAL_WATER				
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT				
Last Update:	06-Nov-2017 08:43:35	Calib Date:	09-Oct-2017 21:58:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK050				
First Level Reviewer: petruszakj		Date:	06-Nov-2017 08:43:35		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
14 Acetone	43	3.684	3.673	0.011	78	3672	6.42	
* 22 TBA-d9 (IS)	65	4.277	4.277	0.000	0	117740	1000.0	
$ 42 Dibromofluoromethane	113	6.242	6.243	0.000	60	146619	44.9	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	128723	43.9	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	610365	50.0	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	14154	1000.0	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	93	592829	46.8	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	83	462751	50.0	
$ 93 4-Bromofluorobenzene (Surr	95	12.219	12.220	-0.001	95	205242	45.6	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	93	228181	50.0	

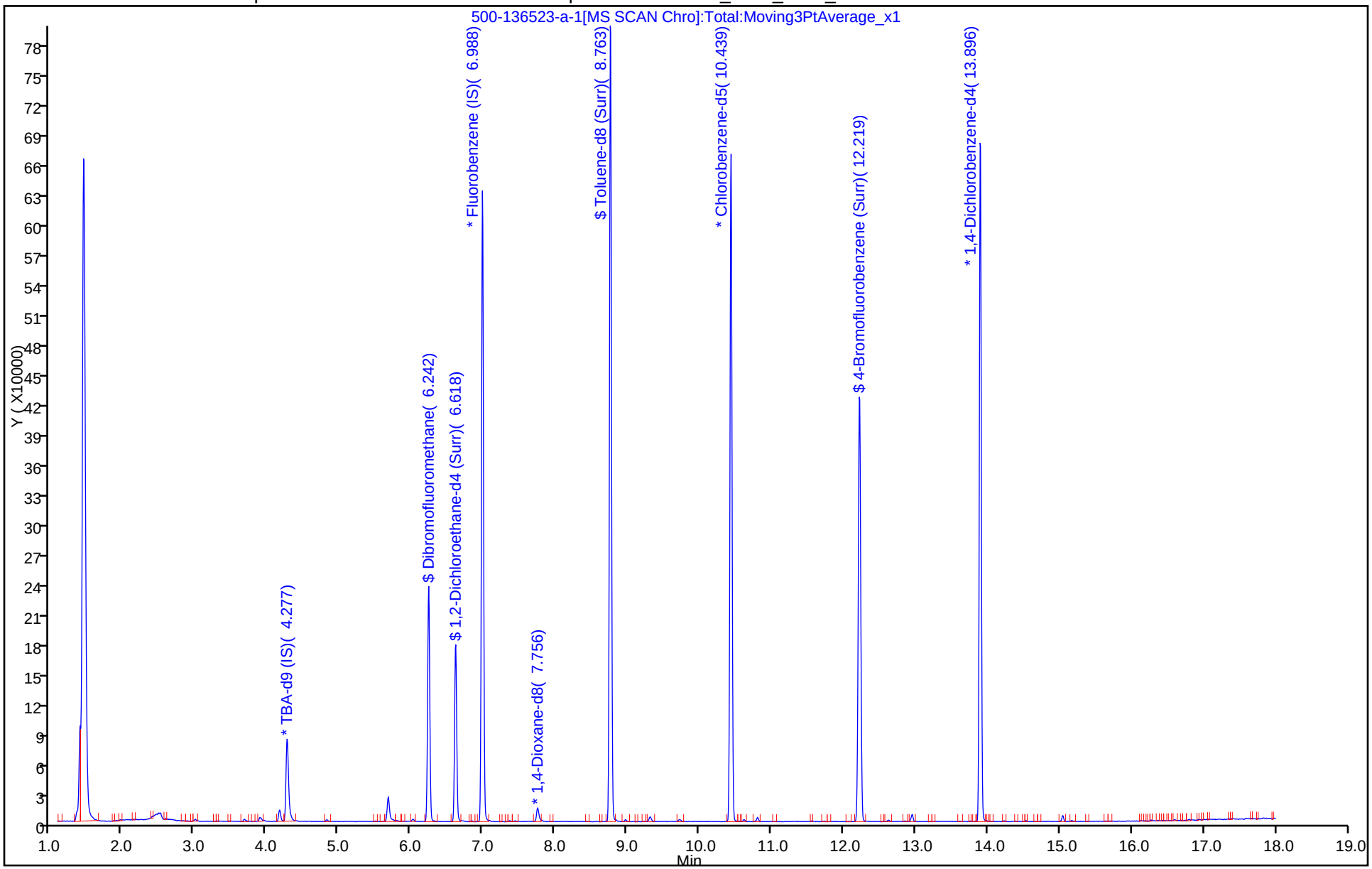
Reagents:

8260LOW IS/SS_00155 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 06-Nov-2017 08:43:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-a-1.D				
Injection Date:	05-Nov-2017 13:55:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	500-136523-A-1	Lab Sample ID:	500-136523-1	Worklist Smp#:	7
Client ID:	EIP-TB09-103017				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Recovery Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-a-1.D				
Lims ID:	500-136523-A-1				
Client ID:	EIP-TB09-103017				
Sample Type:	Client				
Inject. Date:	05-Nov-2017 13:55:30	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-a-1				
Misc. Info.:	500-0048838-007				
Operator ID:	JH	Instrument ID:	CMS22		
Raw Data:	Smoothed				

Method:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m		
Limit Group:	MSVOA_8260_ICAL_WATER		
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT		
Last Update:	06-Nov-2017 08:43:35	Calib Date:	09-Oct-2017 21:58:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D		

Column 1 :		Det: MS SCAN	
Process Host:	XAWRK050		

First Level Reviewer: petruszakj Date: 06-Nov-2017 08:43:35

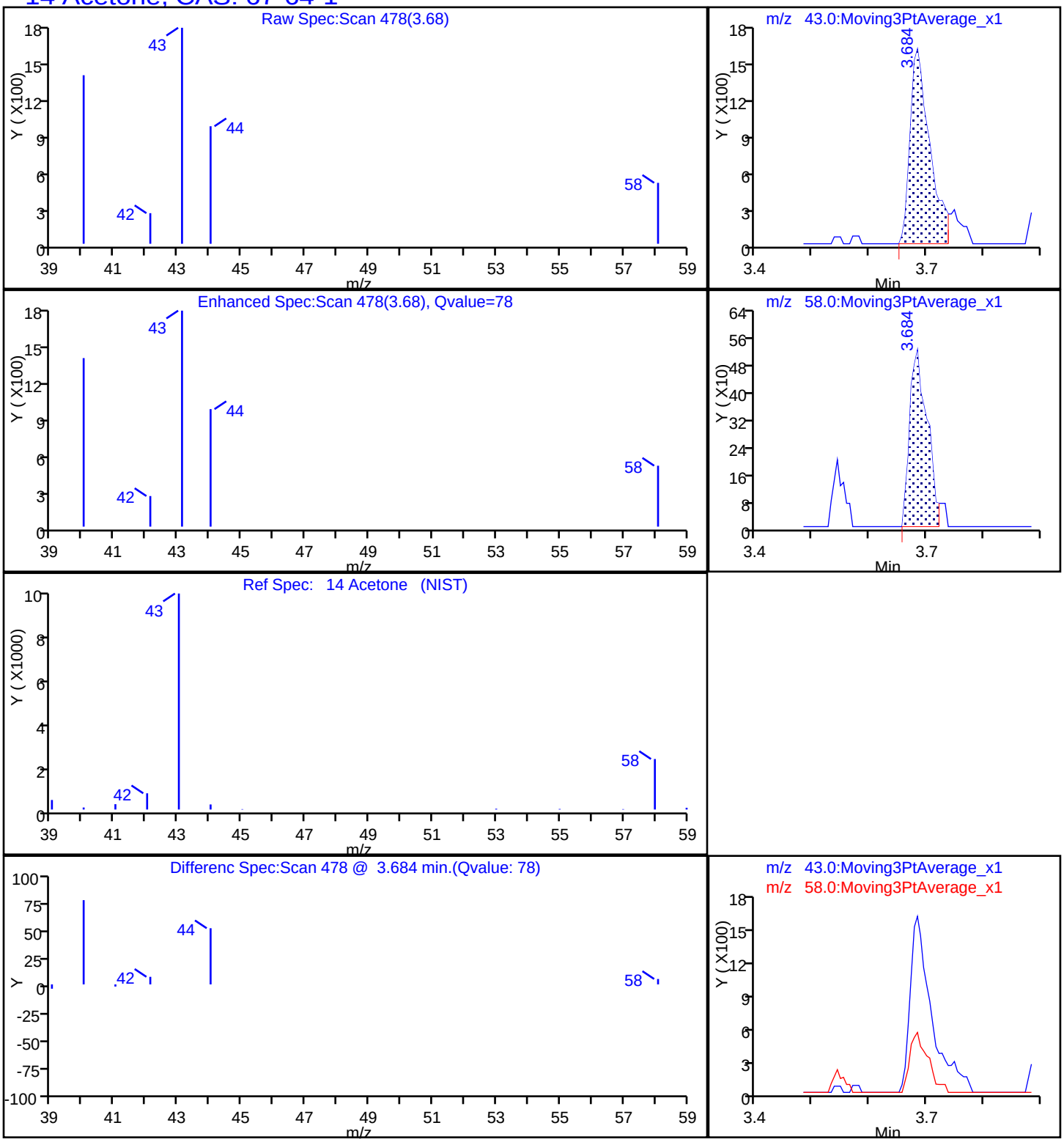
Compound	Amount Added	Amount Recovered	% Rec.
$ 42 Dibromofluoromethane	50.0	44.9	89.81
$ 47 1,2-Dichloroethane-d4 (Surr)	50.0	43.9	87.70
$ 70 Toluene-d8 (Surr)	50.0	46.8	93.63
$ 93 4-Bromofluorobenzene (Surr)	50.0	45.6	91.16

Report Date: 06-Nov-2017 08:43:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-a-1.D				
Injection Date:	05-Nov-2017 13:55:30	Instrument ID:	CMS22		
Lims ID:	500-136523-A-1	Lab Sample ID:	500-136523-1		
Client ID:	EIP-TB09-103017				
Operator ID:	JH	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

14 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW3D-GW-103017 | Lab Sample ID: 500-136523-2

Matrix: Water | Lab File ID: 500-136523-g-2.D

Analysis Method: 8260B | Date Collected: 10/30/2017 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046
71-55-6	1,1,1-Trichloroethane	ND		0.0010	0.00038
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046
79-00-5	1,1,2-Trichloroethane	ND		0.0010	0.00035
75-34-3	1,1-Dichloroethane	ND		0.0010	0.00041
75-35-4	1,1-Dichloroethene	ND		0.0010	0.00039
563-58-6	1,1-Dichloropropene	ND		0.0010	0.00030
87-61-6	1,2,3-Trichlorobenzene	ND		0.0010	0.00046
96-18-4	1,2,3-Trichloropropane	ND		0.0010	0.00041
120-82-1	1,2,4-Trichlorobenzene	ND		0.0010	0.00034
95-63-6	1,2,4-Trimethylbenzene	ND		0.0010	0.00036
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020
106-93-4	1,2-Dibromoethane	ND		0.0010	0.00039
95-50-1	1,2-Dichlorobenzene	ND		0.0010	0.00033
107-06-2	1,2-Dichloroethane	ND		0.0010	0.00039
78-87-5	1,2-Dichloropropane	ND		0.0010	0.00043
108-67-8	1,3,5-Trimethylbenzene	ND		0.0010	0.00025
541-73-1	1,3-Dichlorobenzene	ND		0.0010	0.00040
142-28-9	1,3-Dichloropropane	ND		0.0010	0.00036
106-46-7	1,4-Dichlorobenzene	ND		0.0010	0.00036
123-91-1	1,4-Dioxane	ND		0.10	0.041
594-20-7	2,2-Dichloropropane	ND		0.0010	0.00044
110-75-8	2-Chloroethyl vinyl ether	ND		0.0020	0.00077
95-49-8	2-Chlorotoluene	ND		0.0010	0.00031
591-78-6	2-Hexanone	ND		0.0050	0.0016
106-43-4	4-Chlorotoluene	ND		0.0010	0.00035
67-64-1	Acetone	ND		0.0050	0.0017
107-02-8	Acrolein	ND		0.10	0.023
107-13-1	Acrylonitrile	ND		0.020	0.0045
71-43-2	Benzene	ND		0.00050	0.00015
108-86-1	Bromobenzene	ND		0.0010	0.00036
74-97-5	Bromochloromethane	ND		0.0010	0.00043
75-27-4	Bromodichloromethane	ND		0.0010	0.00037
75-25-2	Bromoform	ND		0.0010	0.00048

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: OMW3D-GW-103017 | Lab Sample ID: 500-136523-2
Matrix: Water | Lab File ID: 500-136523-g-2.D
Analysis Method: 8260B | Date Collected: 10/30/2017 09:45
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 14:23
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-83-9	Bromomethane	ND		0.0020	0.00080
75-15-0	Carbon disulfide	ND		0.0020	0.00045
56-23-5	Carbon tetrachloride	ND		0.0010	0.00038
108-90-7	Chlorobenzene	ND		0.0010	0.00039
75-00-3	Chloroethane	ND		0.0010	0.00051
67-66-3	Chloroform	ND		0.0020	0.00037
74-87-3	Chloromethane	ND		0.0010	0.00032
156-59-2	cis-1,2-Dichloroethene	ND		0.0010	0.00041
10061-01-5	cis-1,3-Dichloropropene	ND		0.0010	0.00042
110-82-7	Cyclohexane	ND		0.0010	0.00049
124-48-1	Dibromochloromethane	ND		0.0010	0.00049
74-95-3	Dibromomethane	ND		0.0010	0.00027
75-71-8	Dichlorodifluoromethane	ND		0.0020	0.00067
100-41-4	Ethylbenzene	ND		0.00050	0.00018
74-88-4	Iodomethane	ND		0.0025	0.00066
108-20-3	Isopropyl ether	ND		0.0010	0.00028
98-82-8	Isopropylbenzene	ND		0.0010	0.00039
79-20-9	Methyl acetate	ND		0.0050	0.0020
78-93-3	Methyl Ethyl Ketone	ND		0.0050	0.0021
108-10-1	methyl isobutyl ketone	ND		0.0050	0.0022
1634-04-4	Methyl tert-butyl ether	ND		0.0010	0.00039
108-87-2	Methylcyclohexane	ND		0.0010	0.00032
75-09-2	Methylene Chloride	ND		0.0050	0.0016
91-20-3	Naphthalene	ND		0.0010	0.00034
104-51-8	n-Butylbenzene	ND		0.0010	0.00039
103-65-1	N-Propylbenzene	ND		0.0010	0.00041
99-87-6	p-Isopropyltoluene	ND		0.0010	0.00036
135-98-8	sec-Butylbenzene	ND		0.0010	0.00040
100-42-5	Styrene	ND		0.0010	0.00039
994-05-8	Tert-amyl methyl ether	ND		0.0010	0.00040
75-65-0	tert-Butyl alcohol	ND		0.050	0.012
637-92-3	Tert-butyl ethyl ether	ND		0.0010	0.00026
98-06-6	tert-Butylbenzene	ND		0.0010	0.00040
127-18-4	Tetrachloroethene	0.00077	J	0.0010	0.00037
108-88-3	Toluene	0.00043	J	0.00050	0.00015
156-60-5	trans-1,2-Dichloroethene	ND		0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW3D-GW-103017 | Lab Sample ID: 500-136523-2

Matrix: Water | Lab File ID: 500-136523-g-2.D

Analysis Method: 8260B | Date Collected: 10/30/2017 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.0010	0.00036
110-57-6	trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012
79-01-6	Trichloroethene	0.0013		0.00050	0.00016
75-69-4	Trichlorofluoromethane	ND		0.0010	0.00043
108-05-4	Vinyl acetate	ND		0.0020	0.00091
75-01-4	Vinyl chloride	ND		0.00050	0.00020
1330-20-7	Xylenes, Total	ND		0.0010	0.00022

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-126
460-00-4	4-Bromofluorobenzene (Surr)	92		72-124
1868-53-7	Dibromofluoromethane	91		75-120
2037-26-5	Toluene-d8 (Surr)	94		75-120

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-2.D
Lims ID: 500-136523-G-2
Client ID: OMW3D-GW-103017
Sample Type: Client
Inject. Date: 05-Nov-2017 14:23:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 500-136523-g-2
Misc. Info.: 500-0048838-008
Operator ID: JH Instrument ID: CMS22
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 06-Nov-2017 08:49:08 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK050

First Level Reviewer: petruszakj Date: 06-Nov-2017 08:49:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 22 TBA-d9 (IS)	65	4.277	4.277	0.000	0	105512	1000.0	
$ 42 Dibromofluoromethane	113	6.243	6.243	0.001	58	133814	45.4	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	118138	44.5	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	551430	50.0	
56 Trichloroethene	130	7.402	7.397	0.005	67	4518	1.31	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	11472	1000.0	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	93	535978	47.2	
71 Toluene	92	8.839	8.839	0.000	58	3152	0.4307	
75 Tetrachloroethene	166	9.460	9.460	0.000	64	2856	0.7729	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	85	415058	50.0	
$ 93 4-Bromofluorobenzene (Surr	95	12.220	12.220	0.000	94	187184	46.0	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	93	206180	50.0	

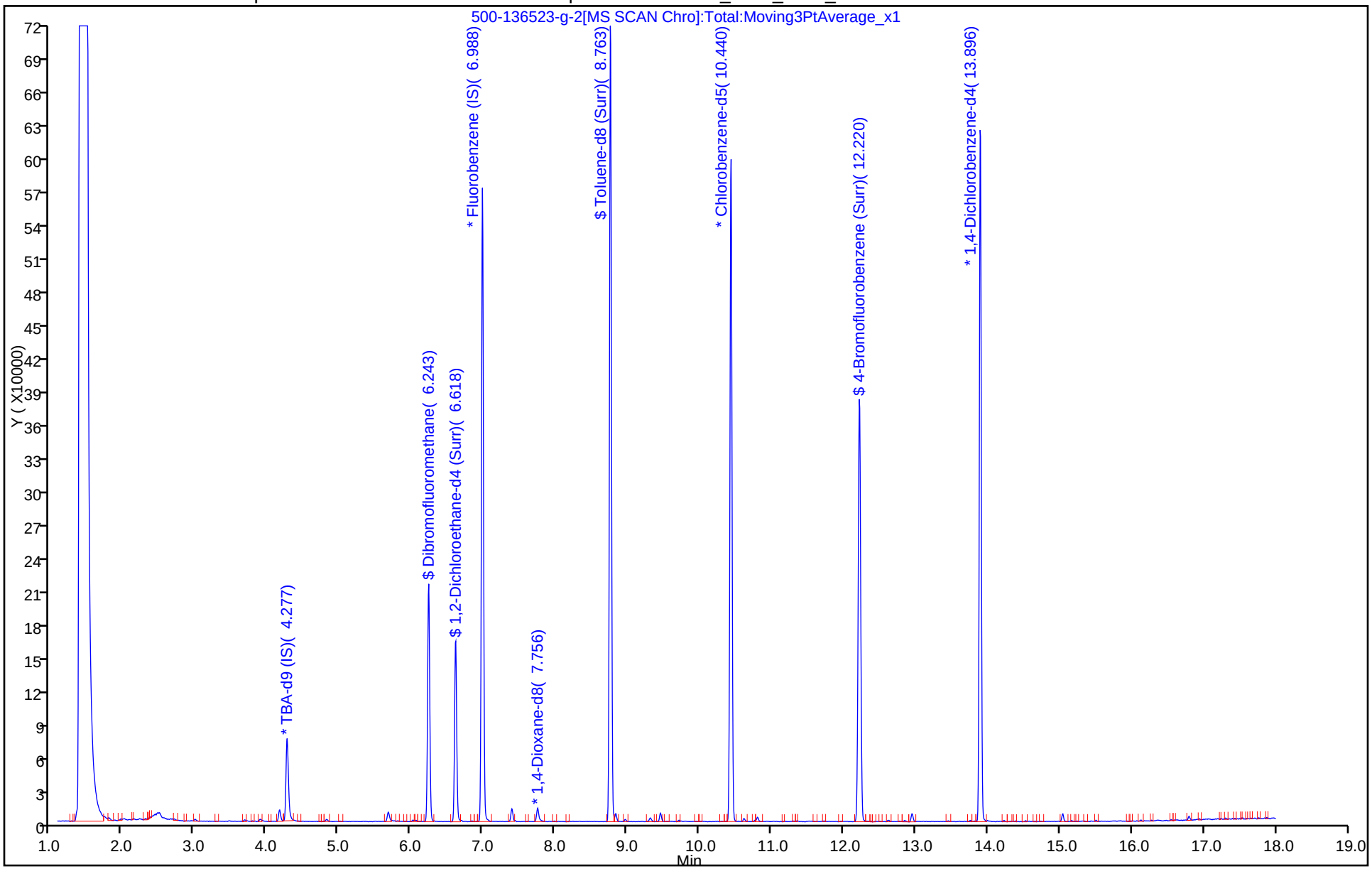
Reagents:

8260LOW IS/SS_00155 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 06-Nov-2017 08:49:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-2.D				
Injection Date:	05-Nov-2017 14:23:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	500-136523-G-2	Lab Sample ID:	500-136523-2	Worklist Smp#:	8
Client ID:	OMW3D-GW-103017				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Recovery Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-2.D				
Lims ID:	500-136523-G-2				
Client ID:	OMW3D-GW-103017				
Sample Type:	Client				
Inject. Date:	05-Nov-2017 14:23:30	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-g-2				
Misc. Info.:	500-0048838-008				
Operator ID:	JH	Instrument ID:	CMS22		
Raw Data:	Smoothed				

Method:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m		
Limit Group:	MSVOA_8260_ICAL_WATER		
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT		
Last Update:	06-Nov-2017 08:49:08	Calib Date:	09-Oct-2017 21:58:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D		

Column 1 :		Det: MS SCAN	
Process Host:	XAWRK050		

First Level Reviewer: petruszakj Date: 06-Nov-2017 08:49:08

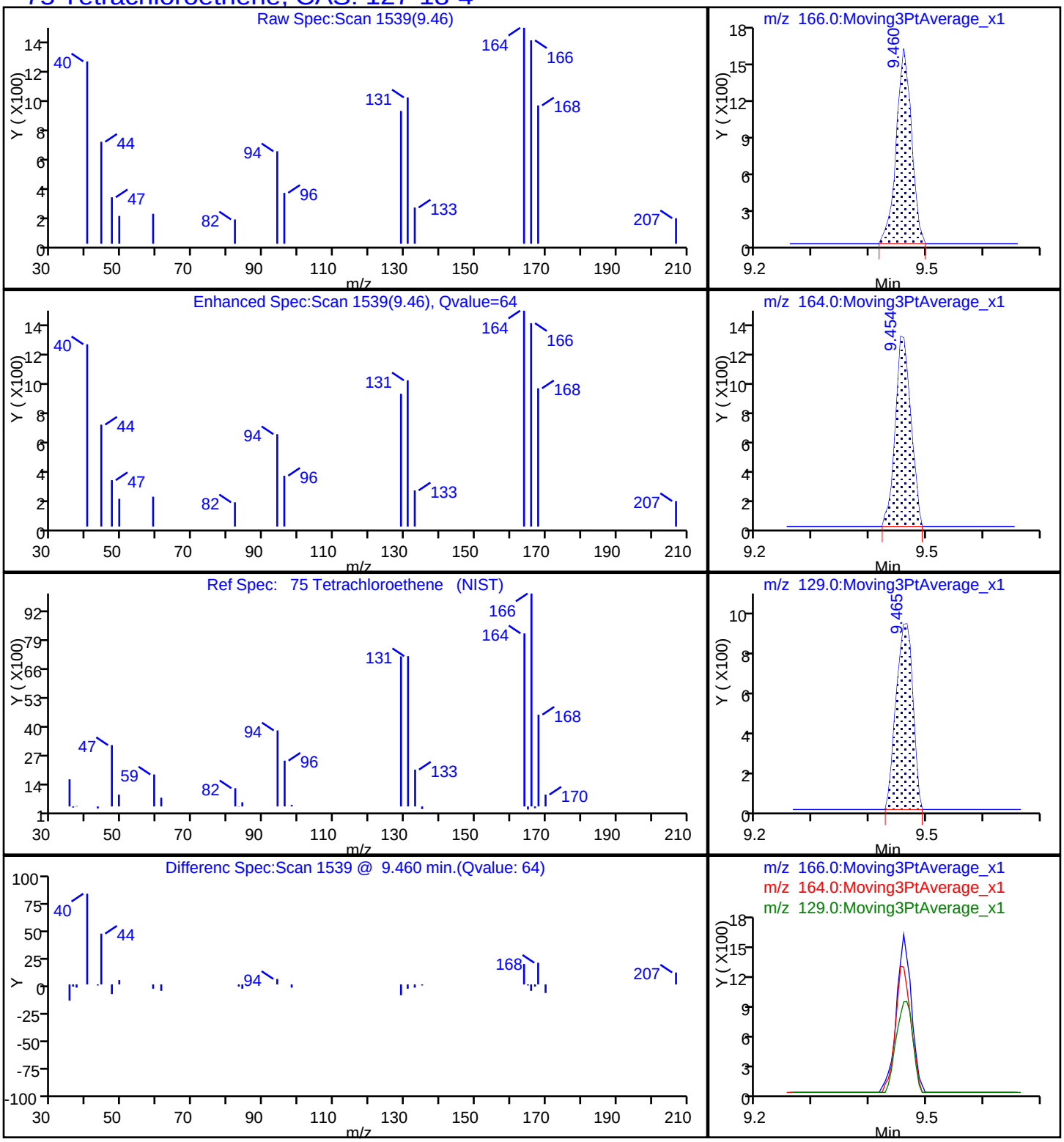
Compound	Amount Added	Amount Recovered	% Rec.
$ 42 Dibromofluoromethane	50.0	45.4	90.73
$ 47 1,2-Dichloroethane-d4 (Surr)	50.0	44.5	89.09
$ 70 Toluene-d8 (Surr)	50.0	47.2	94.38
$ 93 4-Bromofluorobenzene (Surr)	50.0	46.0	92.02

Report Date: 06-Nov-2017 08:49:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-2.D				
Injection Date:	05-Nov-2017 14:23:30	Instrument ID:	CMS22		
Lims ID:	500-136523-G-2	Lab Sample ID:	500-136523-2		
Client ID:	OMW3D-GW-103017				
Operator ID:	JH	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

75 Tetrachloroethene, CAS: 127-18-4

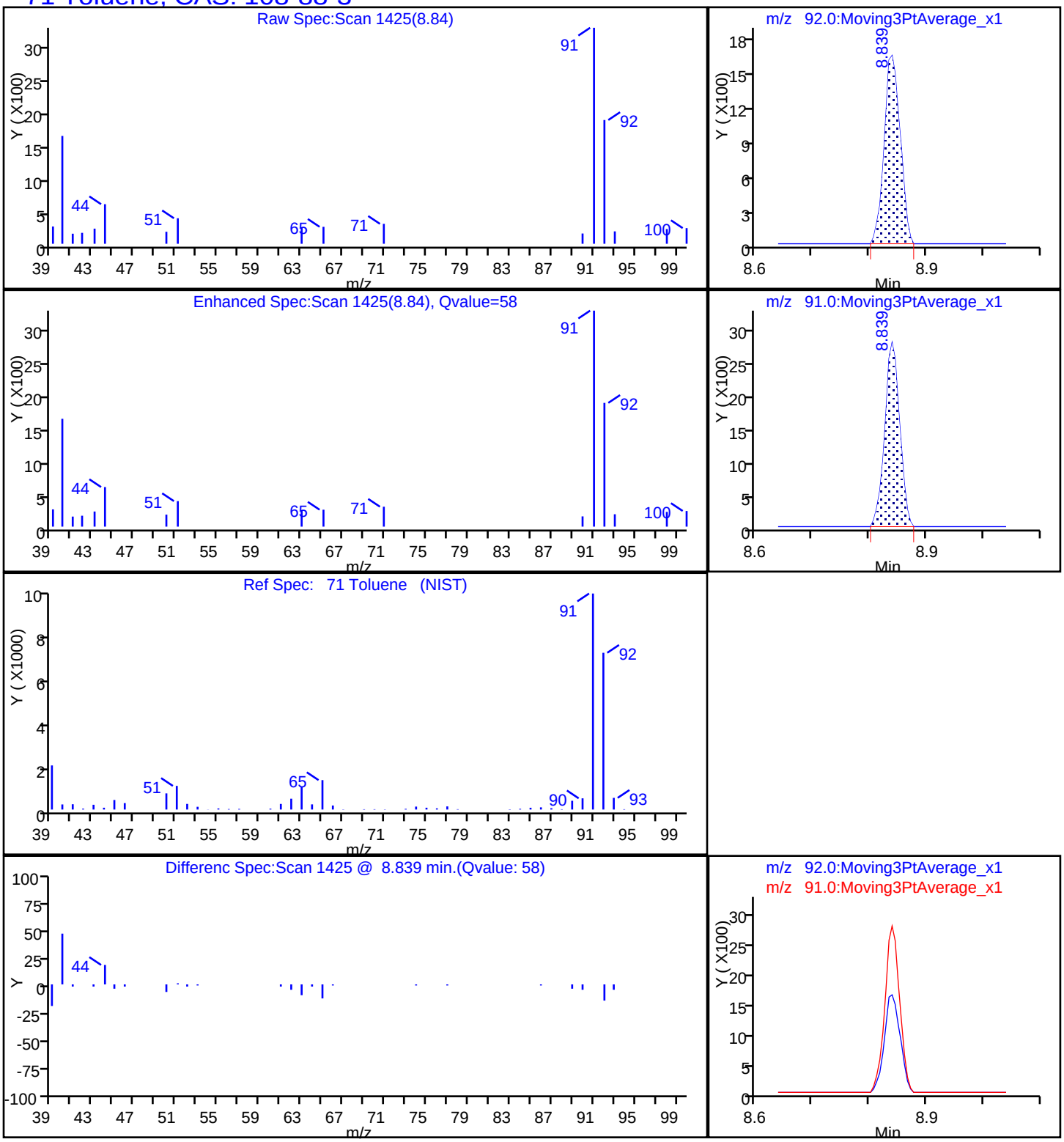


Report Date: 06-Nov-2017 08:49:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-2.D				
Injection Date:	05-Nov-2017 14:23:30	Instrument ID:	CMS22		
Lims ID:	500-136523-G-2	Lab Sample ID:	500-136523-2		
Client ID:	OMW3D-GW-103017				
Operator ID:	JH	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

71 Toluene, CAS: 108-88-3

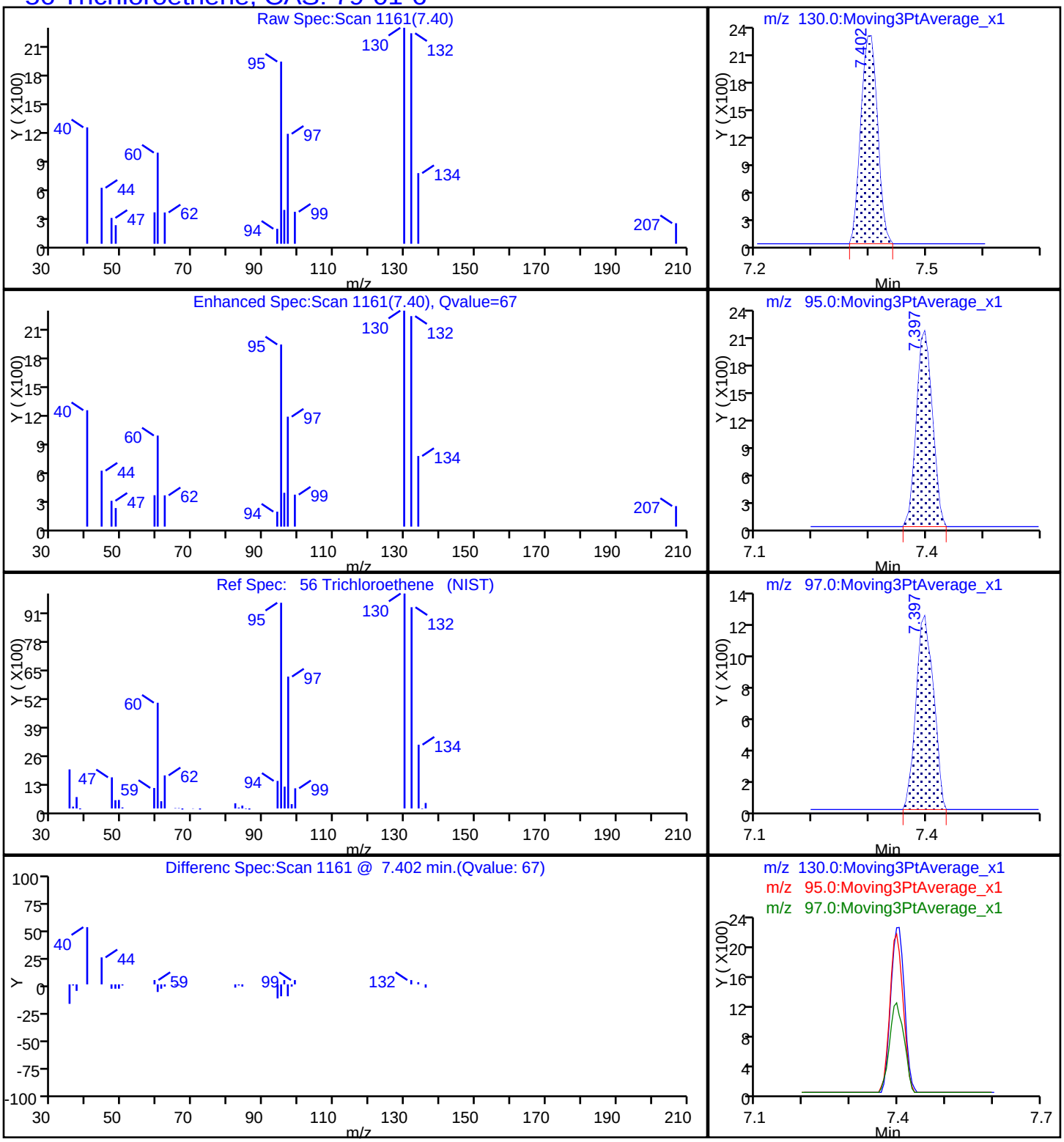


Report Date: 06-Nov-2017 08:49:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-2.D				
Injection Date:	05-Nov-2017 14:23:30	Instrument ID:	CMS22		
Lims ID:	500-136523-G-2	Lab Sample ID:	500-136523-2		
Client ID:	OMW3D-GW-103017				
Operator ID:	JH	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

56 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: EIP-EB-103017 | Lab Sample ID: 500-136523-3
Matrix: Water | Lab File ID: 500-136523-a-3.D
Analysis Method: 8260B | Date Collected: 10/30/2017 11:30
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 15:21
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046
71-55-6	1,1,1-Trichloroethane	ND		0.0010	0.00038
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046
79-00-5	1,1,2-Trichloroethane	ND		0.0010	0.00035
75-34-3	1,1-Dichloroethane	ND		0.0010	0.00041
75-35-4	1,1-Dichloroethene	ND		0.0010	0.00039
563-58-6	1,1-Dichloropropene	ND		0.0010	0.00030
87-61-6	1,2,3-Trichlorobenzene	ND		0.0010	0.00046
96-18-4	1,2,3-Trichloropropane	ND		0.0010	0.00041
120-82-1	1,2,4-Trichlorobenzene	ND		0.0010	0.00034
95-63-6	1,2,4-Trimethylbenzene	ND		0.0010	0.00036
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020
106-93-4	1,2-Dibromoethane	ND		0.0010	0.00039
95-50-1	1,2-Dichlorobenzene	ND		0.0010	0.00033
107-06-2	1,2-Dichloroethane	ND		0.0010	0.00039
78-87-5	1,2-Dichloropropane	ND		0.0010	0.00043
108-67-8	1,3,5-Trimethylbenzene	ND		0.0010	0.00025
541-73-1	1,3-Dichlorobenzene	ND		0.0010	0.00040
142-28-9	1,3-Dichloropropane	ND		0.0010	0.00036
106-46-7	1,4-Dichlorobenzene	ND		0.0010	0.00036
123-91-1	1,4-Dioxane	ND		0.10	0.041
594-20-7	2,2-Dichloropropane	ND		0.0010	0.00044
110-75-8	2-Chloroethyl vinyl ether	ND		0.0020	0.00077
95-49-8	2-Chlorotoluene	ND		0.0010	0.00031
591-78-6	2-Hexanone	ND		0.0050	0.0016
106-43-4	4-Chlorotoluene	ND		0.0010	0.00035
67-64-1	Acetone	ND		0.0050	0.0017
107-02-8	Acrolein	ND		0.10	0.023
107-13-1	Acrylonitrile	ND		0.020	0.0045
71-43-2	Benzene	ND		0.00050	0.00015
108-86-1	Bromobenzene	ND		0.0010	0.00036
74-97-5	Bromochloromethane	ND		0.0010	0.00043
75-27-4	Bromodichloromethane	ND		0.0010	0.00037
75-25-2	Bromoform	ND		0.0010	0.00048

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: EIP-EB-103017 | Lab Sample ID: 500-136523-3
Matrix: Water | Lab File ID: 500-136523-a-3.D
Analysis Method: 8260B | Date Collected: 10/30/2017 11:30
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 15:21
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-83-9	Bromomethane	ND		0.0020	0.00080
75-15-0	Carbon disulfide	ND		0.0020	0.00045
56-23-5	Carbon tetrachloride	ND		0.0010	0.00038
108-90-7	Chlorobenzene	ND		0.0010	0.00039
75-00-3	Chloroethane	ND		0.0010	0.00051
67-66-3	Chloroform	ND		0.0020	0.00037
74-87-3	Chloromethane	ND		0.0010	0.00032
156-59-2	cis-1,2-Dichloroethene	ND		0.0010	0.00041
10061-01-5	cis-1,3-Dichloropropene	ND		0.0010	0.00042
110-82-7	Cyclohexane	ND		0.0010	0.00049
124-48-1	Dibromochloromethane	ND		0.0010	0.00049
74-95-3	Dibromomethane	ND		0.0010	0.00027
75-71-8	Dichlorodifluoromethane	ND		0.0020	0.00067
100-41-4	Ethylbenzene	ND		0.00050	0.00018
74-88-4	Iodomethane	ND		0.0025	0.00066
108-20-3	Isopropyl ether	ND		0.0010	0.00028
98-82-8	Isopropylbenzene	ND		0.0010	0.00039
79-20-9	Methyl acetate	ND		0.0050	0.0020
78-93-3	Methyl Ethyl Ketone	ND		0.0050	0.0021
108-10-1	methyl isobutyl ketone	ND		0.0050	0.0022
1634-04-4	Methyl tert-butyl ether	ND		0.0010	0.00039
108-87-2	Methylcyclohexane	ND		0.0010	0.00032
75-09-2	Methylene Chloride	ND		0.0050	0.0016
91-20-3	Naphthalene	ND		0.0010	0.00034
104-51-8	n-Butylbenzene	ND		0.0010	0.00039
103-65-1	N-Propylbenzene	ND		0.0010	0.00041
99-87-6	p-Isopropyltoluene	ND		0.0010	0.00036
135-98-8	sec-Butylbenzene	ND		0.0010	0.00040
100-42-5	Styrene	ND		0.0010	0.00039
994-05-8	Tert-amyl methyl ether	ND		0.0010	0.00040
75-65-0	tert-Butyl alcohol	ND		0.050	0.012
637-92-3	Tert-butyl ethyl ether	ND		0.0010	0.00026
98-06-6	tert-Butylbenzene	ND		0.0010	0.00040
127-18-4	Tetrachloroethene	ND		0.0010	0.00037
108-88-3	Toluene	ND		0.00050	0.00015
156-60-5	trans-1,2-Dichloroethene	ND		0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1

SDG No.:

Client Sample ID: EIP-EB-103017 | Lab Sample ID: 500-136523-3

Matrix: Water | Lab File ID: 500-136523-a-3.D

Analysis Method: 8260B | Date Collected: 10/30/2017 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 15:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.0010	0.00036
110-57-6	trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012
79-01-6	Trichloroethene	ND		0.00050	0.00016
75-69-4	Trichlorofluoromethane	ND		0.0010	0.00043
108-05-4	Vinyl acetate	ND		0.0020	0.00091
75-01-4	Vinyl chloride	ND		0.00050	0.00020
1330-20-7	Xylenes, Total	ND		0.0010	0.00022

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-126
460-00-4	4-Bromofluorobenzene (Surr)	92		72-124
1868-53-7	Dibromofluoromethane	92		75-120
2037-26-5	Toluene-d8 (Surr)	94		75-120

TestAmerica Chicago
Target Compound Quantitation Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-a-3.D				
Lims ID:	500-136523-A-3				
Client ID:	EIP-EB-103017				
Sample Type:	Client				
Inject. Date:	05-Nov-2017 15:21:30	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-a-3				
Misc. Info.:	500-0048838-010				
Operator ID:	JH	Instrument ID:	CMS22		
Raw Data:	Smoothed				

Method:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m		
Limit Group:	MSVOA_8260_ICAL_WATER		
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT		
Last Update:	06-Nov-2017 08:51:30	Calib Date:	09-Oct-2017 21:58:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D		

Column 1 :			Det: MS SCAN
Process Host:	XAWRK050		

First Level Reviewer: petruszakj Date: 06-Nov-2017 08:51:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 22 TBA-d9 (IS)	65	4.277	4.277	0.000	0	104211	1000.0	
$ 42 Dibromofluoromethane	113	6.242	6.243	0.000	58	136110	45.9	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	118292	44.4	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	553773	50.0	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	11686	1000.0	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	93	532433	46.9	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	83	414847	50.0	
$ 93 4-Bromofluorobenzene (Surr	95	12.219	12.220	-0.001	94	186466	45.8	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	93	206356	50.0	

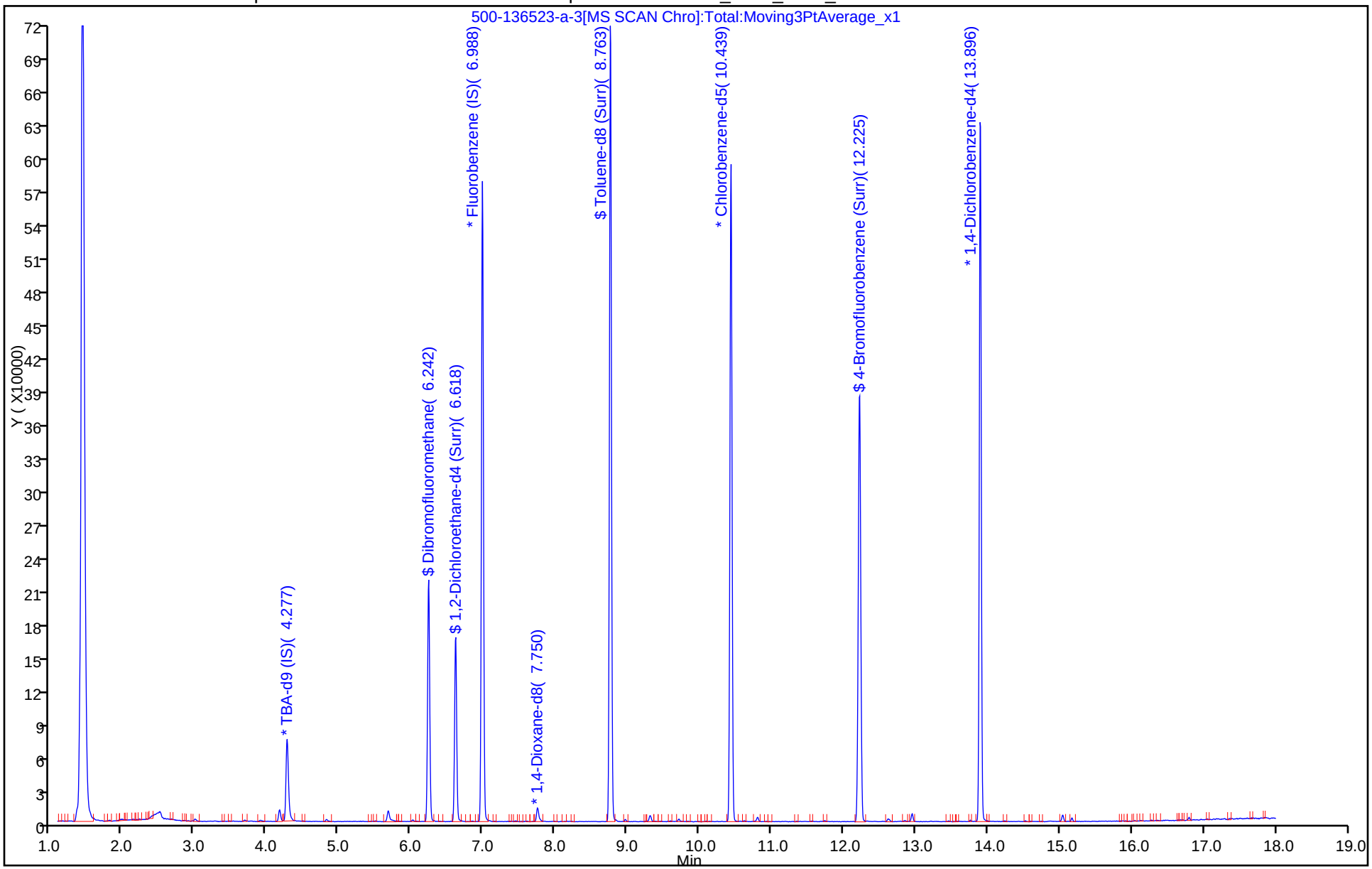
Reagents:

8260LOW IS/SS_00155 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 06-Nov-2017 08:51:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-a-3.D				
Injection Date:	05-Nov-2017 15:21:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	500-136523-A-3	Lab Sample ID:	500-136523-3	Worklist Smp#:	10
Client ID:	EIP-EB-103017				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Recovery Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-a-3.D				
Lims ID:	500-136523-A-3				
Client ID:	EIP-EB-103017				
Sample Type:	Client				
Inject. Date:	05-Nov-2017 15:21:30	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-a-3				
Misc. Info.:	500-0048838-010				
Operator ID:	JH	Instrument ID:	CMS22		
Raw Data:	Smoothed				

Method:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m		
Limit Group:	MSVOA_8260_ICAL_WATER		
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT		
Last Update:	06-Nov-2017 08:51:30	Calib Date:	09-Oct-2017 21:58:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D		

Column 1 :		Det: MS SCAN	
Process Host:	XAWRK050		

First Level Reviewer: petruszakj Date: 06-Nov-2017 08:51:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 42 Dibromofluoromethane	50.0	45.9	91.90
$ 47 1,2-Dichloroethane-d4 (Surr)	50.0	44.4	88.83
$ 70 Toluene-d8 (Surr)	50.0	46.9	93.80
$ 93 4-Bromofluorobenzene (Surr)	50.0	45.8	91.58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: OMW4D-GW-103017 | Lab Sample ID: 500-136523-4
Matrix: Water | Lab File ID: 500-136523-g-4.D
Analysis Method: 8260B | Date Collected: 10/30/2017 12:20
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 14:52
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046
71-55-6	1,1,1-Trichloroethane	ND		0.0010	0.00038
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046
79-00-5	1,1,2-Trichloroethane	ND		0.0010	0.00035
75-34-3	1,1-Dichloroethane	ND		0.0010	0.00041
75-35-4	1,1-Dichloroethene	ND		0.0010	0.00039
563-58-6	1,1-Dichloropropene	ND		0.0010	0.00030
87-61-6	1,2,3-Trichlorobenzene	ND		0.0010	0.00046
96-18-4	1,2,3-Trichloropropane	ND		0.0010	0.00041
120-82-1	1,2,4-Trichlorobenzene	ND		0.0010	0.00034
95-63-6	1,2,4-Trimethylbenzene	ND		0.0010	0.00036
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020
106-93-4	1,2-Dibromoethane	ND		0.0010	0.00039
95-50-1	1,2-Dichlorobenzene	ND		0.0010	0.00033
107-06-2	1,2-Dichloroethane	ND		0.0010	0.00039
78-87-5	1,2-Dichloropropane	ND		0.0010	0.00043
108-67-8	1,3,5-Trimethylbenzene	ND		0.0010	0.00025
541-73-1	1,3-Dichlorobenzene	ND		0.0010	0.00040
142-28-9	1,3-Dichloropropane	ND		0.0010	0.00036
106-46-7	1,4-Dichlorobenzene	ND		0.0010	0.00036
123-91-1	1,4-Dioxane	ND		0.10	0.041
594-20-7	2,2-Dichloropropane	ND		0.0010	0.00044
110-75-8	2-Chloroethyl vinyl ether	ND		0.0020	0.00077
95-49-8	2-Chlorotoluene	ND		0.0010	0.00031
591-78-6	2-Hexanone	ND		0.0050	0.0016
106-43-4	4-Chlorotoluene	ND		0.0010	0.00035
67-64-1	Acetone	ND		0.0050	0.0017
107-02-8	Acrolein	ND		0.10	0.023
107-13-1	Acrylonitrile	ND		0.020	0.0045
71-43-2	Benzene	ND		0.00050	0.00015
108-86-1	Bromobenzene	ND		0.0010	0.00036
74-97-5	Bromochloromethane	ND		0.0010	0.00043
75-27-4	Bromodichloromethane	ND		0.0010	0.00037
75-25-2	Bromoform	ND		0.0010	0.00048

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: OMW4D-GW-103017 | Lab Sample ID: 500-136523-4
Matrix: Water | Lab File ID: 500-136523-g-4.D
Analysis Method: 8260B | Date Collected: 10/30/2017 12:20
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 14:52
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-83-9	Bromomethane	ND		0.0020	0.00080
75-15-0	Carbon disulfide	ND		0.0020	0.00045
56-23-5	Carbon tetrachloride	ND		0.0010	0.00038
108-90-7	Chlorobenzene	ND		0.0010	0.00039
75-00-3	Chloroethane	ND		0.0010	0.00051
67-66-3	Chloroform	ND		0.0020	0.00037
74-87-3	Chloromethane	ND		0.0010	0.00032
156-59-2	cis-1,2-Dichloroethene	ND		0.0010	0.00041
10061-01-5	cis-1,3-Dichloropropene	ND		0.0010	0.00042
110-82-7	Cyclohexane	ND		0.0010	0.00049
124-48-1	Dibromochloromethane	ND		0.0010	0.00049
74-95-3	Dibromomethane	ND		0.0010	0.00027
75-71-8	Dichlorodifluoromethane	ND		0.0020	0.00067
100-41-4	Ethylbenzene	ND		0.00050	0.00018
74-88-4	Iodomethane	ND		0.0025	0.00066
108-20-3	Isopropyl ether	ND		0.0010	0.00028
98-82-8	Isopropylbenzene	ND		0.0010	0.00039
79-20-9	Methyl acetate	ND		0.0050	0.0020
78-93-3	Methyl Ethyl Ketone	ND		0.0050	0.0021
108-10-1	methyl isobutyl ketone	ND		0.0050	0.0022
1634-04-4	Methyl tert-butyl ether	ND		0.0010	0.00039
108-87-2	Methylcyclohexane	ND		0.0010	0.00032
75-09-2	Methylene Chloride	ND		0.0050	0.0016
91-20-3	Naphthalene	ND		0.0010	0.00034
104-51-8	n-Butylbenzene	ND		0.0010	0.00039
103-65-1	N-Propylbenzene	ND		0.0010	0.00041
99-87-6	p-Isopropyltoluene	ND		0.0010	0.00036
135-98-8	sec-Butylbenzene	ND		0.0010	0.00040
100-42-5	Styrene	ND		0.0010	0.00039
994-05-8	Tert-amyl methyl ether	ND		0.0010	0.00040
75-65-0	tert-Butyl alcohol	ND		0.050	0.012
637-92-3	Tert-butyl ethyl ether	ND		0.0010	0.00026
98-06-6	tert-Butylbenzene	ND		0.0010	0.00040
127-18-4	Tetrachloroethene	0.0019		0.0010	0.00037
108-88-3	Toluene	0.00051		0.00050	0.00015
156-60-5	trans-1,2-Dichloroethene	ND		0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW4D-GW-103017 | Lab Sample ID: 500-136523-4

Matrix: Water | Lab File ID: 500-136523-g-4.D

Analysis Method: 8260B | Date Collected: 10/30/2017 12:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 14:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.0010	0.00036
110-57-6	trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012
79-01-6	Trichloroethene	0.0017		0.00050	0.00016
75-69-4	Trichlorofluoromethane	ND		0.0010	0.00043
108-05-4	Vinyl acetate	ND		0.0020	0.00091
75-01-4	Vinyl chloride	ND		0.00050	0.00020
1330-20-7	Xylenes, Total	ND		0.0010	0.00022

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		75-126
460-00-4	4-Bromofluorobenzene (Surr)	90		72-124
1868-53-7	Dibromofluoromethane	90		75-120
2037-26-5	Toluene-d8 (Surr)	95		75-120

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-4.D
Lims ID: 500-136523-G-4
Client ID: OMW4D-GW-103017
Sample Type: Client
Inject. Date: 05-Nov-2017 14:52:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 500-136523-g-4
Misc. Info.: 500-0048838-009
Operator ID: JH Instrument ID: CMS22
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 06-Nov-2017 08:50:36 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK050

First Level Reviewer: petruszakj Date: 06-Nov-2017 08:50:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 22 TBA-d9 (IS)	65	4.277	4.277	0.000	0	115265	1000.0	
$ 42 Dibromofluoromethane	113	6.242	6.243	0.000	60	139662	45.2	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	121766	43.8	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	577872	50.0	
56 Trichloroethene	130	7.396	7.397	-0.001	70	5977	1.65	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	12966	1000.0	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	93	561179	47.4	
71 Toluene	92	8.839	8.839	0.000	57	3909	0.5128	
75 Tetrachloroethene	166	9.460	9.460	0.000	78	7211	1.87	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	85	432391	50.0	
$ 93 4-Bromofluorobenzene (Surr	95	12.219	12.220	-0.001	93	193015	44.8	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	93	218373	50.0	

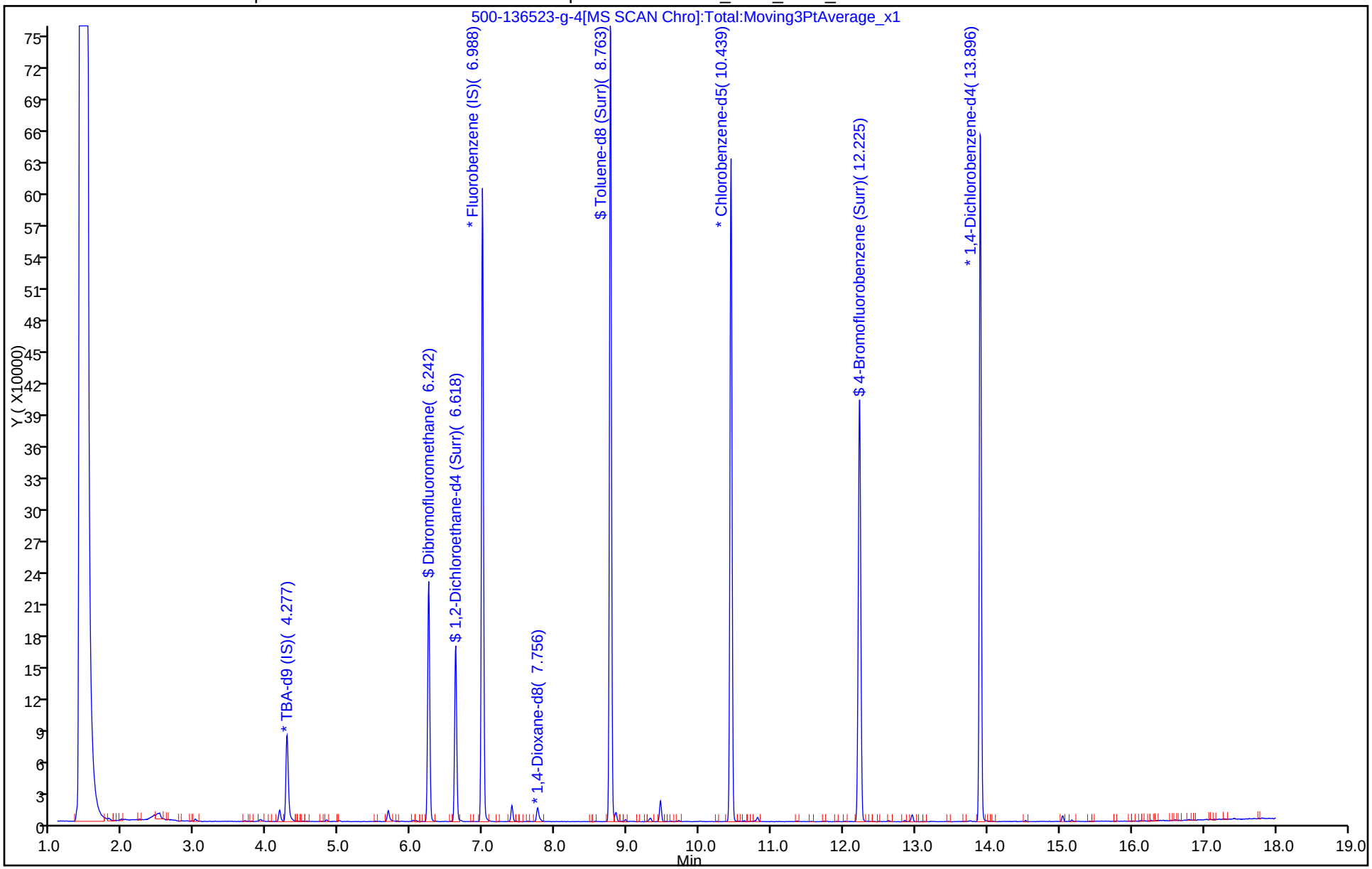
Reagents:

8260LOW IS/SS_00155 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 06-Nov-2017 08:50:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-4.D				
Injection Date:	05-Nov-2017 14:52:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	500-136523-G-4	Lab Sample ID:	500-136523-4	Worklist Smp#:	9
Client ID:	OMW4D-GW-103017				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Recovery Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-4.D				
Lims ID:	500-136523-G-4				
Client ID:	OMW4D-GW-103017				
Sample Type:	Client				
Inject. Date:	05-Nov-2017 14:52:30	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-g-4				
Misc. Info.:	500-0048838-009				
Operator ID:	JH	Instrument ID:	CMS22		
Raw Data:	Smoothed				

Method:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m		
Limit Group:	MSVOA_8260_ICAL_WATER		
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT		
Last Update:	06-Nov-2017 08:50:36	Calib Date:	09-Oct-2017 21:58:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D		

Column 1 :		Det: MS SCAN	
Process Host:	XAWRK050		

First Level Reviewer: petruszakj Date: 06-Nov-2017 08:50:36

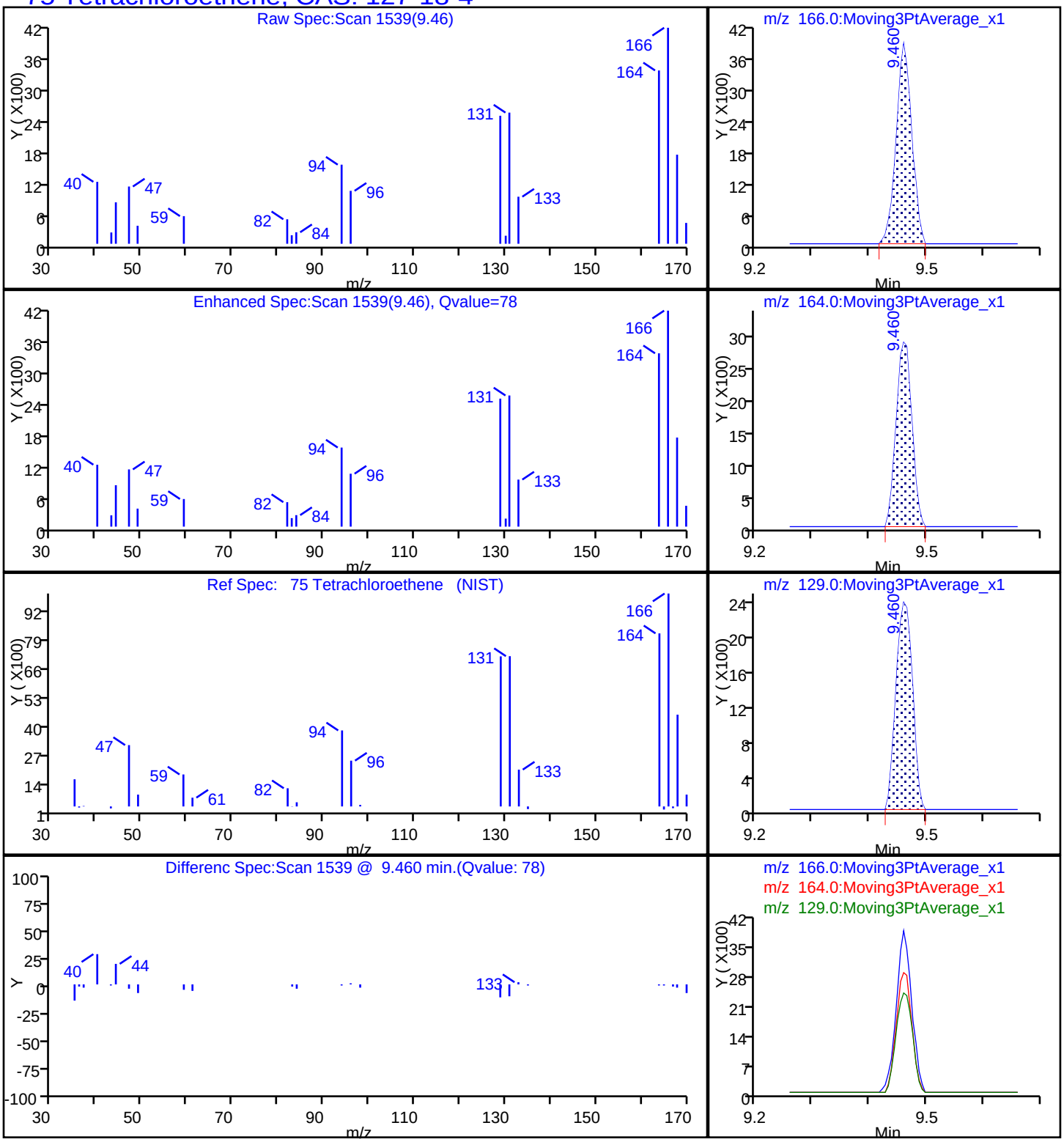
Compound	Amount Added	Amount Recovered	% Rec.
$ 42 Dibromofluoromethane	50.0	45.2	90.36
$ 47 1,2-Dichloroethane-d4 (Surr)	50.0	43.8	87.63
$ 70 Toluene-d8 (Surr)	50.0	47.4	94.85
$ 93 4-Bromofluorobenzene (Surr)	50.0	44.8	89.58

Report Date: 06-Nov-2017 08:50:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-4.D				
Injection Date:	05-Nov-2017 14:52:30	Instrument ID:	CMS22		
Lims ID:	500-136523-G-4	Lab Sample ID:	500-136523-4		
Client ID:	OMW4D-GW-103017				
Operator ID:	JH	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

75 Tetrachloroethene, CAS: 127-18-4

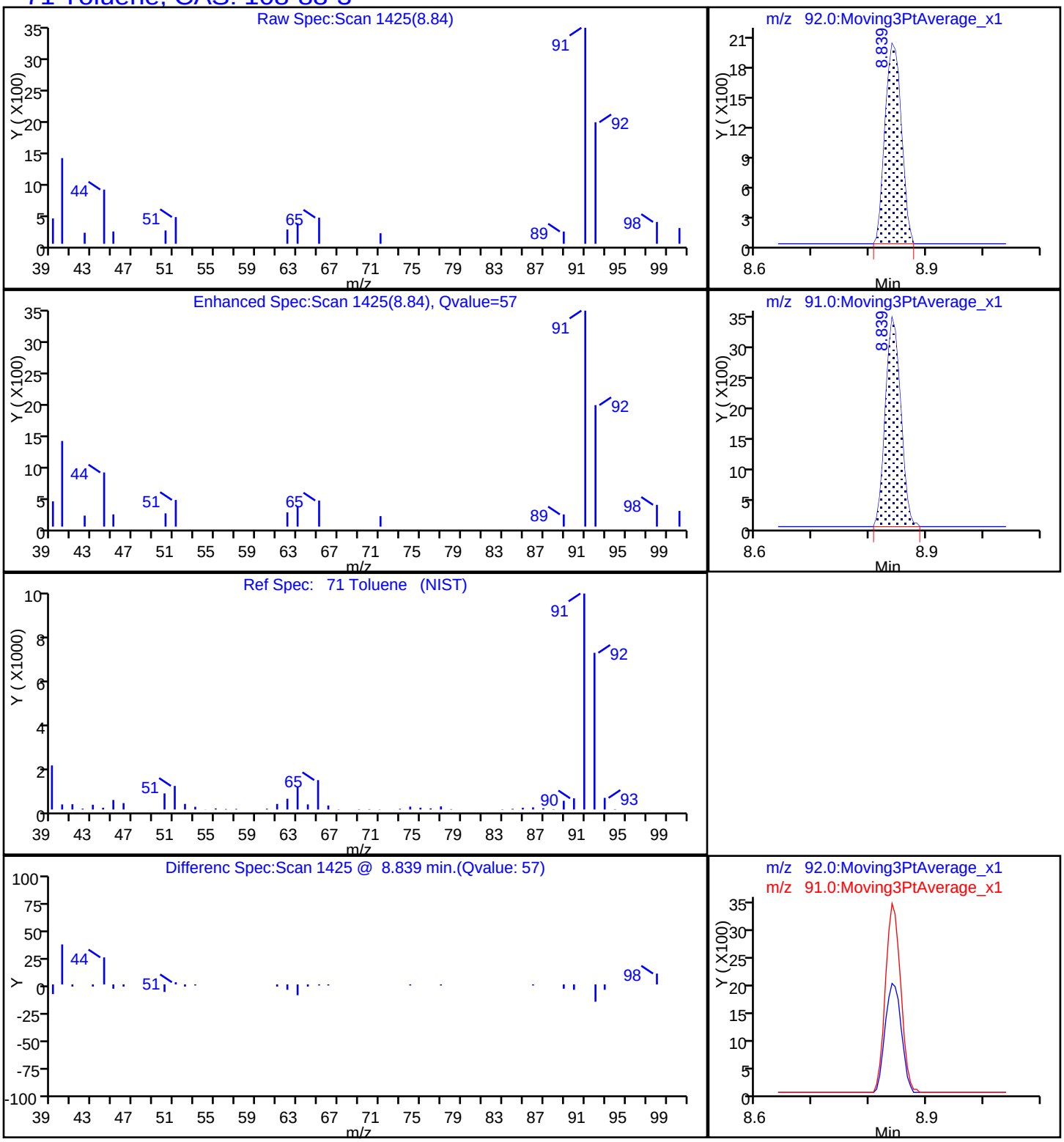


Report Date: 06-Nov-2017 08:50:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-4.D				
Injection Date:	05-Nov-2017 14:52:30	Instrument ID:	CMS22		
Lims ID:	500-136523-G-4	Lab Sample ID:	500-136523-4		
Client ID:	OMW4D-GW-103017				
Operator ID:	JH	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

71 Toluene, CAS: 108-88-3

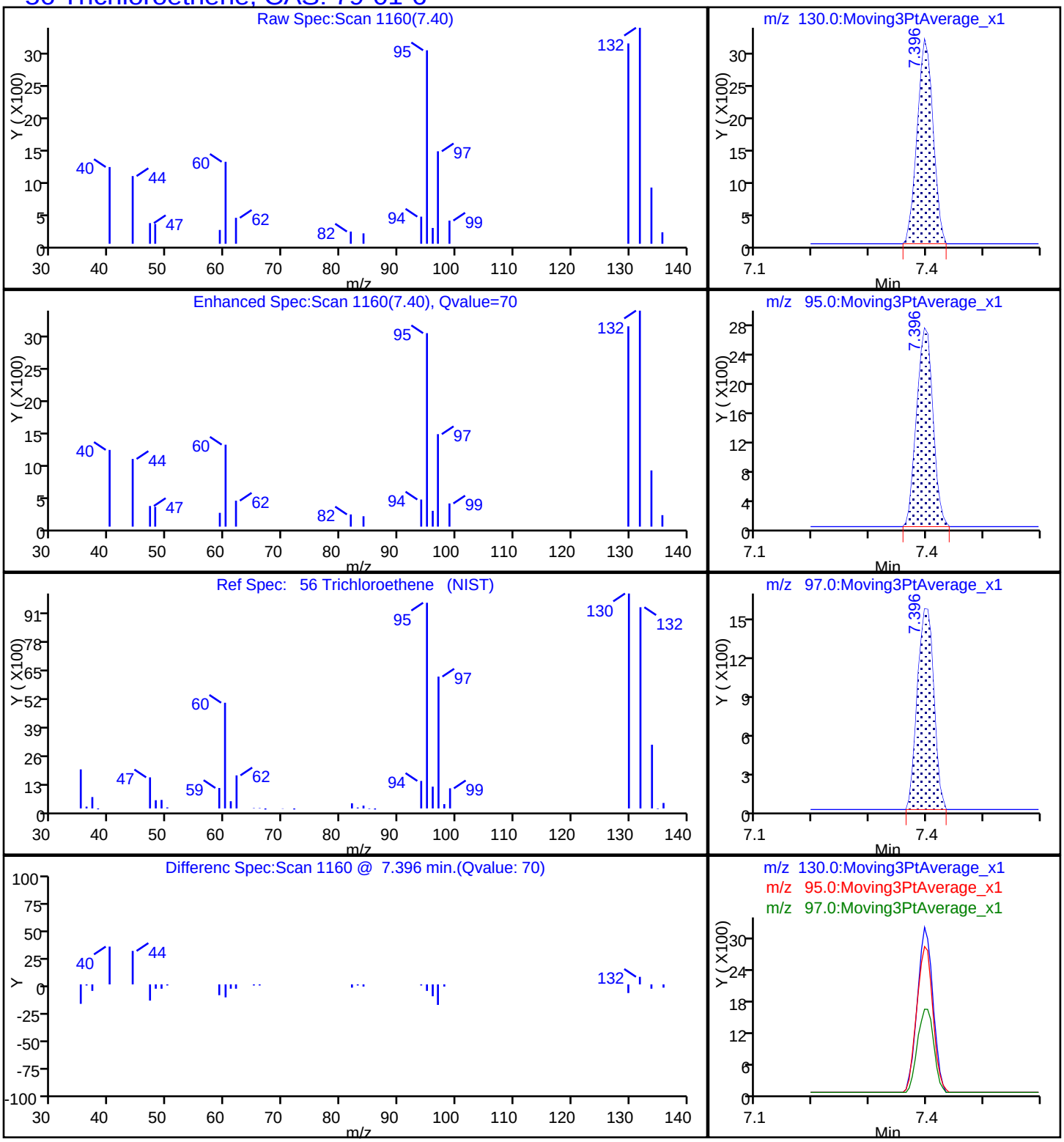


Report Date: 06-Nov-2017 08:50:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\500-136523-g-4.D				
Injection Date:	05-Nov-2017 14:52:30	Instrument ID:	CMS22		
Lims ID:	500-136523-G-4	Lab Sample ID:	500-136523-4		
Client ID:	OMW4D-GW-103017				
Operator ID:	JH	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

56 Trichloroethene, CAS: 79-01-6



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 500-404536/4	22I1009A.D
Level 2	STD02 500-404536/5	22I1009B.D
Level 3	STD03 500-404536/6	22I1009C.D
Level 4	STD04 500-404536/7	22I1009D.D
Level 5	STD05 500-404536/8	22I1009E.D
Level 6	STD06 500-404536/9	22I1009F.D
Level 7	STD07 500-404536/10	22I1009G.D
Level 8	STD08 500-404536/11	22I1009H.D
Level 9	STD09 500-404536/12	22I1009I.D
Level 10	STD10 500-404536/13	22I1009J.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 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Dichlorodifluoromethane			0.3140	0.3037	0.2554	Ave		0.3019			0.0100	10.3		15.0			
	0.2559	0.3097	0.3046	0.3379	0.3336												
Chloromethane			0.5269	0.4784	0.4177	Ave		0.4362			0.1000	10.6		15.0			
	0.3765	0.4189	0.4103	0.4257	0.4354												
Vinyl chloride	0.6368	0.4798	0.4082	0.3670	0.3366	Lin2	0.0702	0.3469			0.0100				0.9970		0.9900
	0.3341	0.3589	0.3550	0.3694	0.3704												
Butadiene			0.2875	0.2734	0.2583	Ave		0.2861			0.0100	6.2		15.0			
	0.2688	0.2971	0.2904	0.3063	0.3069												
Bromomethane			0.2629	0.2522	0.2205	Ave		0.2242			0.0100	9.5		15.0			
	0.2097	0.2111	0.2061	0.2152	0.2161												
Chloroethane			0.2664	0.2455	0.2214	Ave		0.2217			0.0100	10.1		15.0			
	0.2061	0.2072	0.2061	0.2093	0.2117												
Dichlorofluoromethane			0.5714	0.4869	0.4917	Ave		0.5175			0.0100	5.3		15.0			
	0.5058	0.5131	0.5061	0.5282	0.5369												
Trichlorofluoromethane			0.5713	0.4919	0.4972	Ave		0.5075			0.0100	5.6		15.0			
	0.4858	0.4967	0.4872	0.5102	0.5200												
Ethyl ether			0.1904	0.1556	0.1383	Ave		0.1566			0.0100	9.8		15.0			
	0.1508	0.1454	0.1534	0.1603	0.1582												
Acrolein			0.0195	0.0201	0.0194	Ave		0.0198			0.0010	2.6		15.0			
	0.0202	0.0190	0.0198	0.0205	0.0199												
1,1-Dichloroethene			0.3271	0.2778	0.2618	Ave		0.2737			0.0100	8.3		15.0			
	0.2606	0.2559	0.2728	0.2694	0.2645												
1,1,2-Trichloro-1,2,2-trifluoroethane			0.3263	0.2909	0.2877	Ave		0.3013			0.0100	4.3		15.0			
	0.2949	0.2909	0.3098	0.3043	0.3058												
Acetone			+++++	+++++	0.0552	Lin1	0.1076	0.0301			0.0100				0.9980		0.9900
	0.0341	0.0294	0.0302	0.0318	0.0310												

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 Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

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 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Iodomethane	0.5031	0.4756	0.5418 0.5137	0.5030 0.5117	0.4680 0.5046	Ave		0.5027			0.0100	4.6		15.0			
Carbon disulfide	0.8833	0.8777	0.9162 0.9399	0.8830 0.9418	0.8355 0.9272	Ave		0.9006			0.0100	4.1		15.0			
3-Chloropropene	0.1537	0.1496	0.1410 0.1557	0.1526 0.1586	0.1556 0.1471	Ave		0.1517			0.0100	3.7		15.0			
Methyl acetate	0.0805	0.0776	0.1053 0.0820	0.0940 0.0857	0.0786 0.0865	Ave		0.0863			0.0100	10.8		15.0			
Methylene Chloride	0.2625	0.2453	+++++ 0.2570	+++++ 0.2582	0.2623 0.2539	Ave		0.2565			0.0100	2.5		15.0			
tert-Butyl alcohol	1.1717	1.0881	1.3297 1.1521	1.1199 1.0996	1.0802 1.1405	Ave		1.1477			0.0100	7.0		15.0			
Acrylonitrile	0.0474	0.0448	0.0536 0.0477	0.0450 0.0486	0.0459 0.0477	Ave		0.0476			0.0010	5.9		15.0			
trans-1,2-Dichloroethene	0.2911	0.2718	0.3460 0.2881	0.3196 0.2846	0.2790 0.2808	Ave		0.2951			0.0100	8.5		15.0			
Methyl tert-butyl ether	0.4841	0.4659	0.5225 0.4935	0.4931 0.5067	0.4709 0.4897	Ave		0.4908			0.0100	3.7		15.0			
Hexane	0.4736	0.4568	0.5999 0.4847	0.4935 0.4973	0.4505 0.4858	Ave		0.4928			0.0100	9.4		15.0			
1,1-Dichloroethane	0.5160	0.4820	0.5309 0.5163	0.4996 0.5272	0.4933 0.5284	Ave		0.5117			0.1000	3.5		15.0			
Vinyl acetate	0.2678	0.2303	0.2918 0.2241	0.2665 0.2532	0.2410 0.2274	Ave		0.2502			0.0100	9.5		15.0			
2,2-Dichloropropane	0.3914	0.3565	0.3922 0.3866	0.4099 0.3845	0.3735 0.3765	Ave		0.3839			0.0100	4.1		15.0			
cis-1,2-Dichloroethene	0.3077	0.2897	0.3502 0.3055	0.3240 0.3106	0.2944 0.3044	Ave		0.3108			0.0100	6.1		15.0			
Methyl Ethyl Ketone	0.0429	0.0416	+++++ 0.0425	+++++ 0.0459	0.0444 0.0453	Ave		0.0438			0.0100	3.9		15.0			
Bromochloromethane	0.1244	0.1162	0.1385 0.1233	0.1250 0.1249	0.1146 0.1209	Ave		0.1235			0.0100	5.9		15.0			
Tetrahydrofuran	0.0361	0.0300	+++++ 0.0309	0.0776 0.0313	0.0492 0.0304	Lin1	0.1906	0.0300			0.0100				0.9990		0.9900
Chloroform	0.4680	0.4304	0.5573 0.4598	0.4704 0.4723	0.4342 0.4692	Ave		0.4702			0.0100	8.3		15.0			
1,1,1-Trichloroethane	0.4527	0.4262	0.4915 0.4597	0.4603 0.4665	0.4439 0.4671	Ave		0.4585			0.0100	4.1		15.0			
Cyclohexane	0.5716	0.5447	0.6246 0.5874	0.5488 0.5887	0.5429 0.5874	Ave		0.5745			0.0100	4.9		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 Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

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 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Carbon tetrachloride	0.4202	0.4047	0.4226 0.4359	0.4074 0.4427	0.4071 0.4412	Ave		0.4227			0.0100	3.7		15.0			
1,1-Dichloropropene	0.3878	0.3568	0.3904 0.3886	0.4031 0.3918	0.3603 0.3855	Ave		0.3830			0.0100	4.2		15.0			
Isobutyl alcohol	0.4872	0.4417	+++++ 0.4737	0.4827 0.4556	0.4915 0.4644	Ave		0.4710			0.0010	3.8		15.0			
Benzene	1.1150 1.0722	1.0691 1.0050	1.1838 1.0568	1.0625 1.0745	1.0336 1.0529	Ave		1.0725			0.0100	4.5		15.0			
1,2-Dichloroethane	0.2882	0.2688	0.2913 0.2882	0.2922 0.3007	0.2651 0.2949	Ave		0.2862			0.0100	4.4		15.0			
Heptane	0.4561	0.4411	0.5703 0.4561	0.4403 0.4707	0.4328 0.4297	Ave		0.4621			0.0100	9.9		15.0			
Trichloroethene	0.3111 0.3229	0.3080 0.2985	0.3270 0.3123	0.3136 0.3182	0.3040 0.3147	Ave		0.3130			0.0100	2.7		15.0			
Methylcyclohexane	0.5438	0.5230	0.5424 0.5551	0.5078 0.5614	0.5313 0.5491	Ave		0.5392			0.0100	3.3		15.0			
1,2-Dichloropropane	0.2707	0.2520	0.2686 0.2597	0.2490 0.2684	0.2717 0.2566	Ave		0.2621			0.0100	3.4		15.0			
Dibromomethane	0.1194	0.1101	0.1162 0.1165	0.1195 0.1218	0.1114 0.1181	Ave		0.1166			0.0100	3.5		15.0			
1,4-Dioxane	1.1061	1.0674	+++++ 1.0126	+++++ 1.0503	1.1012 1.0218	Ave		1.0599			0.0010	3.7		15.0			
Bromodichloromethane	0.3257	0.2986	0.3108 0.3215	0.2973 0.3312	0.3005 0.3214	Ave		0.3134			0.0100	4.3		15.0			
2-Chloroethyl vinyl ether	0.1079	0.1046	0.1236 0.1011	0.1098 0.1104	0.1052 0.1042	Ave		0.1084			0.0100	6.4		15.0			
cis-1,3-Dichloropropene	0.4735	0.4539	0.5045 0.4825	0.4301 0.4795	0.4495 0.4751	Ave		0.4686			0.0100	4.9		15.0			
methyl isobutyl ketone	0.1489	0.1375	+++++ 0.1374	+++++ 0.1396	0.1403 0.1397	Ave		0.1406			0.0100	3.0		15.0			
Toluene	0.8348 0.9072	0.8827 0.8616	0.9655 0.8896	0.8886 0.8777	0.8383 0.8691	Ave		0.8815			0.0100	4.2		15.0			
trans-1,3-Dichloropropene	0.3808	0.3652	0.3949 0.3791	0.3847 0.3874	0.3563 0.3688	Ave		0.3771			0.0100	3.4		15.0			
Ethyl methacrylate	0.2449	0.2272	0.2844 0.2331	0.2613 0.2377	0.2356 0.2206	Ave		0.2431			0.0100	8.5		15.0			
1,1,2-Trichloroethane	0.2068	0.1969	0.2315 0.2000	0.2210 0.2013	0.1941 0.1950	Ave		0.2058			0.0100	6.6		15.0			
Tetrachloroethene	0.4361	0.4237	0.5152 0.4397	0.4680 0.4309	0.4162 0.4314	Ave		0.4452			0.0100	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 Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

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 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,3-Dichloropropane	0.3515	0.3379	0.4004 0.3452	0.3834 0.3492	0.3303 0.3308	Ave		0.3536			0.0100	7.2		15.0			
2-Hexanone	0.0981	0.0920	+++++ 0.0884	+++++ 0.0929	0.0966 0.0887	Ave		0.0928			0.0100	4.3		15.0			
Dibromochloromethane	0.2724	0.2638	0.2840 0.2813	0.2635 0.2803	0.2599 0.2805	Ave		0.2732			0.0100	3.5		15.0			
1,2-Dibromoethane	0.2032	0.1963	0.2355 0.1987	0.2073 0.2019	0.1957 0.1948	Ave		0.2042			0.0100	6.5		15.0			
Chlorobenzene	1.0117	0.9745	1.0280 1.0087	1.0419 1.0066	0.9643 0.9872	Ave		1.0029			0.3000	2.6		15.0			
1,1,1,2-Tetrachloroethane	0.3577	0.3458	0.3463 0.3628	0.3582 0.3614	0.3391 0.3732	Ave		0.3555			0.0100	3.1		15.0			
Ethylbenzene	0.5745 0.5667	0.5562 0.5448	0.5795 0.5595	0.5742 0.5505	0.5520 0.5370	Ave		0.5595			0.0100	2.5		15.0			
m&p-Xylene	1.5824 1.3390	1.4541 1.3096	1.5035 1.3540	1.3154 1.3363	1.3026 1.3383	Ave		1.3835			0.0100	6.9		15.0			
o-Xylene	1.4698 1.3689	1.4465 1.3334	1.4623 1.3936	1.4532 1.3689	1.3378 1.3955	Ave		1.4030			0.0100	3.7		15.0			
Styrene	1.0791	1.0413	1.0682 1.0619	1.0657 1.0418	1.0387 1.0325	Ave		1.0536			0.0100	1.6		15.0			
Bromoform	0.1523	0.1511	0.1564 0.1604	0.1358 0.1628	0.1498 0.1657	Ave		0.1543			0.1000	6.1		15.0			
Isopropylbenzene	3.8173	3.5979	4.1163 3.7060	4.0437 3.7705	3.6366 3.6847	Ave		3.7966			0.0100	5.0		15.0			
Bromobenzene	0.8563	0.8067	0.8563 0.8335	0.8503 0.8309	0.8087 0.8115	Ave		0.8318			0.0100	2.5		15.0			
1,1,2,2-Tetrachloroethane	0.4633	0.4219	0.4802 0.4243	0.4838 0.4470	0.4300 0.4188	Ave		0.4462			0.3000	6.0		15.0			
1,2,3-Trichloropropane	0.4752	0.4460	0.5309 0.4675	0.5366 0.4871	0.4433 0.4734	Ave		0.4825			0.0100	7.2		15.0			
trans-1,4-Dichloro-2-butene	0.1234	0.1213	+++++ 0.1229	0.1163 0.1289	0.1156 0.1333	Ave		0.1231			0.0100	5.2		15.0			
N-Propylbenzene	4.4422	4.2139	4.8633 4.3783	4.7095 4.4079	4.3326 4.2872	Ave		4.4544			0.0100	5.0		15.0			
2-Chlorotoluene	2.4956	2.3115	2.6701 2.4294	2.6108 2.4884	2.3506 2.4274	Ave		2.4730			0.0100	4.9		15.0			
1,3,5-Trimethylbenzene	3.0618	2.9147	3.2887 3.0264	3.1578 3.0667	2.8915 3.0131	Ave		3.0526			0.0100	4.2		15.0			
4-Chlorotoluene	2.8259	2.6701	3.0917 2.7697	2.9634 2.7944	2.6586 2.7414	Ave		2.8144			0.0100	5.2		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 Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

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 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
tert-Butylbenzene	2.8727	2.6981	3.0064 2.8119	2.8755 2.8774	2.7035 2.8007	Ave		2.8308			0.0100	3.6		15.0			
1,2,4-Trimethylbenzene	3.0654	2.9105	3.2840 3.0665	3.1418 3.0893	2.9300 3.0388	Ave		3.0658			0.0100	3.8		15.0			
sec-Butylbenzene	4.1945	3.9862	4.3982 4.1400	4.2551 4.1683	3.9523 4.0891	Ave		4.1480			0.0100	3.5		15.0			
1,3-Dichlorobenzene	1.6549	1.5712	1.7365 1.6411	1.7354 1.6535	1.5852 1.6293	Ave		1.6509			0.0100	3.7		15.0			
p-Isopropyltoluene	3.6112	3.4356	3.8620 3.5522	3.3392 3.5649	3.4137 3.5035	Ave		3.5353			0.0100	4.5		15.0			
1,4-Dichlorobenzene	1.6141	1.5055	1.7623 1.5830	1.6639 1.6047	1.5529 1.5854	Ave		1.6090			0.0100	4.8		15.0			
n-Butylbenzene	3.1023	2.9992	3.1281 3.1430	3.0535 3.1817	2.9282 3.0685	Ave		3.0756			0.0100	2.7		15.0			
1,2-Dichlorobenzene	1.4326	1.3338	1.4982 1.4000	1.4409 1.4016	1.3564 1.3736	Ave		1.4046			0.0100	3.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0667	0.0625	+++++ 0.0664	0.0576 0.0671	0.0595 0.0687	Ave		0.0641			0.0100	6.6		15.0			
1,2,4-Trichlorobenzene	0.8187	0.8082	0.7743 0.8873	0.7956 0.8795	0.7652 0.8479	Ave		0.8221			0.0100	5.6		15.0			
Hexachlorobutadiene	0.7180	0.6997	0.8409 0.7123	0.7089 0.7080	0.6852 0.6476	Ave		0.7151			0.0100	7.8		15.0			
Naphthalene	1.1603	1.1176	1.0613 1.2681	1.0209 1.3194	1.0255 1.2699	Ave		1.1554			0.0100	10.2		15.0			
1,2,3-Trichlorobenzene	0.6521	0.6417	0.5680 0.6815	0.6176 0.6990	0.6044 0.6672	Ave		0.6414			0.0100	6.7		15.0			
Dibromofluoromethane	0.2789	0.2635	0.2559	0.2710	0.2679	Ave		0.2675			0.0100	3.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2436	0.2323	0.2305	0.2499	0.2461	Ave		0.2405			0.0100	3.6		15.0			
Toluene-d8 (Surr)	1.4100	1.3822	1.3281	1.3684	1.3526	Ave		1.3683			0.0100	2.3		15.0			
4-Bromofluorobenzene (Surr)	1.0523	0.9719	0.9314	1.0012	0.9764	Ave		0.9866			0.0100	4.5		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
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 500-404536/4	22I1009A.D
Level 2	STD02 500-404536/5	22I1009B.D
Level 3	STD03 500-404536/6	22I1009C.D
Level 4	STD04 500-404536/7	22I1009D.D
Level 5	STD05 500-404536/8	22I1009E.D
Level 6	STD06 500-404536/9	22I1009F.D
Level 7	STD07 500-404536/10	22I1009G.D
Level 8	STD08 500-404536/11	22I1009H.D
Level 9	STD09 500-404536/12	22I1009I.D
Level 10	STD10 500-404536/13	22I1009J.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Dichlorodifluoromethane	FB	Ave			3887	7599	16008			1.00	2.00	5.00
			66686	192862	386371	638358	853541	20.0	50.0	100	150	200
Chloromethane	FB	Ave			6522	11969	26177			1.00	2.00	5.00
			98113	260864	520474	804200	1114115	20.0	50.0	100	150	200
Vinyl chloride	FB	Lin2	1824	2843	5053	9182	21093	0.250	0.500	1.00	2.00	5.00
			87063	223534	450351	697757	947785	20.0	50.0	100	150	200
Butadiene	FB	Ave			3559	6840	16184			1.00	2.00	5.00
			70059	185013	368398	578508	785375	20.0	50.0	100	150	200
Bromomethane	FB	Ave			3254	6310	13818			1.00	2.00	5.00
			54650	131447	261409	406561	552833	20.0	50.0	100	150	200
Chloroethane	FB	Ave			3298	6142	13876			1.00	2.00	5.00
			53719	129024	261413	395293	541789	20.0	50.0	100	150	200
Dichlorofluoromethane	FB	Ave			7074	12181	30812			1.00	2.00	5.00
			131820	319531	642076	997654	1373676	20.0	50.0	100	150	200
Trichlorofluoromethane	FB	Ave			7072	12307	31156			1.00	2.00	5.00
			126621	309349	618071	963642	1330378	20.0	50.0	100	150	200
Ethyl ether	FB	Ave			2357	3894	8668			1.00	2.00	5.00
			39311	90558	194670	302708	404876	20.0	50.0	100	150	200
Acrolein	FB	Ave			9631	20115	48561			40.0	80.0	200
			210162	472119	1006067	1551515	2032527	800	2000	4000	6000	8000
1,1-Dichloroethene	FB	Ave			4049	6951	16408			1.00	2.00	5.00
			67913	159368	346065	508847	676746	20.0	50.0	100	150	200
1,1,2-Trichloro-1,2,2-trifluoroetha	FB	Ave			4039	7277	18030			1.00	2.00	5.00
ne			76847	181157	392996	574811	782340	20.0	50.0	100	150	200
Acetone	FB	Lin1			+++++	+++++	3462			+++++	+++++	5.00
			8882	18292	38337	60133	79399	20.0	50.0	100	150	200
Iodomethane	FB	Ave			6707	12585	29328			1.00	2.00	5.00
			131118	296158	651665	966509	1291102	20.0	50.0	100	150	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Carbon disulfide	FB	Ave	230207	546557	11342 1192373	22091 1779046	52360 2372403	20.0	50.0	1.00 100	2.00 150	5.00 200
3-Chloropropene	FB	Ave	40060	93144	1745 197574	3819 299648	9753 376327	20.0	50.0	1.00 100	2.00 150	5.00 200
Methyl acetate	FB	Ave	41942	96588	2607 208070	4705 323840	9855 442514	40.0	100	2.00 200	4.00 300	10.0 400
Methylene Chloride	FB	Ave	68402	152736	+++++ 326036	+++++ 487789	16440 649581	20.0	50.0	+++++ 100	+++++ 150	5.00 200
tert-Butyl alcohol	TBAd 9	Ave	30624	64319	1602 139633	2640 221143	6707 287030	200	500	10.0 1000	20.0 1500	50.0 2000
Acrylonitrile	FB	Ave	123646	279012	6641 604755	11269 917797	28739 1220331	200	500	10.0 1000	20.0 1500	50.0 2000
trans-1,2-Dichloroethene	FB	Ave	75853	169265	4283 365532	7996 537678	17481 718485	20.0	50.0	1.00 100	2.00 150	5.00 200
Methyl tert-butyl ether	FB	Ave	126174	290127	6468 626136	12336 957191	29511 1252963	20.0	50.0	1.00 100	2.00 150	5.00 200
Hexane	FB	Ave	123426	284494	7426 614940	12347 939332	28232 1242984	20.0	50.0	1.00 100	2.00 150	5.00 200
1,1-Dichloroethane	FB	Ave	134481	300188	6572 655028	12499 995753	30911 1352125	20.0	50.0	1.00 100	2.00 150	5.00 200
Vinyl acetate	FB	Ave	69793	143395	3612 284282	6667 478283	15100 581883	20.0	50.0	1.00 100	2.00 150	5.00 200
2,2-Dichloropropane	FB	Ave	101994	221981	4855 490418	10255 726320	23408 963214	20.0	50.0	1.00 100	2.00 150	5.00 200
cis-1,2-Dichloroethene	FB	Ave	80184	180418	4335 387546	8105 586623	18451 778733	20.0	50.0	1.00 100	2.00 150	5.00 200
Methyl Ethyl Ketone	FB	Ave	11183	25894	+++++ 53911	+++++ 86723	2781 115794	20.0	50.0	+++++ 100	+++++ 150	5.00 200
Bromochloromethane	FB	Ave	32426	72385	1714 156426	3127 235949	7179 309306	20.0	50.0	1.00 100	2.00 150	5.00 200
Tetrahydrofuran	FB	Lin1	18838	37399	+++++ 78283	3883 118216	6169 155585	40.0	100	+++++ 200	4.00 300	10.0 400
Chloroform	FB	Ave	121966	268043	6899 583299	11768 892047	27211 1200446	20.0	50.0	1.00 100	2.00 150	5.00 200
1,1,1-Trichloroethane	FB	Ave	117988	265413	6084 583139	11517 881110	27817 1195239	20.0	50.0	1.00 100	2.00 150	5.00 200
Cyclohexane	FB	Ave	148982	339231	7732 745155	13730 1112097	34024 1503013	20.0	50.0	1.00 100	2.00 150	5.00 200
Carbon tetrachloride	FB	Ave	109523	251999	5232 553048	10193 836248	25509 1129004	20.0	50.0	1.00 100	2.00 150	5.00 200
1,1-Dichloropropene	FB	Ave	101077	222219	4833 492967	10086 740117	22580 986238	20.0	50.0	1.00 100	2.00 150	5.00 200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Isobutyl alcohol	TBAd 9	Ave	31831	65269	+++++ 143542	2845 229077	7630 292174	500	1250	+++++ 2500	50.0 3750	125 5000
Benzene	FB	Ave	3194 279435	6335 625854	14655 1340671	26583 2029604	64771 2694003	0.250 20.0	0.500 50.0	1.00 100	2.00 150	5.00 200
1,2-Dichloroethane	FB	Ave	75123	167378	3606 365685	7311 568024	16610 754577	20.0	50.0	1.00 100	2.00 150	5.00 200
Heptane	FB	Ave	118880	274717	7060 578628	11016 889111	27123 1099346	20.0	50.0	1.00 100	2.00 150	5.00 200
Trichloroethene	FB	Ave	891 84143	1825 185879	4048 396200	7847 601115	19051 805318	0.250 20.0	0.500 50.0	1.00 100	2.00 150	5.00 200
Methylcyclohexane	FB	Ave	141727	325668	6715 704244	12704 1060422	33297 1405011	20.0	50.0	1.00 100	2.00 150	5.00 200
1,2-Dichloropropane	FB	Ave	70559	156924	3325 329490	6229 507081	17024 656509	20.0	50.0	1.00 100	2.00 150	5.00 200
Dibromomethane	FB	Ave	31114	68580	1438 147844	2990 230026	6984 302156	20.0	50.0	1.00 100	2.00 150	5.00 200
1,4-Dioxane	DXE	Ave	6967	14562	+++++ 31477	+++++ 50880	1624 61340	400	1000	+++++ 2000	+++++ 3000	100 4000
Bromodichloromethane	FB	Ave	84886	185945	3847 407905	7437 625639	18832 822460	20.0	50.0	1.00 100	2.00 150	5.00 200
2-Chloroethyl vinyl ether	CBNZ d5	Ave	22108	49252	1176 98246	2084 165043	5132 201004	20.0	50.0	1.00 100	2.00 150	5.00 200
cis-1,3-Dichloropropene	CBNZ d5	Ave	96979	213705	4799 468784	8161 716519	21921 915998	20.0	50.0	1.00 100	2.00 150	5.00 200
methyl isobutyl ketone	CBNZ d5	Ave	30495	64720	+++++ 133529	+++++ 208656	6843 269414	20.0	50.0	+++++ 100	+++++ 150	5.00 200
Toluene	CBNZ d5	Ave	1847 185812	3952 405666	9185 864325	16861 1311685	40884 1675748	0.250 20.0	0.500 50.0	1.00 100	2.00 150	5.00 200
trans-1,3-Dichloropropene	CBNZ d5	Ave	77988	171976	3757 368295	7299 578946	17379 711039	20.0	50.0	1.00 100	2.00 150	5.00 200
Ethyl methacrylate	CBNZ d5	Ave	50153	106963	2706 226452	4958 355255	11492 425270	20.0	50.0	1.00 100	2.00 150	5.00 200
1,1,2-Trichloroethane	CBNZ d5	Ave	42365	92730	2202 194312	4194 300751	9466 376019	20.0	50.0	1.00 100	2.00 150	5.00 200
Tetrachloroethene	CBNZ d5	Ave	89319	199517	4901 427201	8881 643945	20298 831846	20.0	50.0	1.00 100	2.00 150	5.00 200
1,3-Dichloropropane	CBNZ d5	Ave	71998	159121	3809 335370	7275 521831	16108 637860	20.0	50.0	1.00 100	2.00 150	5.00 200
2-Hexanone	CBNZ d5	Ave	20098	43301	+++++ 85907	+++++ 138760	4711 171030	20.0	50.0	+++++ 100	+++++ 150	5.00 200
Dibromochloromethane	CBNZ d5	Ave	55793	124201	2702 273320	5000 418955	12675 540768	20.0	50.0	1.00 100	2.00 150	5.00 200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2-Dibromoethane	CBNZ	Ave			2240	3933	9542			1.00	2.00	5.00
	d5		41612	92430	193097	301678	375564	20.0	50.0	100	150	200
Chlorobenzene	CBNZ	Ave			9780	19770	47027			1.00	2.00	5.00
	d5		207211	458835	980014	1504324	1903593	20.0	50.0	100	150	200
1,1,1,2-Tetrachloroethane	CBNZ	Ave			3294	6796	16536			1.00	2.00	5.00
	d5		73264	162828	352525	540023	719513	20.0	50.0	100	150	200
Ethylbenzene	CBNZ	Ave	1271	2490	5513	10896	26922	0.250	0.500	1.00	2.00	5.00
	d5		116071	256504	543612	822614	1035390	20.0	50.0	100	150	200
m&p-Xylene	CBNZ	Ave	3501	6510	14303	24959	63528	0.250	0.500	1.00	2.00	5.00
	d5		274253	616608	1315540	1997015	2580490	20.0	50.0	100	150	200
o-Xylene	CBNZ	Ave	3252	6476	13911	27575	65244	0.250	0.500	1.00	2.00	5.00
	d5		280371	627831	1353997	2045776	2690866	20.0	50.0	100	150	200
Styrene	CBNZ	Ave			10162	20221	50657			1.00	2.00	5.00
	d5		221009	490303	1031790	1556919	1990794	20.0	50.0	100	150	200
Bromoform	CBNZ	Ave			1488	2577	7305			1.00	2.00	5.00
	d5		31197	71162	155829	243221	319507	20.0	50.0	100	150	200
Isopropylbenzene	DCBd	Ave			18532	35851	87113			1.00	2.00	5.00
	4		376777	840067	1807091	2721432	3585441	20.0	50.0	100	150	200
Bromobenzene	DCBd	Ave			3855	7539	19373			1.00	2.00	5.00
	4		84517	188355	406448	599730	789621	20.0	50.0	100	150	200
1,1,2,2-Tetrachloroethane	DCBd	Ave			2162	4289	10300			1.00	2.00	5.00
	4		45732	98506	206888	322616	407535	20.0	50.0	100	150	200
1,2,3-Trichloropropane	DCBd	Ave			2390	4757	10618			1.00	2.00	5.00
	4		46907	104126	227957	351544	460598	20.0	50.0	100	150	200
trans-1,4-Dichloro-2-butene	DCBd	Ave			+++++	1031	2769			+++++	2.00	5.00
	4		12184	28334	59910	93065	129724	20.0	50.0	100	150	200
N-Propylbenzene	DCBd	Ave			21895	41754	103784			1.00	2.00	5.00
	4		438465	983910	2134916	3181467	4171647	20.0	50.0	100	150	200
2-Chlorotoluene	DCBd	Ave			12021	23147	56307			1.00	2.00	5.00
	4		246326	539705	1184600	1796018	2362032	20.0	50.0	100	150	200
1,3,5-Trimethylbenzene	DCBd	Ave			14806	27997	69265			1.00	2.00	5.00
	4		302209	680566	1475733	2213436	2931886	20.0	50.0	100	150	200
4-Chlorotoluene	DCBd	Ave			13919	26273	63686			1.00	2.00	5.00
	4		278922	623450	1350527	2016873	2667533	20.0	50.0	100	150	200
tert-Butylbenzene	DCBd	Ave			13535	25494	64760			1.00	2.00	5.00
	4		283546	629979	1371093	2076814	2725236	20.0	50.0	100	150	200
1,2,4-Trimethylbenzene	DCBd	Ave			14785	27855	70187			1.00	2.00	5.00
	4		302570	679566	1495268	2229756	2956892	20.0	50.0	100	150	200
sec-Butylbenzene	DCBd	Ave			19801	37725	94675			1.00	2.00	5.00
	4		414014	930741	2018696	3008527	3978956	20.0	50.0	100	150	200
1,3-Dichlorobenzene	DCBd	Ave			7818	15386	37972			1.00	2.00	5.00
	4		163346	366852	800204	1193440	1585443	20.0	50.0	100	150	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
p-Isopropyltoluene	DCBd 4	Ave	356436	802184	17387 1732101	29605 2573002	81773 3409062	20.0	50.0	1.00 100	2.00 150	5.00 200
1,4-Dichlorobenzene	DCBd 4	Ave	159318	351532	7934 771910	14752 1158203	37199 1542640	20.0	50.0	1.00 100	2.00 150	5.00 200
n-Butylbenzene	DCBd 4	Ave	306205	700287	14083 1532554	27072 2296450	70143 2985798	20.0	50.0	1.00 100	2.00 150	5.00 200
1,2-Dichlorobenzene	DCBd 4	Ave	141405	311437	6745 682673	12775 1011645	32492 1336547	20.0	50.0	1.00 100	2.00 150	5.00 200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	6582	14587	+++++ 32374	511 48395	1425 66891	20.0	50.0	+++++ 100	2.00 150	5.00 200
1,2,4-Trichlorobenzene	DCBd 4	Ave	80808	188699	3486 432675	7054 634820	18329 825029	20.0	50.0	1.00 100	2.00 150	5.00 200
Hexachlorobutadiene	DCBd 4	Ave	70871	163379	3786 347337	6285 510989	16414 630195	20.0	50.0	1.00 100	2.00 150	5.00 200
Naphthalene	DCBd 4	Ave	114521	260959	4778 618344	9051 952288	24566 1235660	20.0	50.0	1.00 100	2.00 150	5.00 200
1,2,3-Trichlorobenzene	DCBd 4	Ave	64362	149828	2557 332325	5476 504548	14477 649195	20.0	50.0	1.00 100	2.00 150	5.00 200
Dibromofluoromethane	FB	Ave	72698	164122	324651	511973	685374	20.0	50.0	100	150	200
1,2-Dichloroethane-d4 (Surr)	FB	Ave	63477	144652	292384	472068	629727	20.0	50.0	100	150	200
Toluene-d8 (Surr)	CBNZ d5	Ave	288800	650809	1290369	2044933	2608138	20.0	50.0	100	150	200
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	103868	226926	454172	722638	950093	20.0	50.0	100	150	200

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 500-404536/4	22I1009A.D
Level 2	STD02 500-404536/5	22I1009B.D
Level 3	STD03 500-404536/6	22I1009C.D
Level 4	STD04 500-404536/7	22I1009D.D
Level 5	STD05 500-404536/8	22I1009E.D
Level 6	STD06 500-404536/9	22I1009F.D
Level 7	STD07 500-404536/10	22I1009G.D
Level 8	STD08 500-404536/11	22I1009H.D
Level 9	STD09 500-404536/12	22I1009I.D
Level 10	STD10 500-404536/13	22I1009J.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Dichlorodifluoromethane			4.0	0.6	-15.4	-15.2			50	30	30	30
	2.6	0.9	12.0	10.5			30	30	30	30		
Chloromethane			20.8	9.7	-4.2	-13.7			50	30	30	30
	-4.0	-6.0	-2.4	-0.2			30	30	30	30		
Vinyl chloride	2.6	-2.2	-2.6	-4.3	-7.0	-4.7	50	30	30	30	30	30
	3.1	2.1	6.3	6.7			30	30	30	30		
Butadiene			0.5	-4.4	-9.7	-6.0			50	30	30	30
	3.8	1.5	7.1	7.3			30	30	30	30		
Bromomethane			17.2	12.5	-1.7	-6.5			50	30	30	30
	-5.9	-8.1	-4.0	-3.6			30	30	30	30		
Chloroethane			20.2	10.7	-0.1	-7.0			50	30	30	30
	-6.6	-7.1	-5.6	-4.5			30	30	30	30		
Dichlorofluoromethane			10.4	-5.9	-5.0	-2.3			50	30	30	30
	-0.9	-2.2	2.1	3.7			30	30	30	30		
Trichlorofluoromethane			12.6	-3.1	-2.0	-4.3			50	30	30	30
	-2.1	-4.0	0.5	2.4			30	30	30	30		
Ethyl ether			21.6	-0.6	-11.7	-3.7			50	30	30	30
	-7.1	-2.0	2.4	1.1			30	30	30	30		
Acrolein			-1.7	1.6	-2.1	1.9			50	30	30	30
	-4.2	0.2	3.8	0.4			30	30	30	30		
1,1-Dichloroethene			19.5	1.5	-4.4	-4.8			50	30	30	30
	-6.5	-0.3	-1.6	-3.4			30	30	30	30		
1,1,2-Trichloro-1,2,2-trifluoroethane			8.3	-3.5	-4.5	-2.1			50	30	30	30
	-3.5	2.8	1.0	1.5			30	30	30	30		
Acetone			+++++	+++++	12.1	-4.5					50	30
	-9.5	-3.1	3.5	1.4			30	30	30	30		
Iodomethane			7.8	0.1	-6.9	0.1			50	30	30	30
	-5.4	2.2	1.8	0.4			30	30	30	30		

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Carbon disulfide	-2.5	4.4	1.7 4.6	-2.0 3.0	-7.2	-1.9	30	30	50 30	30 30	30	30
3-Chloropropene	-1.4	2.6	-7.1 4.5	0.6 -3.1	2.6	1.3	30	30	50 30	30 30	30	30
Methyl acetate	-10.1	-4.9	22.1 -0.6	9.0 0.2	-8.9	-6.7	30	30	50 30	30 30	30	30
Methylene Chloride	-4.4	0.2	+++++ 0.7	+++++ -1.0	2.3	2.3	30	30	30	30	50	30
tert-Butyl alcohol	-5.2	0.4	15.9 -4.2	-2.4 -0.6	-5.9	2.1	30	30	50 30	30 30	30	30
Acrylonitrile	-5.9	0.2	12.7 2.1	-5.4 0.2	-3.6	-0.3	30	30	50 30	30 30	30	30
trans-1,2-Dichloroethene	-7.9	-2.4	17.2 -3.5	8.3 -4.9	-5.5	-1.4	30	30	50 30	30 30	30	30
Methyl tert-butyl ether	-5.1	0.6	6.5 3.2	0.5 -0.2	-4.1	-1.4	30	30	50 30	30 30	30	30
Hexane	-7.3	-1.6	21.7 0.9	0.2 -1.4	-8.6	-3.9	30	30	50 30	30 30	30	30
1,1-Dichloroethane	-5.8	0.9	3.7 3.0	-2.4 3.3	-3.6	0.8	30	30	50 30	30 30	30	30
Vinyl acetate	-8.0	-10.5	16.6 1.2	6.5 -9.1	-3.7	7.0	30	30	50 30	30 30	30	30
2,2-Dichloropropane	-7.1	0.7	2.2 0.2	6.8 -1.9	-2.7	1.9	30	30	50 30	30 30	30	30
cis-1,2-Dichloroethene	-6.8	-1.7	12.7 -0.1	4.2 -2.1	-5.3	-1.0	30	30	50 30	30 30	30	30
Methyl Ethyl Ketone	-5.0	-2.9	+++++ 4.9	+++++ 3.4	1.4	-1.9	30	30	30	30	50	30
Bromochloromethane	-5.9	-0.1	12.1 1.2	1.2 -2.1	-7.2	0.8	30	30	50 30	30 30	30	30
Tetrahydrofuran	-6.3	-0.4	+++++ 2.1	-0.2 -0.3	0.5	4.5	30	30	30	50 30	30	30
Chloroform	-8.5	-2.2	18.5 0.4	0.0 -0.2	-7.7	-0.5	30	30	50 30	30 30	30	30
1,1,1-Trichloroethane	-7.0	0.3	7.2 1.7	0.4 1.9	-3.2	-1.3	30	30	50 30	30 30	30	30
Cyclohexane	-5.2	2.2	8.7 2.5	-4.5 2.2	-5.5	-0.5	30	30	50 30	30 30	30	30
Carbon tetrachloride	-4.3	3.1	0.0 4.7	-3.6 4.4	-3.7	-0.6	30	30	50 30	30 30	30	30
1,1-Dichloropropene	-6.8	1.4	1.9 2.3	5.2 0.6	-5.9	1.2	30	30	50 30	30 30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Isobutyl alcohol			+++++	2.5	4.4	3.4				50	30	30
	-6.2	0.6	-3.3	-1.4			30	30	30	30		
Benzene	4.0	-0.3	10.4	-0.9	-3.6	0.0	50	30	30	30	30	30
	-6.3	-1.5	0.2	-1.8			30	30	30	30		
1,2-Dichloroethane			1.8	2.1	-7.4	0.7			50	30	30	30
	-6.1	0.7	5.1	3.0			30	30	30	30		
Heptane			23.4	-4.7	-6.3	-1.3			50	30	30	30
	-4.5	-1.3	1.8	-7.0			30	30	30	30		
Trichloroethene	-0.6	-1.6	4.5	0.2	-2.9	3.1	50	30	30	30	30	30
	-4.6	-0.2	1.7	0.5			30	30	30	30		
Methylcyclohexane			0.6	-5.8	-1.5	0.8			50	30	30	30
	-3.0	2.9	4.1	1.8			30	30	30	30		
1,2-Dichloropropane			2.5	-5.0	3.7	3.3			50	30	30	30
	-3.9	-0.9	2.4	-2.1			30	30	30	30		
Dibromomethane			-0.4	2.5	-4.4	2.4			50	30	30	30
	-5.6	-0.1	4.4	1.3			30	30	30	30		
1,4-Dioxane			+++++	+++++	3.9	4.4					50	30
	0.7	-4.5	-0.9	-3.6			30	30	30	30		
Bromodichloromethane			-0.8	-5.1	-4.1	3.9			50	30	30	30
	-4.7	2.6	5.7	2.6			30	30	30	30		
2-Chloroethyl vinyl ether			14.1	1.3	-2.9	-0.4			50	30	30	30
	-3.5	-6.7	1.9	-3.8			30	30	30	30		
cis-1,3-Dichloropropene			7.7	-8.2	-4.1	1.1			50	30	30	30
	-3.1	3.0	2.3	1.4			30	30	30	30		
methyl isobutyl ketone			+++++	+++++	-0.2	5.9					50	30
	-2.2	-2.2	-0.7	-0.6			30	30	30	30		
Toluene	-5.3	0.1	9.5	0.8	-4.9	2.9	50	30	30	30	30	30
	-2.3	0.9	-0.4	-1.4			30	30	30	30		
trans-1,3-Dichloropropene			4.7	2.0	-5.5	1.0			50	30	30	30
	-3.2	0.5	2.7	-2.2			30	30	30	30		
Ethyl methacrylate			17.0	7.5	-3.1	0.7			50	30	30	30
	-6.6	-4.1	-2.2	-9.3			30	30	30	30		
1,1,2-Trichloroethane			12.5	7.4	-5.7	0.5			50	30	30	30
	-4.3	-2.8	-2.2	-5.3			30	30	30	30		
Tetrachloroethene			15.7	5.1	-6.5	-2.0			50	30	30	30
	-4.8	-1.2	-3.2	-3.1			30	30	30	30		
1,3-Dichloropropane			13.2	8.4	-6.6	-0.6			50	30	30	30
	-4.4	-2.4	-1.2	-6.4			30	30	30	30		
2-Hexanone			+++++	+++++	4.1	5.8					50	30
	-0.9	-4.7	0.1	-4.4			30	30	30	30		
Dibromochloromethane			4.0	-3.6	-4.9	-0.3			50	30	30	30
	-3.5	3.0	2.6	2.6			30	30	30	30		

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
1,2-Dibromoethane			15.3	1.5	-4.2	-0.5			50	30	30	30
	-3.8	-2.7	-1.1	-4.6			30	30	30	30		
Chlorobenzene			2.5	3.9	-3.8	0.9			50	30	30	30
	-2.8	0.6	0.4	-1.6			30	30	30	30		
1,1,1,2-Tetrachloroethane			-2.6	0.7	-4.6	0.6			50	30	30	30
	-2.7	2.0	1.6	5.0			30	30	30	30		
Ethylbenzene	2.7	-0.6	3.6	2.6	-1.3	1.3	50	30	30	30	30	30
	-2.6	0.0	-1.6	-4.0			30	30	30	30		
m&p-Xylene	14.4	5.1	8.7	-4.9	-5.8	-3.2	50	30	30	30	30	30
	-5.3	-2.1	-3.4	-3.3			30	30	30	30		
o-Xylene	4.8	3.1	4.2	3.6	-4.6	-2.4	50	30	30	30	30	30
	-5.0	-0.7	-2.4	-0.5			30	30	30	30		
Styrene			1.4	1.1	-1.4	2.4			50	30	30	30
	-1.2	0.8	-1.1	-2.0			30	30	30	30		
Bromoform			1.4	-12.0	-2.9	-1.3			50	30	30	30
	-2.0	4.0	5.5	7.4			30	30	30	30		
Isopropylbenzene			8.4	6.5	-4.2	0.5			50	30	30	30
	-5.2	-2.4	-0.7	-2.9			30	30	30	30		
Bromobenzene			2.9	2.2	-2.8	2.9			50	30	30	30
	-3.0	0.2	-0.1	-2.4			30	30	30	30		
1,1,2,2-Tetrachloroethane			7.6	8.4	-3.6	3.8			50	30	30	30
	-5.4	-4.9	0.2	-6.1			30	30	30	30		
1,2,3-Trichloropropane			10.0	11.2	-8.1	-1.5			50	30	30	30
	-7.6	-3.1	1.0	-1.9			30	30	30	30		
trans-1,4-Dichloro-2-butene			+++++	-5.5	-6.1	0.3				50	30	30
	-1.4	-0.2	4.7	8.3			30	30	30	30		
N-Propylbenzene			9.2	5.7	-2.7	-0.3			50	30	30	30
	-5.4	-1.7	-1.0	-3.8			30	30	30	30		
2-Chlorotoluene			8.0	5.6	-4.9	0.9			50	30	30	30
	-6.5	-1.8	0.6	-1.8			30	30	30	30		
1,3,5-Trimethylbenzene			7.7	3.4	-5.3	0.3			50	30	30	30
	-4.5	-0.9	0.5	-1.3			30	30	30	30		
4-Chlorotoluene			9.9	5.3	-5.5	0.4			50	30	30	30
	-5.1	-1.6	-0.7	-2.6			30	30	30	30		
tert-Butylbenzene			6.2	1.6	-4.5	1.5			50	30	30	30
	-4.7	-0.7	1.6	-1.1			30	30	30	30		
1,2,4-Trimethylbenzene			7.1	2.5	-4.4	0.0			50	30	30	30
	-5.1	0.0	0.8	-0.9			30	30	30	30		
sec-Butylbenzene			6.0	2.6	-4.7	1.1			50	30	30	30
	-3.9	-0.2	0.5	-1.4			30	30	30	30		
1,3-Dichlorobenzene			5.2	5.1	-4.0	0.2			50	30	30	30
	-4.8	-0.6	0.2	-1.3			30	30	30	30		

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 14:05 Calibration End Date: 10/09/2017 18:02 Calibration ID: 25582

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
p-Isopropyltoluene	-2.8	0.5	9.2 0.8	-5.5 -0.9	-3.4	2.1	30	30	50 30	30 30	30	30
1,4-Dichlorobenzene	-6.4	-1.6	9.5 -0.3	3.4 -1.5	-3.5	0.3	30	30	50 30	30 30	30	30
n-Butylbenzene	-2.5	2.2	1.7 3.5	-0.7 -0.2	-4.8	0.9	30	30	50 30	30 30	30	30
1,2-Dichlorobenzene	-5.0	-0.3	6.7 -0.2	2.6 -2.2	-3.4	2.0	30	30	50 30	30 30	30	30
1,2-Dibromo-3-Chloropropane	-2.5	3.6	+++++ 4.7	-10.0 7.3	-7.1	4.1	30	30	30	50 30	30	30
1,2,4-Trichlorobenzene	-1.7	7.9	-5.8 7.0	-3.2 3.1	-6.9	-0.4	30	30	50 30	30 30	30	30
Hexachlorobutadiene	-2.1	-0.4	17.6 -1.0	-0.9 -9.4	-4.2	0.4	30	30	50 30	30 30	30	30
Naphthalene	-3.3	9.8	-8.1 14.2	-11.6 9.9	-11.2	0.4	30	30	50 30	30 30	30	30
1,2,3-Trichlorobenzene	0.0	6.3	-11.5 9.0	-3.7 4.0	-5.8	1.7	30	30	50 30	30 30	30	30
Dibromofluoromethane	-1.5	-4.3	1.3	0.2		4.3	30	30	30	30		50
1,2-Dichloroethane-d4 (Surr)	-3.4	-4.2	3.9	2.3		1.3	30	30	30	30		50
Toluene-d8 (Surr)	1.0	-2.9	0.0	-1.1		3.1	30	30	30	30		50
4-Bromofluorobenzene (Surr)	-1.5	-5.6	1.5	-1.0		6.7	30	30	30	30		50

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009A.D
Lims ID: STD01
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 09-Oct-2017 14:05:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD01
Misc. Info.: 500-0048264-004
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:34:33 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:34:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
3 Vinyl chloride	62	2.018	2.018	0.000	1	1824	0.2500	0.2566	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	120763	1000.0	1000.0	
49 Benzene	78	6.667	6.673	-0.006	34	3194	0.2500	0.2599	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	572892	50.0	50.0	
56 Trichloroethene	130	7.391	7.397	-0.006	1	891	0.2500	0.2484	
* 61 1,4-Dioxane-d8	96	7.750	7.756	-0.006	0	12823	1000.0	1000.0	
71 Toluene	92	8.839	8.839	0.000	37	1847	0.2500	0.2368	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	85	442500	50.0	50.0	
85 Ethylbenzene	106	10.619	10.619	0.000	63	1271	0.2500	0.2567	
86 m-Xylene & p-Xylene	91	10.772	10.777	-0.005	0	3501	0.2500	0.2859	
87 o-Xylene	91	11.349	11.349	0.000	36	3252	0.2500	0.2619	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	228152	50.0	50.0	
S 124 Xylenes, Total	91				0			0.5478	

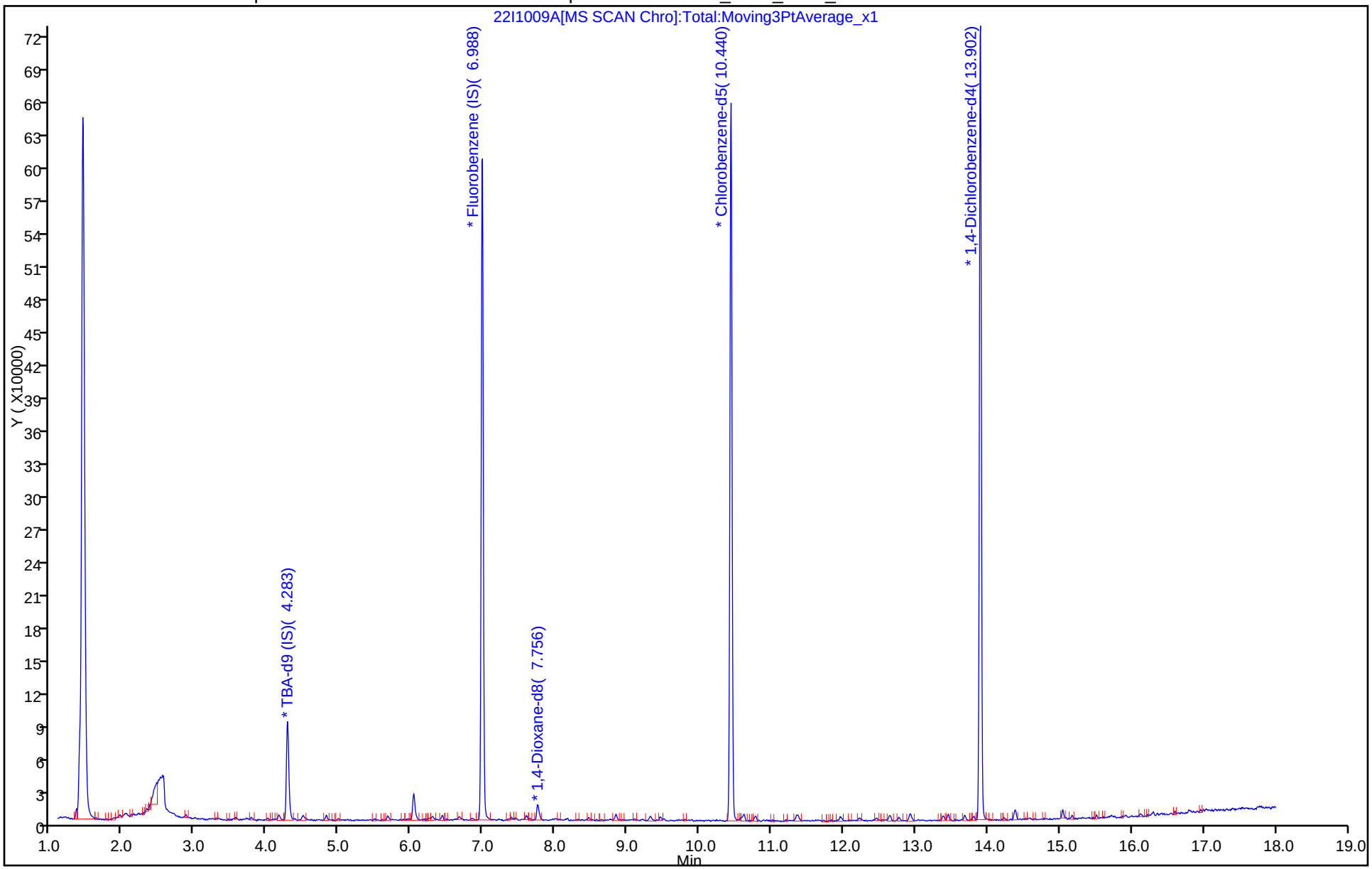
Reagents:

LEVEL1 8260_00003 Amount Added: 2.50 Units: uL
8260 LOWIS1_00112 Amount Added: 5.00 Units: uL

Report Date: 10-Oct-2017 10:34:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009A.D				
Injection Date:	09-Oct-2017 14:05:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD01			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009B.D
Lims ID: STD02
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 09-Oct-2017 14:30:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD02
Misc. Info.: 500-0048264-005
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:34:38 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:34:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
3 Vinyl chloride	62	2.013	2.018	-0.005	1	2843	0.5000	0.4892	
* 22 TBA-d9 (IS)	65	4.288	4.283	0.005	0	120267	1000.0	1000.0	
49 Benzene	78	6.667	6.673	-0.006	80	6335	0.5000	0.4984	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	592531	50.0	50.0	
56 Trichloroethene	130	7.396	7.397	-0.001	13	1825	0.5000	0.4920	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	13383	1000.0	1000.0	
71 Toluene	92	8.839	8.839	0.000	55	3952	0.5000	0.5007	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	447703	50.0	50.0	
85 Ethylbenzene	106	10.619	10.619	0.000	84	2490	0.5000	0.4970	
86 m-Xylene & p-Xylene	91	10.771	10.777	-0.006	0	6510	0.5000	0.5255	
87 o-Xylene	91	11.348	11.349	-0.001	63	6476	0.5000	0.5155	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	94	225310	50.0	50.0	
S 124 Xylenes, Total	91				0			1.04	

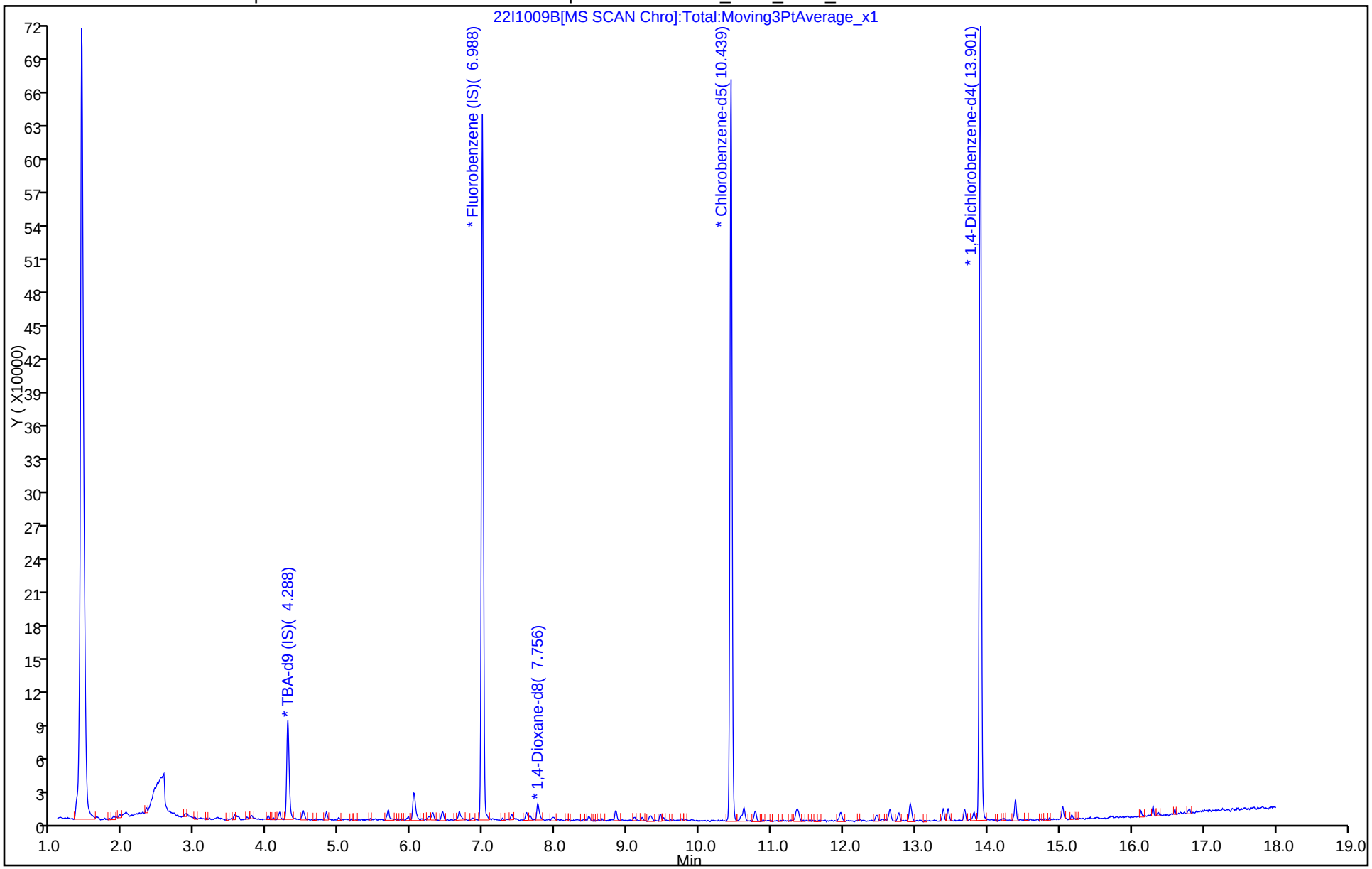
Reagents:

8260 LOWIS1_00112 Amount Added: 5.00 Units: uL
LEVEL1 8260_00003 Amount Added: 5.00 Units: uL

Report Date: 10-Oct-2017 10:34:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009B.D				
Injection Date:	09-Oct-2017 14:30:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD02			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009C.D
Lims ID: STD03
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Oct-2017 14:58:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD03
Misc. Info.: 500-0048264-006
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:34:44 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:34:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	17	3887	1.00	1.04	
2 Chloromethane	50	1.866	1.871	-0.005	54	6522	1.00	1.21	
3 Vinyl chloride	62	2.013	2.018	-0.005	24	5053	1.00	0.9743	
4 Butadiene	39	2.045	2.046	-0.001	67	3559	1.00	1.00	
5 Bromomethane	94	2.421	2.427	-0.006	27	3254	1.00	1.17	
6 Chloroethane	64	2.552	2.557	-0.005	36	3298	1.00	1.20	
7 Dichlorofluoromethane	67	2.867	2.868	-0.001	42	7074	1.00	1.10	
8 Trichlorofluoromethane	101	2.884	2.889	-0.005	27	7072	1.00	1.13	
10 Ethyl ether	59	3.303	3.303	0.000	38	2357	1.00	1.22	
11 Acrolein	56	3.461	3.461	0.000	83	9631	40.0	39.3	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	62	4049	1.00	1.19	
13 1,1,2-Trichloro-1,2,2-trif	101	3.586	3.592	-0.006	23	4039	1.00	1.08	
15 Iodomethane	142	3.717	3.722	-0.005	67	6707	1.00	1.08	
16 Carbon disulfide	76	3.782	3.782	0.000	77	11342	1.00	1.02	
19 3-Chloro-1-propene	76	4.016	4.016	0.000	72	1745	1.00	0.9289	
20 Methyl acetate	43	4.087	4.076	0.011	43	2607	2.00	2.44	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	120474	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.386	4.386	0.000	1	1602	10.0	11.6	
24 Acrylonitrile	53	4.495	4.490	0.005	90	6641	10.0	11.3	
25 trans-1,2-Dichloroethene	96	4.490	4.495	-0.005	84	4283	1.00	1.17	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	89	6468	1.00	1.06	
27 Hexane	57	4.822	4.822	0.000	83	7426	1.00	1.22	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	55	6572	1.00	1.04	
29 Vinyl acetate	43	5.088	5.089	0.000	49	3612	1.00	1.17	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	59	4855	1.00	1.02	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	78	4335	1.00	1.13	
39 Chlorobromomethane	128	5.954	5.954	0.000	44	1714	1.00	1.12	
41 Chloroform	83	6.057	6.057	0.000	69	6899	1.00	1.19	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	59	6084	1.00	1.07	
44 Cyclohexane	56	6.302	6.302	0.000	79	7732	1.00	1.09	
46 1,1-Dichloropropene	75	6.438	6.433	0.005	64	4833	1.00	1.02	
45 Carbon tetrachloride	117	6.428	6.433	-0.005	64	5232	1.00	1.00	
49 Benzene	78	6.667	6.673	-0.006	96	14655	1.00	1.10	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	34	3606	1.00	1.02	
54 n-Heptane	43	6.972	6.977	-0.005	37	7060	1.00	1.23	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	618957	50.0	50.0	
56 Trichloroethene	130	7.397	7.397	0.000	55	4048	1.00	1.04	
58 Methylcyclohexane	83	7.603	7.603	0.000	85	6715	1.00	1.01	
59 1,2-Dichloropropane	63	7.647	7.652	-0.005	42	3325	1.00	1.02	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	14294	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	34	1438	1.00	1.00	
65 Dichlorobromomethane	83	7.963	7.968	-0.005	41	3847	1.00	0.99	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	1	1176	1.00	1.14	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	59	4799	1.00	1.08	
71 Toluene	92	8.839	8.839	0.000	81	9185	1.00	1.10	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	50	3757	1.00	1.05	
73 Ethyl methacrylate	69	9.209	9.204	0.005	43	2706	1.00	1.17	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	27	2202	1.00	1.12	
75 Tetrachloroethene	166	9.460	9.460	0.000	71	4901	1.00	1.16	
76 1,3-Dichloropropane	76	9.498	9.503	-0.005	53	3809	1.00	1.13	
78 Chlorodibromomethane	129	9.759	9.759	0.000	30	2702	1.00	1.04	
80 Ethylene Dibromide	107	9.890	9.890	0.000	18	2240	1.00	1.15	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	475664	50.0	50.0	
82 Chlorobenzene	112	10.472	10.478	-0.006	64	9780	1.00	1.03	
84 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	43	3294	1.00	0.9739	
85 Ethylbenzene	106	10.619	10.619	0.000	90	5513	1.00	1.04	
86 m-Xylene & p-Xylene	91	10.772	10.777	-0.005	0	14303	1.00	1.09	
87 o-Xylene	91	11.349	11.349	0.000	81	13911	1.00	1.04	
88 Styrene	104	11.370	11.370	0.000	81	10162	1.00	1.01	
89 Bromoform	173	11.670	11.664	0.006	0	1488	1.00	1.01	
90 Isopropylbenzene	105	11.958	11.958	0.000	80	18532	1.00	1.08	
94 Bromobenzene	156	12.459	12.459	0.000	84	3855	1.00	1.03	
95 1,1,2,2-Tetrachloroethane	83	12.481	12.486	-0.005	1	2162	1.00	1.08	
96 1,2,3-Trichloropropane	75	12.552	12.546	0.006	1	2390	1.00	1.10	
98 N-Propylbenzene	91	12.650	12.650	0.000	88	21895	1.00	1.09	
99 2-Chlorotoluene	91	12.769	12.769	0.000	82	12021	1.00	1.08	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	83	14806	1.00	1.08	
100 4-Chlorotoluene	91	12.933	12.933	0.000	79	13919	1.00	1.10	
104 tert-Butylbenzene	119	13.384	13.385	-0.001	83	13535	1.00	1.06	
105 1,2,4-Trimethylbenzene	105	13.450	13.455	-0.005	77	14785	1.00	1.07	
106 sec-Butylbenzene	105	13.684	13.684	0.000	82	19801	1.00	1.06	
107 1,3-Dichlorobenzene	146	13.815	13.815	-0.001	84	7818	1.00	1.05	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	55	17387	1.00	1.09	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	225105	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	56	7934	1.00	1.10	
113 1,2-Dichlorobenzene	146	14.386	14.386	0.000	49	6745	1.00	1.07	
114 n-Butylbenzene	91	14.386	14.386	0.000	92	14083	1.00	1.02	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	33	3486	1.00	0.9419	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	62	3786	1.00	1.18	
119 Naphthalene	128	16.368	16.368	0.000	55	4778	1.00	0.9186	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
120 1,2,3-Trichlorobenzene	180	16.596	16.596	0.000	28	2557	1.00	0.8854	
S 123 1,2-Dichloroethene, Total	96				0			2.30	
S 124 Xylenes, Total	91				0			2.13	
S 125 1,3-Dichloropropene, Total	75				0			2.12	
S 126 Trihalomethanes, Total	1				0			4.23	
S 127 Trimethylbenzene, Total	150				0			2.15	

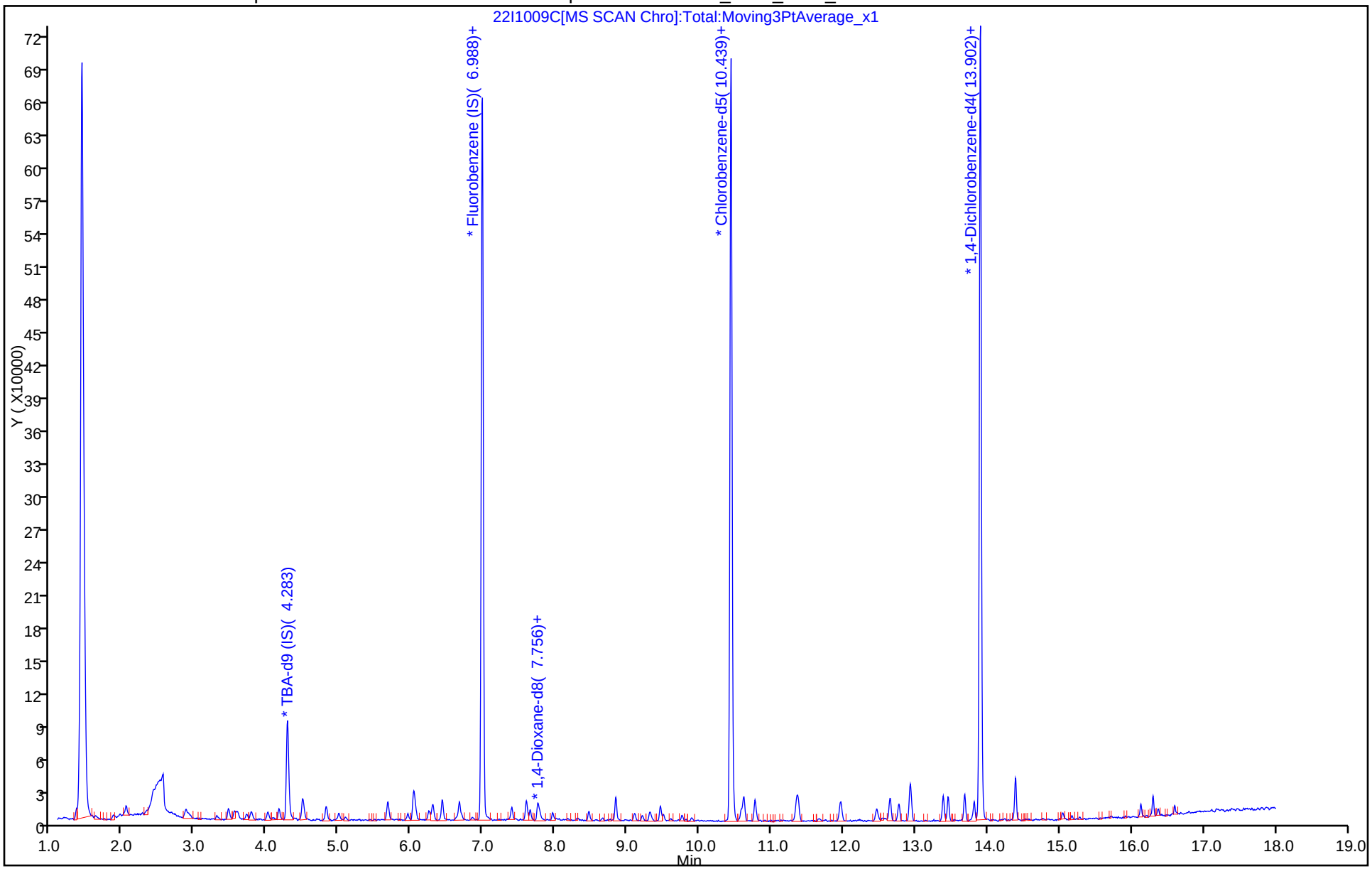
Reagents:

LOW8260ACR_00177 Amount Added: 1.00 Units: uL
LO8260/624STD_00264 Amount Added: 1.00 Units: uL
8260 LOWIS1_00112 Amount Added: 5.00 Units: uL

Report Date: 10-Oct-2017 10:34:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009C.D				
Injection Date:	09-Oct-2017 14:58:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD03			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009D.D
Lims ID: STD04
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 09-Oct-2017 15:24:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD04
Misc. Info.: 500-0048264-007
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:34:50 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:34:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	37	7599	2.00	2.01	
2 Chloromethane	50	1.866	1.871	-0.005	85	11969	2.00	2.19	
3 Vinyl chloride	62	2.018	2.018	0.000	60	9182	2.00	1.91	
4 Butadiene	39	2.046	2.046	0.000	84	6840	2.00	1.91	
5 Bromomethane	94	2.427	2.427	0.000	38	6310	2.00	2.25	
6 Chloroethane	64	2.552	2.557	-0.005	53	6142	2.00	2.21	
7 Dichlorofluoromethane	67	2.867	2.868	-0.001	75	12181	2.00	1.88	
8 Trichlorofluoromethane	101	2.884	2.889	-0.005	82	12307	2.00	1.94	
10 Ethyl ether	59	3.303	3.303	0.000	55	3894	2.00	1.99	
11 Acrolein	56	3.461	3.461	0.000	92	20115	80.0	81.3	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	78	6951	2.00	2.03	
13 1,1,2-Trichloro-1,2,2-trif	101	3.591	3.592	-0.001	63	7277	2.00	1.93	
15 Iodomethane	142	3.722	3.722	0.000	84	12585	2.00	2.00	
16 Carbon disulfide	76	3.777	3.782	-0.005	90	22091	2.00	1.96	
19 3-Chloro-1-propene	76	4.011	4.016	-0.005	81	3819	2.00	2.01	
20 Methyl acetate	43	4.081	4.076	0.005	65	4705	4.00	4.36	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	117872	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.386	4.386	0.000	44	2640	20.0	19.5	
24 Acrylonitrile	53	4.490	4.490	0.000	96	11269	20.0	18.9	
25 trans-1,2-Dichloroethene	96	4.490	4.495	-0.005	88	7996	2.00	2.17	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	83	12336	2.00	2.01	
27 Hexane	57	4.816	4.822	-0.006	87	12347	2.00	2.00	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	73	12499	2.00	1.95	
29 Vinyl acetate	43	5.083	5.089	-0.005	85	6667	2.00	2.13	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	61	10255	2.00	2.14	
34 cis-1,2-Dichloroethene	96	5.676	5.682	-0.006	84	8105	2.00	2.08	
39 Chlorobromomethane	128	5.954	5.954	0.000	80	3127	2.00	2.02	
40 Tetrahydrofuran	42	6.019	6.014	0.005	62	3883	4.00	3.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
41 Chloroform	83	6.057	6.057	0.000	75	11768	2.00	2.00	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	83	11517	2.00	2.01	
44 Cyclohexane	56	6.297	6.302	-0.005	87	13730	2.00	1.91	
46 1,1-Dichloropropene	75	6.433	6.433	0.000	86	10086	2.00	2.10	
45 Carbon tetrachloride	117	6.428	6.433	-0.005	70	10193	2.00	1.93	
48 Isobutyl alcohol	43	6.629	6.624	0.005	29	2845	50.0	51.2	
49 Benzene	78	6.667	6.673	-0.006	97	26583	2.00	1.98	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	78	7311	2.00	2.04	
54 n-Heptane	43	6.972	6.977	-0.005	37	11016	2.00	1.91	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	625461	50.0	50.0	
56 Trichloroethene	130	7.397	7.397	0.000	73	7847	2.00	2.00	
58 Methylcyclohexane	83	7.598	7.603	-0.005	90	12704	2.00	1.88	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	76	6229	2.00	1.90	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	12826	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	58	2990	2.00	2.05	
65 Dichlorobromomethane	83	7.963	7.968	-0.005	75	7437	2.00	1.90	
67 2-Chloroethyl vinyl ether	63	8.306	8.311	-0.005	22	2084	2.00	2.03	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	73	8161	2.00	1.84	
71 Toluene	92	8.839	8.839	0.000	92	16861	2.00	2.02	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	74	7299	2.00	2.04	
73 Ethyl methacrylate	69	9.204	9.204	0.000	70	4958	2.00	2.15	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	55	4194	2.00	2.15	
75 Tetrachloroethene	166	9.460	9.460	0.000	84	8881	2.00	2.10	
76 1,3-Dichloropropane	76	9.498	9.503	-0.005	79	7275	2.00	2.17	
78 Chlorodibromomethane	129	9.759	9.759	0.000	55	5000	2.00	1.93	
80 Ethylene Dibromide	107	9.890	9.890	0.000	35	3933	2.00	2.03	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	85	474368	50.0	50.0	
82 Chlorobenzene	112	10.472	10.478	-0.006	91	19770	2.00	2.08	
84 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	79	6796	2.00	2.01	
85 Ethylbenzene	106	10.614	10.619	-0.005	96	10896	2.00	2.05	
86 m-Xylene & p-Xylene	91	10.772	10.777	-0.005	0	24959	2.00	1.90	
87 o-Xylene	91	11.349	11.349	0.000	87	27575	2.00	2.07	
88 Styrene	104	11.370	11.370	0.000	85	20221	2.00	2.02	
89 Bromoform	173	11.670	11.664	0.006	30	2577	2.00	1.76	
90 Isopropylbenzene	105	11.964	11.958	0.006	93	35851	2.00	2.13	
94 Bromobenzene	156	12.459	12.459	0.000	84	7539	2.00	2.04	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.486	0.000	36	4289	2.00	2.17	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	13	4757	2.00	2.22	
97 trans-1,4-Dichloro-2-buten	53	12.584	12.579	0.005	1	1031	2.00	1.89	
98 N-Propylbenzene	91	12.644	12.650	-0.006	95	41754	2.00	2.11	
99 2-Chlorotoluene	91	12.769	12.769	0.000	85	23147	2.00	2.11	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	87	27997	2.00	2.07	
100 4-Chlorotoluene	91	12.933	12.933	0.000	88	26273	2.00	2.11	
104 tert-Butylbenzene	119	13.384	13.385	-0.001	84	25494	2.00	2.03	
105 1,2,4-Trimethylbenzene	105	13.450	13.455	-0.005	88	27855	2.00	2.05	
106 sec-Butylbenzene	105	13.684	13.684	0.000	83	37725	2.00	2.05	
107 1,3-Dichlorobenzene	146	13.815	13.815	0.000	92	15386	2.00	2.10	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	67	29605	2.00	1.89	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	221647	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.934	13.929	0.005	88	14752	2.00	2.07	
113 1,2-Dichlorobenzene	146	14.392	14.386	0.006	62	12775	2.00	2.05	
114 n-Butylbenzene	91	14.386	14.386	0.000	92	27072	2.00	1.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
115 1,2-Dibromo-3-Chloropropan	75	15.284	15.279	0.005	1	511	2.00	1.80	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	82	7054	2.00	1.94	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	75	6285	2.00	1.98	
119 Naphthalene	128	16.368	16.368	0.000	88	9051	2.00	1.77	
120 1,2,3-Trichlorobenzene	180	16.596	16.596	0.000	70	5476	2.00	1.93	
S 123 1,2-Dichloroethene, Total	96				0			4.25	
S 124 Xylenes, Total	91				0			3.97	
S 125 1,3-Dichloropropene, Total	75				0			3.88	
S 126 Trihalomethanes, Total	1				0			7.59	
S 127 Trimethylbenzene, Total	150				0			4.12	

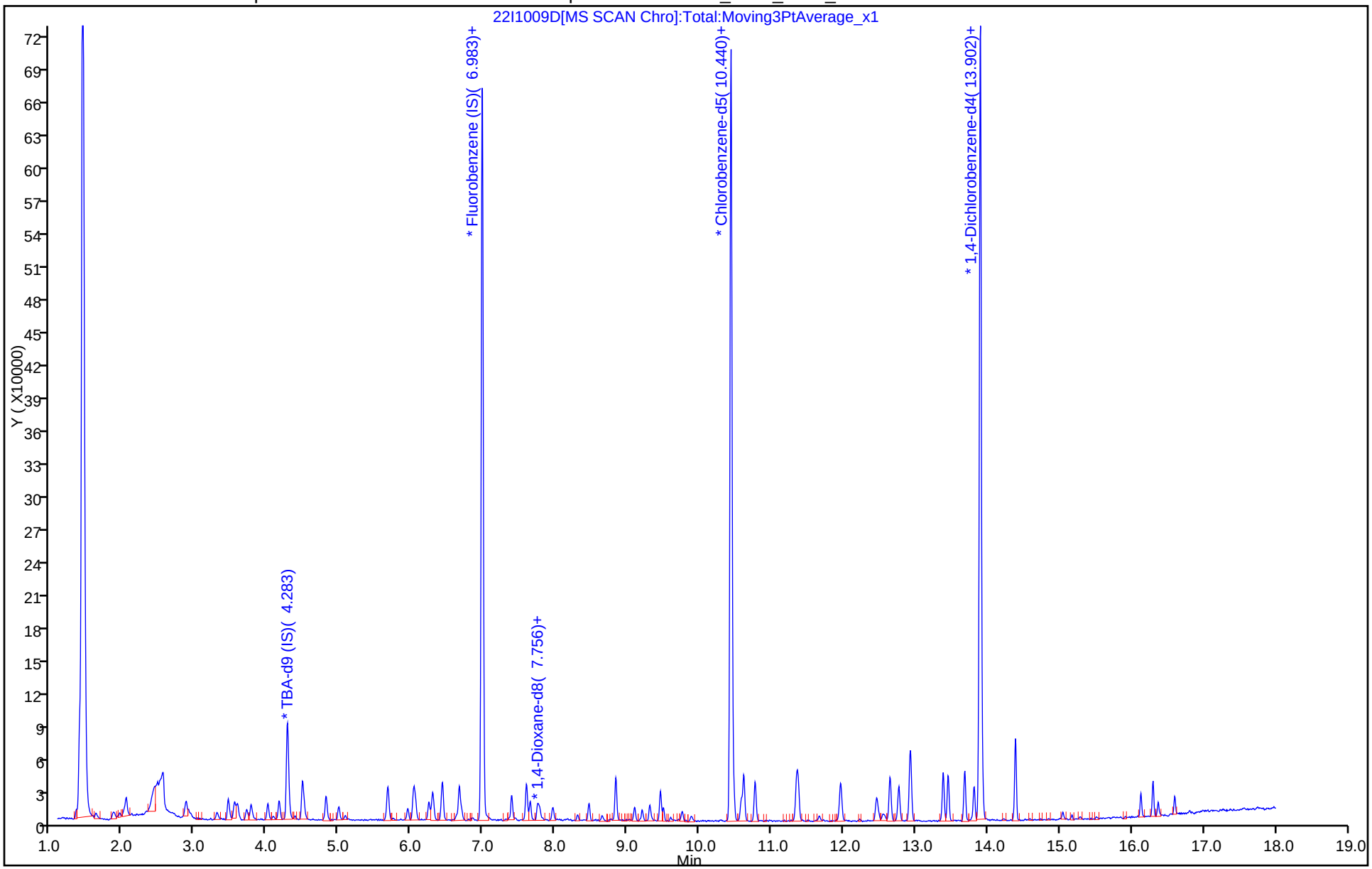
Reagents:

LO8260/624STD_00264	Amount Added:	2.00	Units: uL	
LOW8260ACR_00177	Amount Added:	2.00	Units: uL	
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL	

Report Date: 10-Oct-2017 10:34:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009D.D				
Injection Date:	09-Oct-2017 15:24:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD04			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009E.D
Lims ID: STD05
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 09-Oct-2017 15:50:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD05
Misc. Info.: 500-0048264-008
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:34:55 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:34:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	80	16008	5.00	4.23	
2 Chloromethane	50	1.871	1.871	0.000	93	26177	5.00	4.79	
3 Vinyl chloride	62	2.018	2.018	0.000	82	21093	5.00	4.65	
4 Butadiene	39	2.045	2.046	-0.001	82	16184	5.00	4.51	
5 Bromomethane	94	2.432	2.427	0.005	64	13818	5.00	4.92	
6 Chloroethane	64	2.552	2.557	-0.005	76	13876	5.00	4.99	
7 Dichlorofluoromethane	67	2.867	2.868	-0.001	80	30812	5.00	4.75	
8 Trichlorofluoromethane	101	2.889	2.889	0.000	74	31156	5.00	4.90	
10 Ethyl ether	59	3.303	3.303	0.000	89	8668	5.00	4.42	
11 Acrolein	56	3.461	3.461	0.000	93	48561	200.0	195.9	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	85	16408	5.00	4.78	
13 1,1,2-Trichloro-1,2,2-trif	101	3.586	3.592	-0.006	76	18030	5.00	4.77	
14 Acetone	43	3.695	3.679	0.016	51	3462	5.00	5.61	
15 Iodomethane	142	3.717	3.722	-0.005	97	29328	5.00	4.66	
16 Carbon disulfide	76	3.782	3.782	0.000	96	52360	5.00	4.64	
19 3-Chloro-1-propene	76	4.011	4.016	-0.005	87	9753	5.00	5.13	
20 Methyl acetate	43	4.076	4.076	0.000	92	9855	10.0	9.11	
21 Methylene Chloride	84	4.168	4.169	-0.001	94	16440	5.00	5.11	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	124184	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.386	4.386	0.000	77	6707	50.0	47.1	
24 Acrylonitrile	53	4.490	4.490	0.000	98	28739	50.0	48.2	
25 trans-1,2-Dichloroethene	96	4.490	4.495	-0.005	90	17481	5.00	4.73	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	95	29511	5.00	4.80	
27 Hexane	57	4.822	4.822	0.000	93	28232	5.00	4.57	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	81	30911	5.00	4.82	
29 Vinyl acetate	43	5.083	5.089	-0.005	93	15100	5.00	4.81	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	73	23408	5.00	4.87	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	95	18451	5.00	4.74	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.736	5.725	0.011	42	2781	5.00	5.07	
39 Chlorobromomethane	128	5.954	5.954	0.000	90	7179	5.00	4.64	
40 Tetrahydrofuran	42	6.019	6.014	0.005	67	6169	10.0	10.0	
41 Chloroform	83	6.057	6.057	0.000	83	27211	5.00	4.62	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	90	27817	5.00	4.84	
44 Cyclohexane	56	6.297	6.302	-0.005	90	34024	5.00	4.73	
46 1,1-Dichloropropene	75	6.433	6.433	0.000	85	22580	5.00	4.70	
45 Carbon tetrachloride	117	6.433	6.433	0.000	79	25509	5.00	4.81	
48 Isobutyl alcohol	43	6.624	6.624	0.000	86	7630	125.0	130.5	
49 Benzene	78	6.667	6.673	-0.006	97	64771	5.00	4.82	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	87	16610	5.00	4.63	
54 n-Heptane	43	6.972	6.977	-0.005	43	27123	5.00	4.68	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	98	626667	50.0	50.0	
56 Trichloroethene	130	7.396	7.397	-0.001	84	19051	5.00	4.86	
58 Methylcyclohexane	83	7.598	7.603	-0.005	92	33297	5.00	4.93	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	93	17024	5.00	5.18	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	14748	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	87	6984	5.00	4.78	
63 1,4-Dioxane	88	7.821	7.816	0.005	17	1624	100.0	103.9	
65 Dichlorobromomethane	83	7.963	7.968	-0.005	88	18832	5.00	4.79	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	59	5132	5.00	4.85	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	84	21921	5.00	4.80	
69 4-Methyl-2-pentanone (MIBK	43	8.654	8.649	0.005	80	6843	5.00	4.99	
71 Toluene	92	8.839	8.839	0.000	92	40884	5.00	4.75	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	88	17379	5.00	4.72	
73 Ethyl methacrylate	69	9.209	9.204	0.005	82	11492	5.00	4.85	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	89	9466	5.00	4.71	
75 Tetrachloroethene	166	9.460	9.460	0.000	88	20298	5.00	4.67	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	85	16108	5.00	4.67	
77 2-Hexanone	43	9.601	9.601	0.000	79	4711	5.00	5.21	
78 Chlorodibromomethane	129	9.759	9.759	0.000	81	12675	5.00	4.76	
80 Ethylene Dibromide	107	9.890	9.890	0.000	88	9542	5.00	4.79	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	487701	50.0	50.0	
82 Chlorobenzene	112	10.478	10.478	0.000	92	47027	5.00	4.81	
84 1,1,1,2-Tetrachloroethane	131	10.586	10.581	0.005	83	16536	5.00	4.77	
85 Ethylbenzene	106	10.619	10.619	0.000	97	26922	5.00	4.93	
86 m-Xylene & p-Xylene	91	10.772	10.777	-0.005	0	63528	5.00	4.71	
87 o-Xylene	91	11.349	11.349	0.000	93	65244	5.00	4.77	
88 Styrene	104	11.370	11.370	0.000	93	50657	5.00	4.93	
89 Bromoform	173	11.670	11.664	0.006	78	7305	5.00	4.85	
90 Isopropylbenzene	105	11.958	11.958	0.000	95	87113	5.00	4.79	
94 Bromobenzene	156	12.459	12.459	0.000	92	19373	5.00	4.86	
95 1,1,2,2-Tetrachloroethane	83	12.481	12.486	-0.005	76	10300	5.00	4.82	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	65	10618	5.00	4.59	
97 trans-1,4-Dichloro-2-buten	53	12.579	12.579	0.000	55	2769	5.00	4.69	
98 N-Propylbenzene	91	12.650	12.650	0.000	97	103784	5.00	4.86	
99 2-Chlorotoluene	91	12.769	12.769	0.000	94	56307	5.00	4.75	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	91	69265	5.00	4.74	
100 4-Chlorotoluene	91	12.933	12.933	0.000	92	63686	5.00	4.72	
104 tert-Butylbenzene	119	13.384	13.385	-0.001	91	64760	5.00	4.78	
105 1,2,4-Trimethylbenzene	105	13.455	13.455	0.000	94	70187	5.00	4.78	
106 sec-Butylbenzene	105	13.684	13.684	0.000	92	94675	5.00	4.76	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
107 1,3-Dichlorobenzene	146	13.814	13.815	-0.001	98	37972	5.00	4.80	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	92	81773	5.00	4.83	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	95	239543	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	89	37199	5.00	4.83	
113 1,2-Dichlorobenzene	146	14.386	14.386	0.000	67	32492	5.00	4.83	
114 n-Butylbenzene	91	14.386	14.386	0.000	94	70143	5.00	4.76	
115 1,2-Dibromo-3-Chloropropan	75	15.284	15.279	0.005	13	1425	5.00	4.64	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	89	18329	5.00	4.65	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	91	16414	5.00	4.79	
119 Naphthalene	128	16.368	16.368	0.000	96	24566	5.00	4.44	
120 1,2,3-Trichlorobenzene	180	16.596	16.596	0.000	91	14477	5.00	4.71	
S 123 1,2-Dichloroethene, Total	96				0			9.46	
S 124 Xylenes, Total	91				0			9.48	
S 125 1,3-Dichloropropene, Total	75				0			9.52	
S 126 Trihalomethanes, Total	1				0			19.0	
S 127 Trimethylbenzene, Total	150				0			9.51	

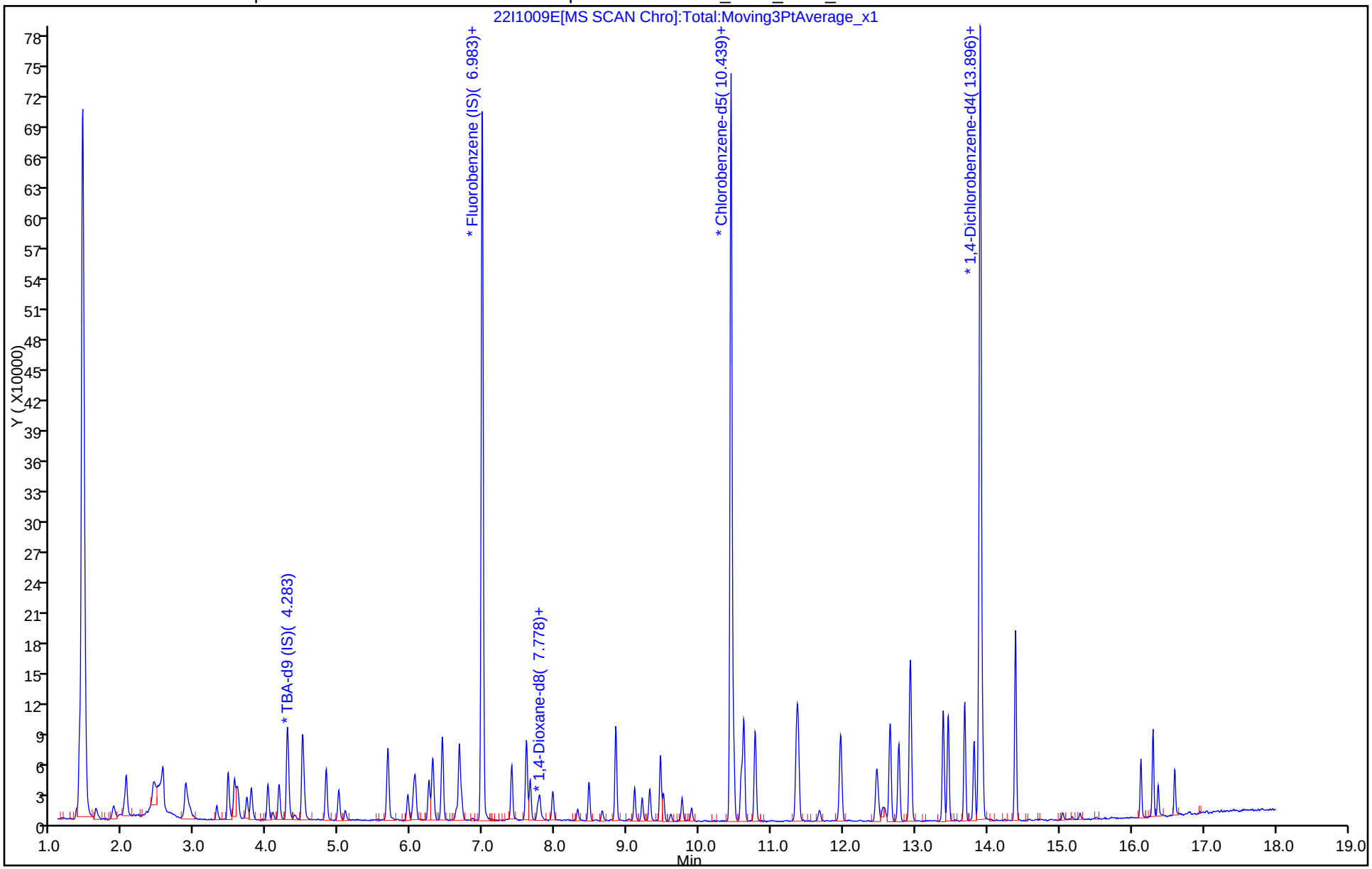
Reagents:

LOW8260ACR_00177 Amount Added: 5.00 Units: uL
LO8260/624STD_00264 Amount Added: 5.00 Units: uL
8260 LOWIS1_00112 Amount Added: 5.00 Units: uL

Report Date: 10-Oct-2017 10:34:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009E.D				
Injection Date:	09-Oct-2017 15:50:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD05			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009F.D
Lims ID: STD06
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 09-Oct-2017 16:17:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD06
Misc. Info.: 500-0048264-009
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:01 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	87	66686	20.0	17.0	
2 Chloromethane	50	1.871	1.871	0.000	88	98113	20.0	17.3	
3 Vinyl chloride	62	2.018	2.018	0.000	84	87063	20.0	19.1	
4 Butadiene	39	2.045	2.046	-0.001	87	70059	20.0	18.8	
5 Bromomethane	94	2.427	2.427	0.000	92	54650	20.0	18.7	
6 Chloroethane	64	2.552	2.557	-0.005	96	53719	20.0	18.6	
7 Dichlorofluoromethane	67	2.867	2.868	-0.001	82	131820	20.0	19.5	
8 Trichlorofluoromethane	101	2.884	2.889	-0.005	80	126621	20.0	19.1	
10 Ethyl ether	59	3.303	3.303	0.000	91	39311	20.0	19.3	
11 Acrolein	56	3.461	3.461	0.000	98	210162	800.0	815.3	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	89	67913	20.0	19.0	
13 1,1,2-Trichloro-1,2,2-trif	101	3.586	3.592	-0.006	84	76847	20.0	19.6	
14 Acetone	43	3.684	3.679	0.005	90	8882	20.0	19.1	
15 Iodomethane	142	3.722	3.722	0.000	97	131118	20.0	20.0	
16 Carbon disulfide	76	3.782	3.782	0.000	99	230207	20.0	19.6	
19 3-Chloro-1-propene	76	4.011	4.016	-0.005	89	40060	20.0	20.3	
20 Methyl acetate	43	4.076	4.076	0.000	97	41942	40.0	37.3	
21 Methylene Chloride	84	4.168	4.169	-0.001	97	68402	20.0	20.5	
* 22 TBA-d9 (IS)	65	4.288	4.283	0.005	0	130681	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.386	4.386	0.000	97	30624	200.0	204.2	
24 Acrylonitrile	53	4.490	4.490	0.000	97	123646	200.0	199.4	
25 trans-1,2-Dichloroethene	96	4.490	4.495	-0.005	92	75853	20.0	19.7	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	97	126174	20.0	19.7	
27 Hexane	57	4.822	4.822	0.000	89	123426	20.0	19.2	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	86	134481	20.0	20.2	
29 Vinyl acetate	43	5.088	5.089	0.000	98	69793	20.0	21.4	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	76	101994	20.0	20.4	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	87	80184	20.0	19.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.731	5.725	0.006	93	11183	20.0	19.6	
39 Chlorobromomethane	128	5.954	5.954	0.000	92	32426	20.0	20.2	
40 Tetrahydrofuran	42	6.019	6.014	0.005	87	18838	40.0	41.8	
41 Chloroform	83	6.057	6.057	0.000	83	121966	20.0	19.9	
$ 42 Dibromofluoromethane	113	6.242	6.243	-0.001	57	72698	20.0	20.9	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	90	117988	20.0	19.7	
44 Cyclohexane	56	6.302	6.302	0.000	91	148982	20.0	19.9	
46 1,1-Dichloropropene	75	6.433	6.433	0.000	89	101077	20.0	20.2	
45 Carbon tetrachloride	117	6.433	6.433	0.000	81	109523	20.0	19.9	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.613	6.613	0.000	0	63477	20.0	20.3	
48 Isobutyl alcohol	43	6.629	6.624	0.005	82	31831	500.0	517.2	
49 Benzene	78	6.667	6.673	-0.006	97	279435	20.0	20.0	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	90	75123	20.0	20.1	
54 n-Heptane	43	6.972	6.977	-0.005	68	118880	20.0	19.7	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	97	651545	50.0	50.0	
56 Trichloroethene	130	7.397	7.397	0.000	88	84143	20.0	20.6	
58 Methylcyclohexane	83	7.603	7.603	0.000	94	141727	20.0	20.2	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	93	70559	20.0	20.7	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	15747	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	90	31114	20.0	20.5	
63 1,4-Dioxane	88	7.816	7.816	0.000	70	6967	400.0	417.4	
65 Dichlorobromomethane	83	7.968	7.968	0.000	92	84886	20.0	20.8	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	84	22108	20.0	19.9	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	90	96979	20.0	20.2	
69 4-Methyl-2-pentanone (MIBK	43	8.654	8.649	0.005	92	30495	20.0	21.2	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	85	288800	20.0	20.6	
71 Toluene	92	8.839	8.839	0.000	93	185812	20.0	20.6	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	91	77988	20.0	20.2	
73 Ethyl methacrylate	69	9.204	9.204	0.000	91	50153	20.0	20.1	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	84	42365	20.0	20.1	
75 Tetrachloroethene	166	9.460	9.460	0.000	89	89319	20.0	19.6	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	91	71998	20.0	19.9	
77 2-Hexanone	43	9.601	9.601	0.000	94	20098	20.0	21.2	
78 Chlorodibromomethane	129	9.759	9.759	0.000	87	55793	20.0	19.9	
80 Ethylene Dibromide	107	9.890	9.890	0.000	98	41612	20.0	19.9	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	512039	50.0	50.0	
82 Chlorobenzene	112	10.478	10.478	0.000	94	207211	20.0	20.2	
84 1,1,1,2-Tetrachloroethane	131	10.586	10.581	0.005	89	73264	20.0	20.1	
85 Ethylbenzene	106	10.614	10.619	-0.005	98	116071	20.0	20.3	
86 m-Xylene & p-Xylene	91	10.777	10.777	0.000	0	274253	20.0	19.4	
87 o-Xylene	91	11.349	11.349	0.000	93	280371	20.0	19.5	
88 Styrene	104	11.376	11.370	0.006	94	221009	20.0	20.5	
89 Bromoform	173	11.664	11.664	0.000	98	31197	20.0	19.7	
90 Isopropylbenzene	105	11.958	11.958	0.000	98	376777	20.0	20.1	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	93	103868	20.0	21.3	
94 Bromobenzene	156	12.459	12.459	0.000	90	84517	20.0	20.6	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.486	0.000	89	45732	20.0	20.8	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	86	46907	20.0	19.7	
97 trans-1,4-Dichloro-2-buten	53	12.579	12.579	0.000	85	12184	20.0	20.1	
98 N-Propylbenzene	91	12.650	12.650	0.000	97	438465	20.0	19.9	
99 2-Chlorotoluene	91	12.769	12.769	0.000	97	246326	20.0	20.2	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	90	302209	20.0	20.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
100 4-Chlorotoluene	91	12.933	12.933	0.000	93	278922	20.0	20.1	
104 tert-Butylbenzene	119	13.384	13.385	-0.001	91	283546	20.0	20.3	
105 1,2,4-Trimethylbenzene	105	13.455	13.455	0.000	95	302570	20.0	20.0	
106 sec-Butylbenzene	105	13.684	13.684	0.000	94	414014	20.0	20.2	
107 1,3-Dichlorobenzene	146	13.815	13.815	-0.001	98	163346	20.0	20.0	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	96	356436	20.0	20.4	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	246759	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	93	159318	20.0	20.1	
113 1,2-Dichlorobenzene	146	14.386	14.386	0.000	67	141405	20.0	20.4	
114 n-Butylbenzene	91	14.386	14.386	0.000	95	306205	20.0	20.2	
115 1,2-Dibromo-3-Chloropropan	75	15.284	15.279	0.005	42	6582	20.0	20.8	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	94	80808	20.0	19.9	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	95	70871	20.0	20.1	
119 Naphthalene	128	16.368	16.368	0.000	99	114521	20.0	20.1	
120 1,2,3-Trichlorobenzene	180	16.602	16.596	0.006	93	64362	20.0	20.3	
S 123 1,2-Dichloroethene, Total	96				0			39.5	
S 124 Xylenes, Total	91				0			38.9	
S 125 1,3-Dichloropropene, Total	75				0			40.4	
S 126 Trihalomethanes, Total	1				0			80.4	
S 127 Trimethylbenzene, Total	150				0			40.1	

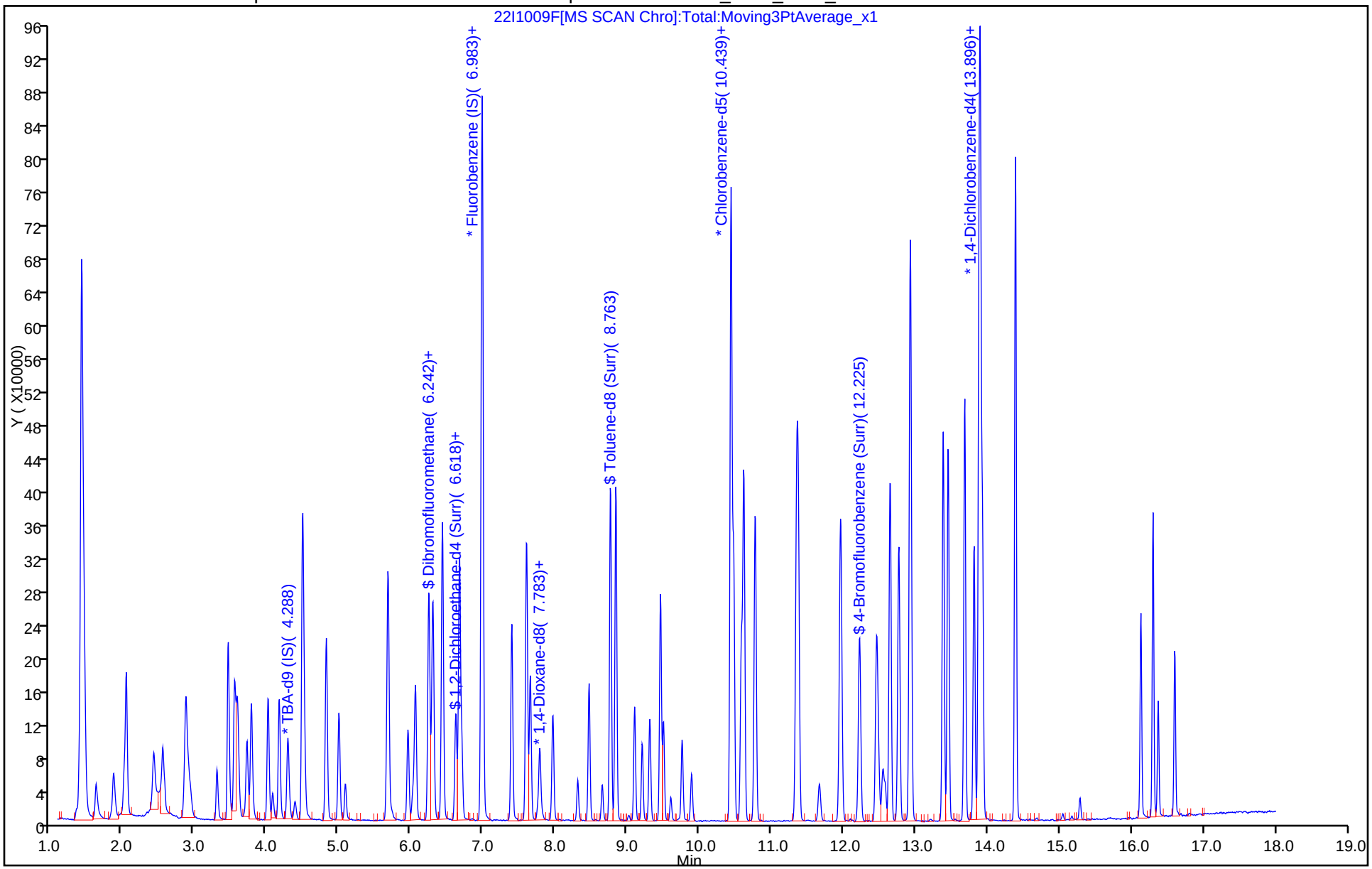
Reagents:

LO8260/624STD_00264	Amount Added: 20.00	Units: uL
LOW8260ACR_00177	Amount Added: 20.00	Units: uL
8260 LOWSS1_00137	Amount Added: 2.00	Units: uL
8260 LOWIS1_00112	Amount Added: 5.00	Units: uL

Report Date: 10-Oct-2017 10:35:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009F.D				
Injection Date:	09-Oct-2017 16:17:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD06			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009G.D
Lims ID: STD07
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 09-Oct-2017 16:43:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD07
Misc. Info.: 500-0048264-010
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:07 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	87	192862	50.0	51.3	
2 Chloromethane	50	1.871	1.871	0.000	89	260864	50.0	48.0	
3 Vinyl chloride	62	2.018	2.018	0.000	84	223534	50.0	51.5	
4 Butadiene	39	2.046	2.046	0.000	85	185013	50.0	51.9	
5 Bromomethane	94	2.427	2.427	0.000	92	131447	50.0	47.1	
6 Chloroethane	64	2.557	2.557	0.000	97	129024	50.0	46.7	
7 Dichlorofluoromethane	67	2.868	2.868	0.000	82	319531	50.0	49.6	
8 Trichlorofluoromethane	101	2.889	2.889	0.000	80	309349	50.0	48.9	
10 Ethyl ether	59	3.303	3.303	0.000	93	90558	50.0	46.4	
11 Acrolein	56	3.461	3.461	0.000	98	472119	2000.0	1916.2	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	88	159368	50.0	46.7	
13 1,1,2-Trichloro-1,2,2-trif	101	3.592	3.592	0.000	85	181157	50.0	48.3	
14 Acetone	43	3.679	3.679	0.000	92	18292	50.0	45.3	
15 Iodomethane	142	3.722	3.722	0.000	98	296158	50.0	47.3	
16 Carbon disulfide	76	3.782	3.782	0.000	100	546557	50.0	48.7	
19 3-Chloro-1-propene	76	4.016	4.016	0.000	88	93144	50.0	49.3	
20 Methyl acetate	43	4.076	4.076	0.000	97	96588	100.0	89.9	
21 Methylene Chloride	84	4.169	4.169	0.000	96	152736	50.0	47.8	
* 22 TBA-d9 (IS)	65	4.288	4.288	0.000	0	118225	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.386	4.386	0.000	98	64319	500.0	474.0	
24 Acrylonitrile	53	4.490	4.490	0.000	98	279012	500.0	470.7	
25 trans-1,2-Dichloroethene	96	4.495	4.495	0.000	94	169265	50.0	46.0	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	90	290127	50.0	47.5	
27 Hexane	57	4.822	4.822	0.000	91	284494	50.0	46.4	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	86	300188	50.0	47.1	
29 Vinyl acetate	43	5.089	5.089	0.000	99	143395	50.0	46.0	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	77	221981	50.0	46.4	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	88	180418	50.0	46.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.725	5.725	0.000	96	25894	50.0	47.5	
39 Chlorobromomethane	128	5.954	5.954	0.000	95	72385	50.0	47.1	
40 Tetrahydrofuran	42	6.014	6.014	0.000	80	37399	100.0	93.7	
41 Chloroform	83	6.057	6.057	0.000	84	268043	50.0	45.8	
$ 42 Dibromofluoromethane	113	6.243	6.243	0.000	73	164122	50.0	49.3	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	90	265413	50.0	46.5	
44 Cyclohexane	56	6.302	6.302	0.000	91	339231	50.0	47.4	
46 1,1-Dichloropropene	75	6.433	6.433	0.000	91	222219	50.0	46.6	
45 Carbon tetrachloride	117	6.433	6.433	0.000	81	251999	50.0	47.9	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.613	6.613	0.000	0	144652	50.0	48.3	
48 Isobutyl alcohol	43	6.624	6.624	0.000	67	65269	1250.0	1172.2	
49 Benzene	78	6.673	6.673	0.000	97	625854	50.0	46.9	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	97	167378	50.0	47.0	
54 n-Heptane	43	6.977	6.977	0.000	81	274717	50.0	47.7	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	96	622746	50.0	50.0	
56 Trichloroethene	130	7.397	7.397	0.000	89	185879	50.0	47.7	
58 Methylcyclohexane	83	7.603	7.603	0.000	94	325668	50.0	48.5	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	93	156924	50.0	48.1	
* 61 1,4-Dioxane-d8	96	7.761	7.761	0.000	0	13643	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	90	68580	50.0	47.2	
63 1,4-Dioxane	88	7.816	7.816	0.000	81	14562	1000.0	1007.1	
65 Dichlorobromomethane	83	7.968	7.968	0.000	92	185945	50.0	47.6	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	88	49252	50.0	48.3	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	91	213705	50.0	48.4	
69 4-Methyl-2-pentanone (MIBK	43	8.649	8.649	0.000	96	64720	50.0	48.9	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	94	650809	50.0	50.5	
71 Toluene	92	8.839	8.839	0.000	93	405666	50.0	48.9	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	90	171976	50.0	48.4	
73 Ethyl methacrylate	69	9.204	9.204	0.000	92	106963	50.0	46.7	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	87	92730	50.0	47.8	
75 Tetrachloroethene	166	9.460	9.460	0.000	91	199517	50.0	47.6	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	92	159121	50.0	47.8	
77 2-Hexanone	43	9.601	9.601	0.000	94	43301	50.0	49.6	
78 Chlorodibromomethane	129	9.759	9.759	0.000	88	124201	50.0	48.3	
80 Ethylene Dibromide	107	9.890	9.890	0.000	99	92430	50.0	48.1	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	84	470845	50.0	50.0	
82 Chlorobenzene	112	10.478	10.478	0.000	93	458835	50.0	48.6	
84 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	90	162828	50.0	48.6	
85 Ethylbenzene	106	10.619	10.619	0.000	98	256504	50.0	48.7	
86 m-Xylene & p-Xylene	91	10.777	10.777	0.000	0	616608	50.0	47.3	
87 o-Xylene	91	11.349	11.349	0.000	93	627831	50.0	47.5	
88 Styrene	104	11.370	11.370	0.000	94	490303	50.0	49.4	
89 Bromoform	173	11.664	11.664	0.000	98	71162	50.0	49.0	
90 Isopropylbenzene	105	11.958	11.958	0.000	98	840067	50.0	47.4	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	93	226926	50.0	49.3	
94 Bromobenzene	156	12.459	12.459	0.000	93	188355	50.0	48.5	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.486	0.000	91	98506	50.0	47.3	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	88	104126	50.0	46.2	
97 trans-1,4-Dichloro-2-buten	53	12.579	12.579	0.000	87	28334	50.0	49.3	
98 N-Propylbenzene	91	12.650	12.650	0.000	97	983910	50.0	47.3	
99 2-Chlorotoluene	91	12.769	12.769	0.000	97	539705	50.0	46.7	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	90	680566	50.0	47.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
100 4-Chlorotoluene	91	12.933	12.933	0.000	93	623450	50.0	47.4	
104 tert-Butylbenzene	119	13.385	13.385	0.000	92	629979	50.0	47.7	
105 1,2,4-Trimethylbenzene	105	13.455	13.455	0.000	95	679566	50.0	47.5	
106 sec-Butylbenzene	105	13.684	13.684	0.000	94	930741	50.0	48.1	
107 1,3-Dichlorobenzene	146	13.815	13.815	0.000	98	366852	50.0	47.6	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	94	802184	50.0	48.6	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	95	233491	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	93	351532	50.0	46.8	
113 1,2-Dichlorobenzene	146	14.386	14.386	0.000	66	311437	50.0	47.5	
114 n-Butylbenzene	91	14.386	14.386	0.000	95	700287	50.0	48.8	
115 1,2-Dibromo-3-Chloropropan	75	15.279	15.279	0.000	60	14587	50.0	48.8	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	94	188699	50.0	49.2	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	95	163379	50.0	48.9	
119 Naphthalene	128	16.368	16.368	0.000	99	260959	50.0	48.4	
120 1,2,3-Trichlorobenzene	180	16.596	16.596	0.000	94	149828	50.0	50.0	

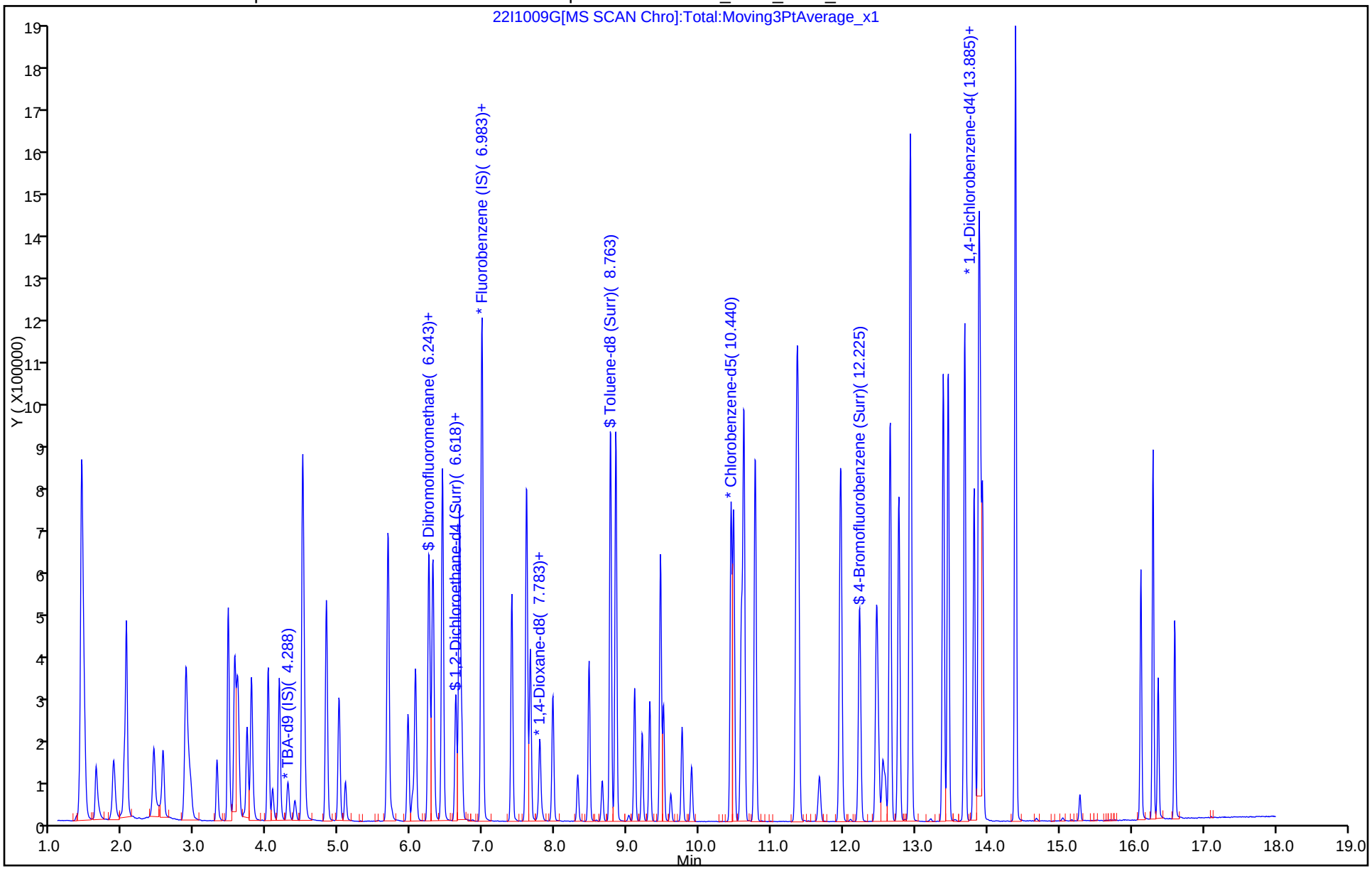
Reagents:

8260 LOWSS1_00137	Amount Added:	5.00	Units: uL
8260/624ACRWK_00356	Amount Added:	2.50	Units: uL
8260VA/2CEVE_00294	Amount Added:	2.50	Units: uL
8260/624KETWK_00281	Amount Added:	2.50	Units: uL
8260/624MEGWK_00411	Amount Added:	2.50	Units: uL
8260/624GASWK_00472	Amount Added:	2.50	Units: uL
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL

Report Date: 10-Oct-2017 10:35:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009G.D				
Injection Date:	09-Oct-2017 16:43:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD07			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009H.D
Lims ID: STD08
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 09-Oct-2017 17:09:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD08
Misc. Info.: 500-0048264-011
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:13 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	88	386371	100.0	100.9	
2 Chloromethane	50	1.871	1.871	0.000	89	520474	100.0	94.0	
3 Vinyl chloride	62	2.018	2.018	0.000	84	450351	100.0	102.1	
4 Butadiene	39	2.045	2.046	-0.001	84	368398	100.0	101.5	
5 Bromomethane	94	2.432	2.427	0.005	91	261409	100.0	91.9	
6 Chloroethane	64	2.557	2.557	0.000	93	261413	100.0	92.9	
7 Dichlorofluoromethane	67	2.873	2.868	0.005	82	642076	100.0	97.8	
8 Trichlorofluoromethane	101	2.884	2.889	-0.005	68	618071	100.0	96.0	
10 Ethyl ether	59	3.303	3.303	0.000	93	194670	100.0	98.0	
11 Acrolein	56	3.461	3.461	0.000	98	1006067	4000.0	4008.8	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	87	346065	100.0	99.7	
13 1,1,2-Trichloro-1,2,2-trif	101	3.591	3.592	-0.001	85	392996	100.0	102.8	
14 Acetone	43	3.673	3.679	-0.006	97	38337	100.0	96.9	
15 Iodomethane	142	3.722	3.722	0.000	98	651665	100.0	102.2	
16 Carbon disulfide	76	3.782	3.782	0.000	100	1192373	100.0	104.4	
19 3-Chloro-1-propene	76	4.016	4.016	0.000	89	197574	100.0	102.6	
20 Methyl acetate	43	4.076	4.076	0.000	98	208070	200.0	190.1	
21 Methylene Chloride	84	4.168	4.169	-0.001	95	326036	100.0	100.2	
* 22 TBA-d9 (IS)	65	4.288	4.288	0.000	0	121201	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.386	4.386	0.000	98	139633	1000.0	1003.8	
24 Acrylonitrile	53	4.489	4.490	-0.001	97	604755	1000.0	1001.6	
25 trans-1,2-Dichloroethene	96	4.495	4.495	0.000	92	365532	100.0	97.6	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	96	626136	100.0	100.6	
27 Hexane	57	4.822	4.822	0.000	89	614940	100.0	98.4	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	86	655028	100.0	100.9	
29 Vinyl acetate	43	5.088	5.089	0.000	99	284282	100.0	89.5	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	78	490418	100.0	100.7	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	87	387546	100.0	98.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.725	5.725	0.000	97	53911	100.0	97.1	
39 Chlorobromomethane	128	5.959	5.954	0.005	94	156426	100.0	99.9	
40 Tetrahydrofuran	42	6.014	6.014	0.000	90	78283	200.0	199.2	
41 Chloroform	83	6.057	6.057	0.000	84	583299	100.0	97.8	
$ 42 Dibromofluoromethane	113	6.242	6.243	-0.001	75	324651	100.0	95.7	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	91	583139	100.0	100.3	
44 Cyclohexane	56	6.302	6.302	0.000	92	745155	100.0	102.2	
46 1,1-Dichloropropene	75	6.438	6.433	0.005	92	492967	100.0	101.4	
45 Carbon tetrachloride	117	6.433	6.433	0.000	81	553048	100.0	103.1	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.613	0.005	0	292384	100.0	95.8	
48 Isobutyl alcohol	43	6.623	6.624	-0.001	69	143542	2500.0	2514.7	
49 Benzene	78	6.672	6.673	-0.001	98	1340671	100.0	98.5	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	90	365685	100.0	100.7	
54 n-Heptane	43	6.977	6.977	0.000	90	578628	100.0	98.7	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	93	634321	50.0	50.0	
56 Trichloroethene	130	7.396	7.397	-0.001	89	396200	100.0	99.8	
58 Methylcyclohexane	83	7.603	7.603	0.000	94	704244	100.0	102.9	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	92	329490	100.0	99.1	
* 61 1,4-Dioxane-d8	96	7.761	7.761	0.000	0	15543	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	91	147844	100.0	99.9	
63 1,4-Dioxane	88	7.816	7.816	0.000	92	31477	2000.0	1910.7	
65 Dichlorobromomethane	83	7.968	7.968	0.000	92	407905	100.0	102.6	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	91	98246	100.0	93.3	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	91	468784	100.0	103.0	
69 4-Methyl-2-pentanone (MIBK	43	8.654	8.649	0.005	96	133529	100.0	97.8	
$ 70 Toluene-d8 (Surr)	98	8.768	8.763	0.005	94	1290369	100.0	97.1	
71 Toluene	92	8.839	8.839	0.000	93	864325	100.0	100.9	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	91	368295	100.0	100.5	
73 Ethyl methacrylate	69	9.209	9.204	0.005	91	226452	100.0	95.9	
74 1,1,2-Trichloroethane	97	9.312	9.313	-0.001	87	194312	100.0	97.2	
75 Tetrachloroethene	166	9.459	9.460	-0.001	91	427201	100.0	98.8	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	91	335370	100.0	97.6	
77 2-Hexanone	43	9.601	9.601	0.000	95	85907	100.0	95.3	
78 Chlorodibromomethane	129	9.759	9.759	0.000	85	273320	100.0	103.0	
80 Ethylene Dibromide	107	9.890	9.890	0.000	99	193097	100.0	97.3	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	85	485800	50.0	50.0	
82 Chlorobenzene	112	10.477	10.478	-0.001	95	980014	100.0	100.6	
84 1,1,1,2-Tetrachloroethane	131	10.586	10.581	0.005	90	352525	100.0	102.0	
85 Ethylbenzene	106	10.619	10.619	0.000	98	543612	100.0	100.0	
86 m-Xylene & p-Xylene	91	10.777	10.777	0.000	0	1315540	100.0	97.9	
87 o-Xylene	91	11.348	11.349	-0.001	94	1353997	100.0	99.3	
88 Styrene	104	11.376	11.370	0.006	94	1031790	100.0	100.8	
89 Bromoform	173	11.664	11.664	0.000	98	155829	100.0	104.0	
90 Isopropylbenzene	105	11.964	11.958	0.006	98	1807091	100.0	97.6	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	93	454172	100.0	94.4	
94 Bromobenzene	156	12.459	12.459	0.000	91	406448	100.0	100.2	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.486	0.000	91	206888	100.0	95.1	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	87	227957	100.0	96.9	
97 trans-1,4-Dichloro-2-buten	53	12.584	12.579	0.005	88	59910	100.0	99.8	
98 N-Propylbenzene	91	12.649	12.650	-0.001	98	2134916	100.0	98.3	
99 2-Chlorotoluene	91	12.769	12.769	0.000	98	1184600	100.0	98.2	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	91	1475733	100.0	99.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
100 4-Chlorotoluene	91	12.932	12.933	-0.001	92	1350527	100.0	98.4	
104 tert-Butylbenzene	119	13.384	13.385	-0.001	91	1371093	100.0	99.3	
105 1,2,4-Trimethylbenzene	105	13.455	13.455	0.000	95	1495268	100.0	100.0	
106 sec-Butylbenzene	105	13.684	13.684	0.000	94	2018696	100.0	99.8	
107 1,3-Dichlorobenzene	146	13.814	13.815	-0.001	98	800204	100.0	99.4	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	94	1732101	100.0	100.5	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	95	243806	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	94	771910	100.0	98.4	
113 1,2-Dichlorobenzene	146	14.391	14.386	0.005	65	682673	100.0	99.7	
114 n-Butylbenzene	91	14.386	14.386	0.000	95	1532554	100.0	102.2	
115 1,2-Dibromo-3-Chloropropan	75	15.279	15.279	0.000	61	32374	100.0	103.6	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	90	432675	100.0	107.9	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	95	347337	100.0	99.6	
119 Naphthalene	128	16.367	16.368	-0.001	99	618344	100.0	109.8	
120 1,2,3-Trichlorobenzene	180	16.601	16.596	0.005	94	332325	100.0	106.3	
S 123 1,2-Dichloroethene, Total	96				0			195.9	
S 124 Xylenes, Total	91				0			197.2	
S 125 1,3-Dichloropropene, Total	75				0			203.5	
S 126 Trihalomethanes, Total	1				0			407.3	
S 127 Trimethylbenzene, Total	150				0			199.2	

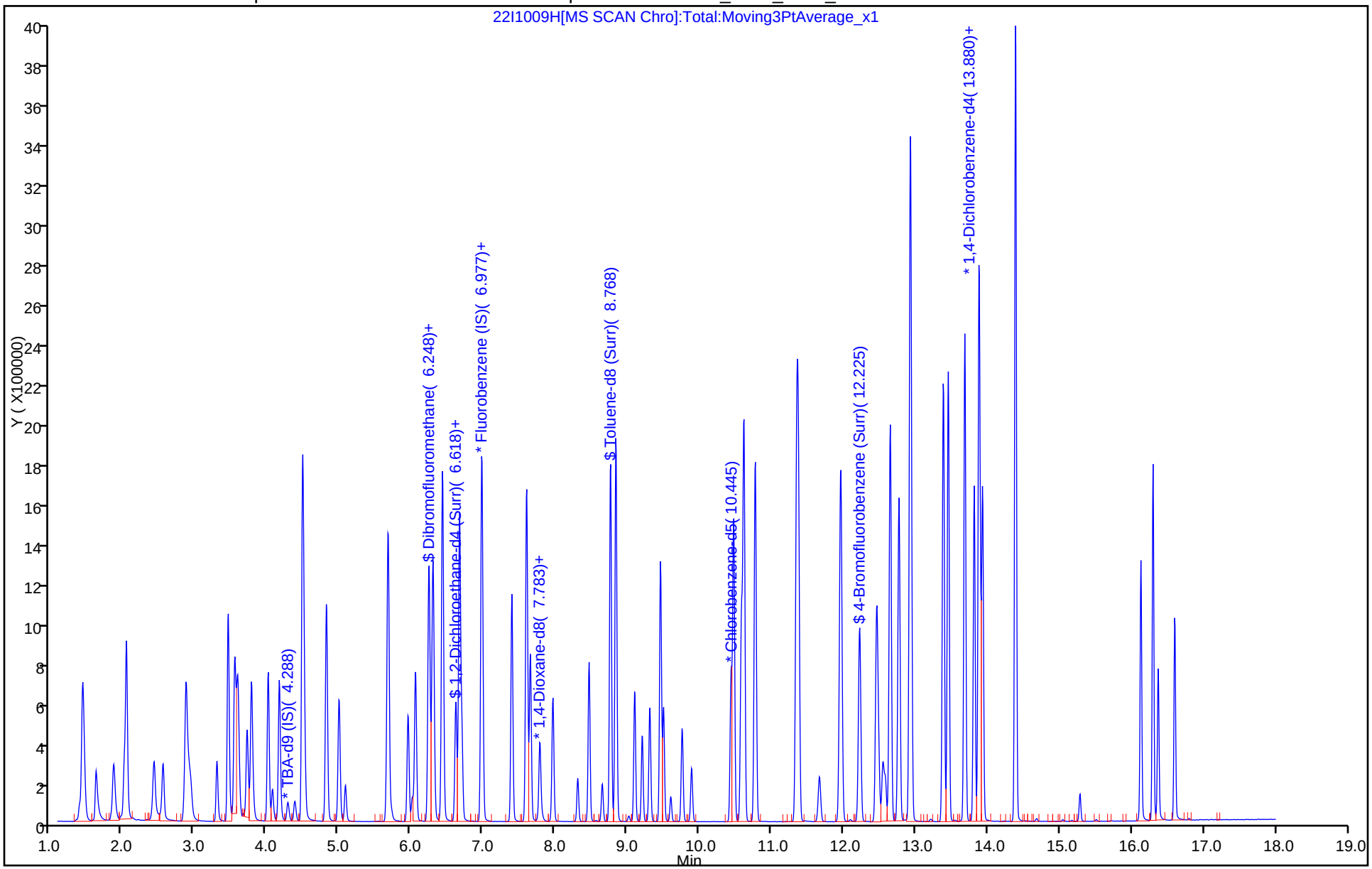
Reagents:

8260 LOWSS1_00137	Amount Added: 10.00	Units: uL
8260VA/2CEVE_00294	Amount Added: 5.00	Units: uL
8260/624KETWK_00281	Amount Added: 5.00	Units: uL
8260/624MEGWK_00411	Amount Added: 5.00	Units: uL
8260/624GASWK_00472	Amount Added: 5.00	Units: uL
8260/624ACRWK_00356	Amount Added: 5.00	Units: uL
8260 LOWIS1_00112	Amount Added: 5.00	Units: uL

Report Date: 10-Oct-2017 10:35:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009H.D				
Injection Date:	09-Oct-2017 17:09:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD08			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009I.D
Lims ID: STD09
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 09-Oct-2017 17:36:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD09
Misc. Info.: 500-0048264-012
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:19 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	88	638358	150.0	167.9	
2 Chloromethane	50	1.871	1.871	0.000	89	804200	150.0	146.4	
3 Vinyl chloride	62	2.018	2.018	0.000	84	697757	150.0	159.5	
4 Butadiene	39	2.046	2.046	0.000	85	578508	150.0	160.6	
5 Bromomethane	94	2.427	2.427	0.000	92	406561	150.0	144.0	
6 Chloroethane	64	2.552	2.557	-0.005	93	395293	150.0	141.6	
7 Dichlorofluoromethane	67	2.868	2.868	0.000	82	997654	150.0	153.1	
8 Trichlorofluoromethane	101	2.884	2.889	-0.005	75	963642	150.0	150.8	
10 Ethyl ether	59	3.298	3.303	-0.005	93	302708	150.0	153.5	
11 Acrolein	56	3.455	3.461	-0.006	97	1551515	6000.0	6228.2	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	86	508847	150.0	147.6	
13 1,1,2-Trichloro-1,2,2-trif	101	3.586	3.592	-0.006	86	574811	150.0	151.5	
14 Acetone	43	3.668	3.679	-0.011	98	60133	150.0	155.2	
15 Iodomethane	142	3.717	3.722	-0.005	99	966509	150.0	152.7	
16 Carbon disulfide	76	3.782	3.782	0.000	100	1779046	150.0	156.9	
19 3-Chloro-1-propene	76	4.011	4.016	-0.005	90	299648	150.0	156.8	
20 Methyl acetate	43	4.071	4.076	-0.005	98	323840	300.0	298.1	
21 Methylene Chloride	84	4.169	4.169	0.000	97	487789	150.0	151.0	
* 22 TBA-d9 (IS)	65	4.283	4.288	-0.005	0	134077	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.381	4.386	-0.005	98	221143	1500.0	1437.1	
24 Acrylonitrile	53	4.484	4.490	-0.006	97	917797	1500.0	1531.3	
25 trans-1,2-Dichloroethene	96	4.490	4.495	-0.005	91	537678	150.0	144.7	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	96	957191	150.0	154.9	
27 Hexane	57	4.822	4.822	0.000	90	939332	150.0	151.4	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	86	995753	150.0	154.5	
29 Vinyl acetate	43	5.083	5.089	-0.005	99	478283	150.0	151.8	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	70	726320	150.0	150.3	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	87	586623	150.0	149.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.720	5.725	-0.005	98	86723	150.0	157.4	
39 Chlorobromomethane	128	5.954	5.954	0.000	94	235949	150.0	151.8	
40 Tetrahydrofuran	42	6.008	6.014	-0.006	86	118216	300.0	306.4	
41 Chloroform	83	6.057	6.057	0.000	84	892047	150.0	150.7	
$ 42 Dibromofluoromethane	113	6.237	6.243	-0.006	82	511973	150.0	152.0	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	91	881110	150.0	152.6	
44 Cyclohexane	56	6.302	6.302	0.000	92	1112097	150.0	153.7	
46 1,1-Dichloropropene	75	6.433	6.433	0.000	92	740117	150.0	153.4	
45 Carbon tetrachloride	117	6.433	6.433	0.000	80	836248	150.0	157.1	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.613	6.613	0.000	0	472068	150.0	155.9	
48 Isobutyl alcohol	43	6.624	6.624	0.000	72	229077	3750.0	3627.7	
49 Benzene	78	6.667	6.673	-0.006	98	2029604	150.0	150.3	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	90	568024	150.0	157.6	
54 n-Heptane	43	6.972	6.977	-0.005	91	889111	150.0	152.8	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	90	629643	50.0	50.0	
56 Trichloroethene	130	7.397	7.397	0.000	90	601115	150.0	152.5	
58 Methylcyclohexane	83	7.603	7.603	0.000	94	1060422	150.0	156.2	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	93	507081	150.0	153.6	
* 61 1,4-Dioxane-d8	96	7.756	7.761	-0.005	0	16147	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	91	230026	150.0	156.6	
63 1,4-Dioxane	88	7.810	7.816	-0.006	92	50880	3000.0	2973.0	
65 Dichlorobromomethane	83	7.963	7.968	-0.005	92	625639	150.0	158.5	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	93	165043	150.0	152.9	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	92	716519	150.0	153.5	
69 4-Methyl-2-pentanone (MIBK	43	8.649	8.649	0.000	97	208656	150.0	149.0	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	94	2044933	150.0	150.0	
71 Toluene	92	8.839	8.839	0.000	93	1311685	150.0	149.4	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	91	578946	150.0	154.1	
73 Ethyl methacrylate	69	9.204	9.204	0.000	89	355255	150.0	146.7	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	88	300751	150.0	146.7	
75 Tetrachloroethene	166	9.460	9.460	0.000	91	643945	150.0	145.2	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	91	521831	150.0	148.1	
77 2-Hexanone	43	9.601	9.601	0.000	95	138760	150.0	150.1	
78 Chlorodibromomethane	129	9.759	9.759	0.000	87	418955	150.0	153.9	
80 Ethylene Dibromide	107	9.890	9.890	0.000	99	301678	150.0	148.3	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	84	498138	50.0	50.0	
82 Chlorobenzene	112	10.478	10.478	0.000	94	1504324	150.0	150.6	
84 1,1,1,2-Tetrachloroethane	131	10.587	10.581	0.005	89	540023	150.0	152.5	
85 Ethylbenzene	106	10.619	10.619	0.000	98	822614	150.0	147.6	
86 m-Xylene & p-Xylene	91	10.777	10.777	0.000	0	1997015	150.0	144.9	
87 o-Xylene	91	11.349	11.349	0.000	94	2045776	150.0	146.4	
88 Styrene	104	11.376	11.370	0.006	95	1556919	150.0	148.3	
89 Bromoform	173	11.664	11.664	0.000	98	243221	150.0	158.2	
90 Isopropylbenzene	105	11.964	11.958	0.006	98	2721432	150.0	149.0	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	91	722638	150.0	152.2	
94 Bromobenzene	156	12.459	12.459	0.000	92	599730	150.0	149.8	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.486	0.000	91	322616	150.0	150.3	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	87	351544	150.0	151.4	
97 trans-1,4-Dichloro-2-buten	53	12.584	12.579	0.005	88	93065	150.0	157.1	
98 N-Propylbenzene	91	12.650	12.650	0.000	98	3181467	150.0	148.4	
99 2-Chlorotoluene	91	12.769	12.769	0.000	97	1796018	150.0	150.9	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	90	2213436	150.0	150.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
100 4-Chlorotoluene	91	12.933	12.933	0.000	92	2016873	150.0	148.9	
104 tert-Butylbenzene	119	13.385	13.385	-0.001	91	2076814	150.0	152.5	
105 1,2,4-Trimethylbenzene	105	13.455	13.455	0.000	94	2229756	150.0	151.2	
106 sec-Butylbenzene	105	13.684	13.684	0.000	95	3008527	150.0	150.7	
107 1,3-Dichlorobenzene	146	13.815	13.815	0.000	98	1193440	150.0	150.2	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	94	2573002	150.0	151.3	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	93	240589	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.934	13.929	0.005	95	1158203	150.0	149.6	
113 1,2-Dichlorobenzene	146	14.392	14.386	0.006	65	1011645	150.0	149.7	
114 n-Butylbenzene	91	14.386	14.386	0.000	95	2296450	150.0	155.2	
115 1,2-Dibromo-3-Chloropropan	75	15.284	15.279	0.005	66	48395	150.0	157.0	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	90	634820	150.0	160.5	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	95	510989	150.0	148.5	
119 Naphthalene	128	16.368	16.368	0.000	99	952288	150.0	171.3	
120 1,2,3-Trichlorobenzene	180	16.602	16.596	0.006	94	504548	150.0	163.5	
S 123 1,2-Dichloroethene, Total	96				0			294.6	
S 124 Xylenes, Total	91				0			291.2	
S 125 1,3-Dichloropropene, Total	75				0			307.6	
S 126 Trihalomethanes, Total	1				0			621.3	
S 127 Trimethylbenzene, Total	150				0			301.8	

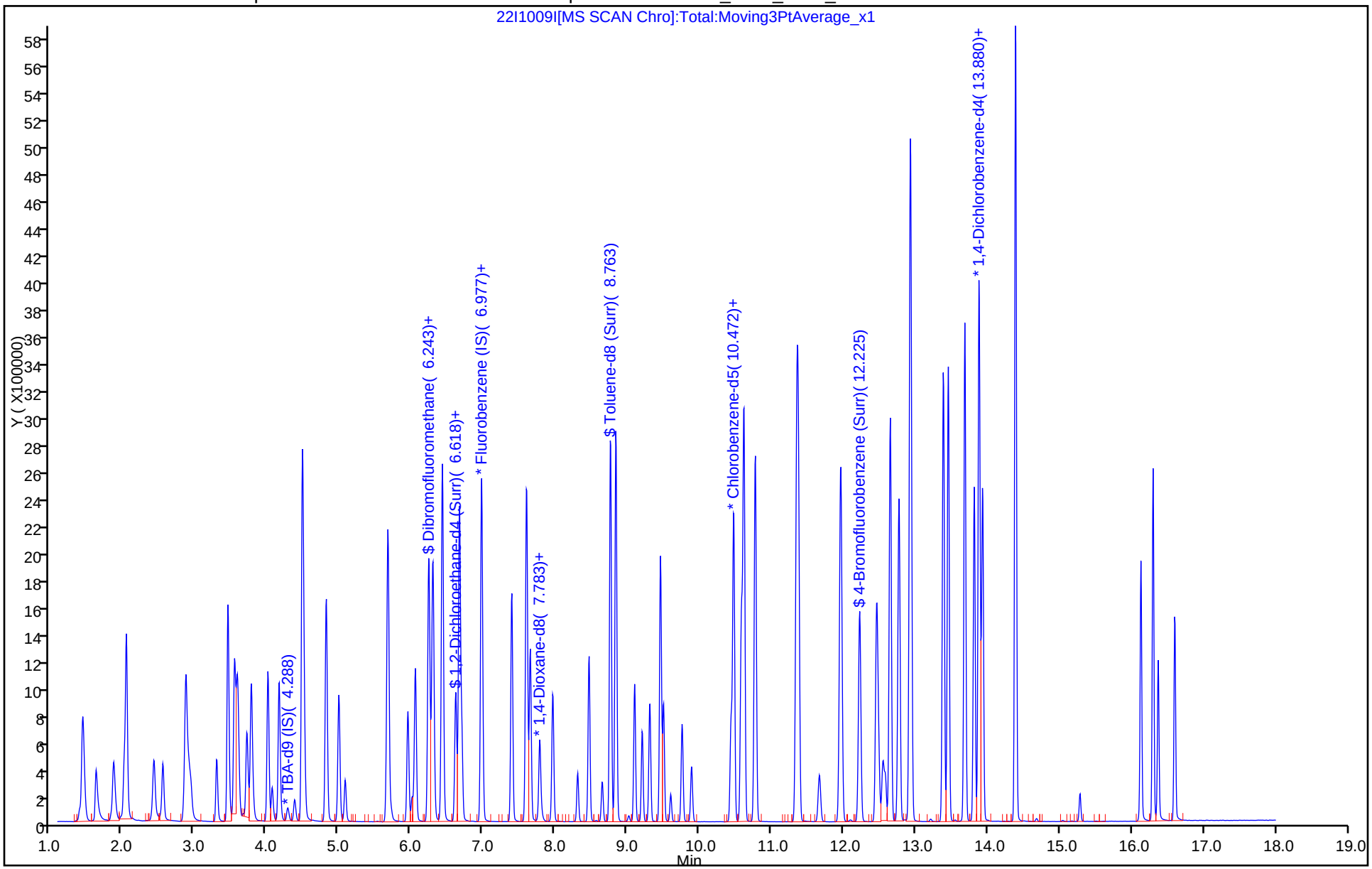
Reagents:

8260 LOWSS1_00137	Amount Added: 15.00	Units: uL
8260VA/2CEVE_00294	Amount Added: 7.50	Units: uL
8260/624KETWK_00281	Amount Added: 7.50	Units: uL
8260/624MEGWK_00411	Amount Added: 7.50	Units: uL
8260/624GASWK_00472	Amount Added: 7.50	Units: uL
8260/624ACRWK_00356	Amount Added: 7.50	Units: uL
8260 LOWIS1_00112	Amount Added: 5.00	Units: uL

Report Date: 10-Oct-2017 10:35:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009I.D				
Injection Date:	09-Oct-2017 17:36:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD09			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009J.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 09-Oct-2017 18:02:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Misc. Info.: 500-0048264-013
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:25 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.632	1.626	0.006	88	853541	200.0	221.0	
2 Chloromethane	50	1.871	1.871	0.000	89	1114115	200.0	199.6	
3 Vinyl chloride	62	2.018	2.018	0.000	84	947785	200.0	213.3	
4 Butadiene	39	2.051	2.046	0.005	85	785375	200.0	214.6	
5 Bromomethane	94	2.432	2.427	0.005	92	552833	200.0	192.7	
6 Chloroethane	64	2.557	2.557	0.000	93	541789	200.0	191.0	
7 Dichlorofluoromethane	67	2.873	2.868	0.005	82	1373676	200.0	207.5	
8 Trichlorofluoromethane	101	2.889	2.889	0.000	80	1330378	200.0	204.9	
10 Ethyl ether	59	3.308	3.303	0.005	93	404876	200.0	202.1	
11 Acrolein	56	3.461	3.461	0.000	97	2032527	8000.0	8031.3	
12 1,1-Dichloroethene	96	3.553	3.548	0.005	87	676746	200.0	193.2	
13 1,1,2-Trichloro-1,2,2-trif	101	3.591	3.592	-0.001	86	782340	200.0	203.0	
14 Acetone	43	3.673	3.679	-0.006	97	79399	200.0	202.9	
15 Iodomethane	142	3.722	3.722	0.000	99	1291102	200.0	200.8	
16 Carbon disulfide	76	3.787	3.782	0.005	100	2372403	200.0	205.9	
19 3-Chloro-1-propene	76	4.016	4.016	0.000	90	376327	200.0	193.8	
20 Methyl acetate	43	4.076	4.076	0.000	98	442514	400.0	400.9	
21 Methylene Chloride	84	4.174	4.169	0.005	97	649581	200.0	197.9	
* 22 TBA-d9 (IS)	65	4.294	4.288	0.006	0	125832	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.386	4.386	0.000	98	287030	2000.0	1987.5	
24 Acrylonitrile	53	4.490	4.490	0.000	98	1220331	2000.0	2004.2	
25 trans-1,2-Dichloroethene	96	4.495	4.495	0.000	91	718485	200.0	190.3	
26 Methyl tert-butyl ether	73	4.517	4.511	0.006	91	1252963	200.0	199.5	
27 Hexane	57	4.827	4.822	0.005	90	1242984	200.0	197.2	
28 1,1-Dichloroethane	63	5.001	4.996	0.005	86	1352125	200.0	206.5	
29 Vinyl acetate	43	5.088	5.089	0.000	99	581883	200.0	181.8	
33 2,2-Dichloropropane	77	5.676	5.671	0.005	67	963214	200.0	196.1	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	86	778733	200.0	195.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.725	5.725	0.000	98	115794	200.0	206.9	
39 Chlorobromomethane	128	5.959	5.954	0.005	93	309306	200.0	195.8	
40 Tetrahydrofuran	42	6.014	6.014	0.000	87	155585	400.0	398.8	
41 Chloroform	83	6.063	6.057	0.006	84	1200446	200.0	199.6	
$ 42 Dibromofluoromethane	113	6.242	6.243	-0.001	80	685374	200.0	200.3	
43 1,1,1-Trichloroethane	97	6.253	6.248	0.005	90	1195239	200.0	203.8	
44 Cyclohexane	56	6.302	6.302	0.000	92	1503013	200.0	204.5	
46 1,1-Dichloropropene	75	6.438	6.433	0.005	91	986238	200.0	201.3	
45 Carbon tetrachloride	117	6.433	6.433	0.000	83	1129004	200.0	208.8	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.613	0.005	0	629727	200.0	204.7	
48 Isobutyl alcohol	43	6.629	6.624	0.005	75	292174	5000.0	4930.1	
49 Benzene	78	6.672	6.673	-0.001	98	2694003	200.0	196.3	
50 1,2-Dichloroethane	62	6.705	6.700	0.005	90	754577	200.0	206.1	
54 n-Heptane	43	6.977	6.977	0.000	91	1099346	200.0	185.9	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	81	639666	50.0	50.0	
56 Trichloroethene	130	7.396	7.397	-0.001	91	805318	200.0	201.1	
58 Methylcyclohexane	83	7.603	7.603	0.000	94	1405011	200.0	203.7	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	93	656509	200.0	195.8	
* 61 1,4-Dioxane-d8	96	7.761	7.761	0.000	0	15008	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	91	302156	200.0	202.5	
63 1,4-Dioxane	88	7.810	7.816	-0.006	88	61340	4000.0	3856.2	
65 Dichlorobromomethane	83	7.968	7.968	0.000	92	822460	200.0	205.1	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	92	201004	200.0	192.4	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	92	915998	200.0	202.8	
69 4-Methyl-2-pentanone (MIBK	43	8.654	8.649	0.005	97	269414	200.0	198.8	
$ 70 Toluene-d8 (Surr)	98	8.768	8.763	0.005	94	2608138	200.0	197.7	
71 Toluene	92	8.844	8.839	0.005	93	1675748	200.0	197.2	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	91	711039	200.0	195.6	
73 Ethyl methacrylate	69	9.209	9.204	0.005	89	425270	200.0	181.5	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	88	376019	200.0	189.5	
75 Tetrachloroethene	166	9.460	9.460	0.000	91	831846	200.0	193.8	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	91	637860	200.0	187.1	
77 2-Hexanone	43	9.601	9.601	0.000	95	171030	200.0	191.2	
78 Chlorodibromomethane	129	9.759	9.759	0.000	88	540768	200.0	205.3	
80 Ethylene Dibromide	107	9.890	9.890	0.000	99	375564	200.0	190.8	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	85	482049	50.0	50.0	
82 Chlorobenzene	112	10.478	10.478	0.000	94	1903593	200.0	196.9	
84 1,1,1,2-Tetrachloroethane	131	10.586	10.581	0.005	90	719513	200.0	209.9	
85 Ethylbenzene	106	10.619	10.619	0.000	98	1035390	200.0	192.0	
86 m-Xylene & p-Xylene	91	10.777	10.777	0.000	0	2580490	200.0	193.5	
87 o-Xylene	91	11.349	11.349	0.000	95	2690866	200.0	198.9	
88 Styrene	104	11.376	11.370	0.006	94	1990794	200.0	196.0	
89 Bromoform	173	11.670	11.664	0.006	98	319507	200.0	214.8	
90 Isopropylbenzene	105	11.964	11.958	0.006	98	3585441	200.0	194.1	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	90	950093	200.0	197.9	
94 Bromobenzene	156	12.464	12.459	0.005	93	789621	200.0	195.1	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.486	0.000	91	407535	200.0	187.7	
96 1,2,3-Trichloropropane	75	12.552	12.546	0.006	86	460598	200.0	196.2	
97 trans-1,4-Dichloro-2-buten	53	12.584	12.579	0.005	88	129724	200.0	216.6	
98 N-Propylbenzene	91	12.650	12.650	0.000	98	4171647	200.0	192.5	
99 2-Chlorotoluene	91	12.769	12.769	0.000	97	2362032	200.0	196.3	
101 1,3,5-Trimethylbenzene	105	12.927	12.922	0.005	88	2931886	200.0	197.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
100 4-Chlorotoluene	91	12.938	12.933	0.005	92	2667533	200.0	194.8	
104 tert-Butylbenzene	119	13.390	13.385	0.005	91	2725236	200.0	197.9	
105 1,2,4-Trimethylbenzene	105	13.455	13.455	0.000	94	2956892	200.0	198.2	
106 sec-Butylbenzene	105	13.684	13.684	0.000	95	3978956	200.0	197.2	
107 1,3-Dichlorobenzene	146	13.814	13.815	-0.001	97	1585443	200.0	197.4	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	95	3409062	200.0	198.2	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	76	243264	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.934	13.929	0.005	94	1542640	200.0	197.1	
113 1,2-Dichlorobenzene	146	14.391	14.386	0.005	66	1336547	200.0	195.6	
114 n-Butylbenzene	91	14.391	14.386	0.005	95	2985798	200.0	199.5	
115 1,2-Dibromo-3-Chloropropan	75	15.284	15.279	0.005	71	66891	200.0	214.6	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	93	825029	200.0	206.3	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	95	630195	200.0	181.1	
119 Naphthalene	128	16.368	16.368	0.000	99	1235660	200.0	219.8	
120 1,2,3-Trichlorobenzene	180	16.602	16.596	0.006	93	649195	200.0	208.0	
S 123 1,2-Dichloroethene, Total	96				0			386.2	
S 124 Xylenes, Total	91				0			392.4	
S 125 1,3-Dichloropropene, Total	75				0			398.3	
S 126 Trihalomethanes, Total	1				0			824.8	
S 127 Trimethylbenzene, Total	150				0			395.6	

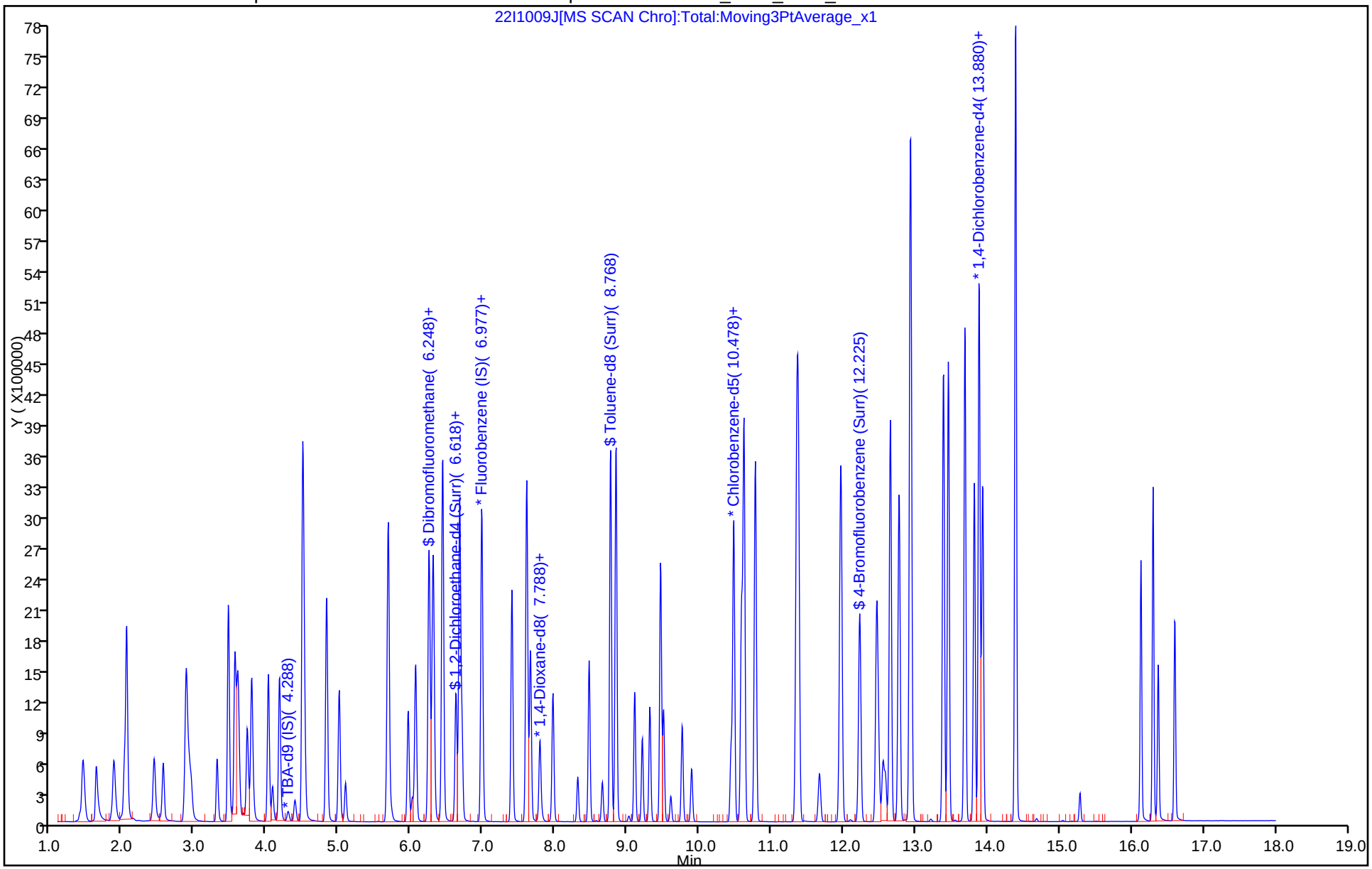
Reagents:

8260 LOWSS1_00137	Amount Added: 20.00	Units: uL
8260VA/2CEVE_00294	Amount Added: 10.00	Units: uL
8260/624KETWK_00281	Amount Added: 10.00	Units: uL
8260/624MEGWK_00411	Amount Added: 10.00	Units: uL
8260/624GASWK_00472	Amount Added: 10.00	Units: uL
8260/624ACRWK_00356	Amount Added: 10.00	Units: uL
8260 LOWIS1_00112	Amount Added: 5.00	Units: uL

Report Date: 10-Oct-2017 10:35:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22I1009J.D				
Injection Date:	09-Oct-2017 18:02:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD10			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 18:55 Calibration End Date: 10/09/2017 21:58 Calibration ID: 25585

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD03AP 500-404536/15	22J1009C.D
Level 2	STD04AP 500-404536/16	22J1009D.D
Level 3	STD05AP 500-404536/17	22J1009E.D
Level 4	STD06AP 500-404536/18	22J1009F.D
Level 5	STD07AP 500-404536/19	22J1009G.D
Level 6	STD08AP 500-404536/20	22J1009H.D
Level 7	STD09AP 500-404536/21	22J1009I.D
Level 8	STD10AP 500-404536/22	22J1009J.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 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.1262	0.1205 0.1640	0.1344 0.1454	0.1393	0.1347	Ave		0.1378			0.0010	10.3		15.0			
Isopropyl alcohol	+++++ 0.6704	+++++ 0.7600	0.7001 0.6937	0.6922	0.6433	Ave		0.6933			0.0010	5.6		15.0			
Acetonitrile	0.0255 0.0147	0.0159 0.0156	0.0145 0.0145	0.0145	0.0150	Lin1	0.0658	0.0148			0.0010				0.9990		0.9900
2-Chloro-1,3-butadiene	0.5443 0.5027	0.4925 0.5238	0.4723 0.5148	0.5065	0.4664	Ave		0.5029			0.0100	5.1		15.0			
Isopropyl ether	0.8979 0.8147	0.7950 0.8347	0.8597 0.8404	0.8305	0.8489	Ave		0.8402			0.0100	3.7		15.0			
Tert-butyl ethyl ether	0.7798 0.7210	0.6794 0.7412	0.7535 0.7395	0.7214	0.7447	Ave		0.7351			0.0010	4.0		15.0			
Propionitrile	0.0194 0.0163	0.0159 0.0174	0.0178 0.0166	0.0169	0.0170	Ave		0.0172			0.0010	6.4		15.0			
Ethyl acetate	0.1108 0.0969	0.1071 0.0997	0.0973 0.0963	0.1013	0.0978	Ave		0.1009			0.0100	5.3		15.0			
Methacrylonitrile	0.0781 0.0659	0.0672 0.0694	0.0656 0.0667	0.0700	0.0678	Ave		0.0688			0.0100	5.9		15.0			
Isooctane	1.3552 1.3577	1.2946 1.4000	1.2551 1.3594	1.3258	1.3089	Ave		1.3321			0.0100	3.4		15.0			
Tert-amyl methyl ether	0.6033 0.5524	0.5617 0.5624	0.5570 0.5632	0.5513	0.5707	Ave		0.5652			0.0100	2.9		15.0			
n-Butyl alcohol	+++++ 0.3184	0.3812 0.3733	0.3407 0.3385	0.3301	0.3103	Ave		0.3418			0.0010	7.8		15.0			
Ethyl acrylate	+++++ 0.1615	0.1700 0.1735	0.1759 0.1667	0.1718	0.1697	Ave		0.1699			0.0010	2.8		15.0			
2,3-Dichloro-1-propene	0.4480 0.4146	0.3792 0.4148	0.4091 0.4033	0.4132	0.4123	Ave		0.4118			0.0010	4.6		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
CURVE EVALUATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 18:55 Calibration End Date: 10/09/2017 21:58 Calibration ID: 25585

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 8	LVL 4	LVL 5		B	M1	M2								
Methyl methacrylate	0.1139 0.1043	0.1086 0.1119	0.1010 0.1055	0.1098	0.1032	Ave		0.1073			0.0100	4.2		15.0			
2-Nitropropane	0.0460 0.0470	0.0548 0.0502	0.0454 0.0489	0.0486	0.0446	Ave		0.0482			0.0100	6.8		15.0			
n-Butyl acetate	0.3496 0.2505	0.3184 0.2649	0.2667 0.2546	0.2630	0.2402	Ave		0.2760			0.0010	13.7		15.0			
1-Chlorohexane	0.7636 0.5370	0.6129 0.5593	0.5548 0.5440	0.5454	0.4913	Lin2	0.2219	0.5264			0.0100				0.9970		0.9900
Cyclohexanone	0.0142 0.0111	0.0117 0.0137	0.0112 0.0110	0.0114	0.0100	Ave		0.0118			0.0100	12.0		15.0			
2-Ethyltoluene	4.7015 3.9029	3.9134 3.6750	3.8426 3.5875	3.9157	3.7298	Ave		3.9085			0.0010	8.8		15.0			
Pentachloroethane	0.3983 0.4098	0.2949 0.3455	0.3594 0.3213	0.3916	0.3793	Ave		0.3625			0.0100	11.0		15.0			
1,2,3-Trimethylbenzene	3.1247 2.8573	2.7967 3.0672	2.7325 2.8608	2.9733	2.6982	Ave		2.8888			0.0010	5.3		15.0			
Benzyl chloride	0.1679 0.1765	0.1867 0.1918	0.1469 0.1717	0.1662	0.1603	Ave		0.1710			0.0010	8.4		15.0			
1,3,5-Trichlorobenzene	1.2457 1.1066	1.1445 1.2537	1.0938 1.1696	1.1332	1.0550	Ave		1.1502			0.0100	6.1		15.0			
2-Methylnaphthalene	0.2437 0.5751	0.2694 0.7229	0.3079 0.6718	0.3972	0.4650	Qua2	-0.140	0.3624	0.0019037		0.0100				0.9920		0.9900
1-Methylnaphthalene	0.2603 0.4220	0.2525 0.5266	0.2373 0.4919	0.3181	0.3522	Qua2	-0.033	0.2788	0.0013067		0.0100				0.9920		0.9900

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 Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 18:55 Calibration End Date: 10/09/2017 21:58 Calibration ID: 25585

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD03AP 500-404536/15	22J1009C.D
Level 2	STD04AP 500-404536/16	22J1009D.D
Level 3	STD05AP 500-404536/17	22J1009E.D
Level 4	STD06AP 500-404536/18	22J1009F.D
Level 5	STD07AP 500-404536/19	22J1009G.D
Level 6	STD08AP 500-404536/20	22J1009H.D
Level 7	STD09AP 500-404536/21	22J1009I.D
Level 8	STD10AP 500-404536/22	22J1009J.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethanol	TBAd9	Ave	+++++ 60437	1232 135903	3309 144835	13775	32738	+++++ 4000	80.0 6000	200 8000	800	2000
Isopropyl alcohol	TBAd9	Ave	+++++ 80238	+++++ 157403	4310 172715	17113	39093	+++++ 1000	+++++ 1500	50.0 2000	200	500
Acetonitrile	FB	Lin1	3468 180032	4409 289682	9093 363722	36473	89103	10.0 1000	20.0 1500	50.0 2000	200	500
2-Chloro-1,3-butadiene	FB	Ave	7389 613879	13636 974662	29609 1295185	127515	276451	1.00 100	2.00 150	5.00 200	20.0	50.0
Isopropyl ether	FB	Ave	12189 994983	22013 1553156	53898 2114143	209086	503207	1.00 100	2.00 150	5.00 200	20.0	50.0
Tert-butyl ethyl ether	FB	Ave	10586 880554	18812 1379183	47244 1860484	181615	441442	1.00 100	2.00 150	5.00 200	20.0	50.0
Propionitrile	FB	Ave	2637 199674	4395 323245	11169 417203	42496	100565	10.0 1000	20.0 1500	50.0 2000	200	500
Ethyl acetate	FB	Ave	3009 236656	5933 370996	12203 484536	51013	115902	2.00 200	4.00 300	10.0 400	40.0	100
Methacrylonitrile	FB	Ave	10604 804257	18616 1291258	41131 1677848	176321	401710	10.0 1000	20.0 1500	50.0 2000	200	500
Isooctane	FB	Ave	18396 1658162	35844 2604958	78689 3419973	333797	775870	1.00 100	2.00 150	5.00 200	20.0	50.0
Tert-amyl methyl ether	FB	Ave	8189 674664	15552 1046428	34919 1416725	138789	338326	1.00 100	2.00 150	5.00 200	20.0	50.0
n-Butyl alcohol	TBAd9	Ave	+++++ 95266	2436 193281	5243 210699	20401	47151	+++++ 2500	50.0 3750	125 5000	500	1250
Ethyl acrylate	FB	Ave	+++++ 197273	4708 322789	11028 419426	43264	100599	+++++ 100	2.00 150	5.00 200	20.0	50.0
2,3-Dichloro-1-propene	FB	Ave	6082 506346	10499 771887	25651 1014688	104028	244429	1.00 100	2.00 150	5.00 200	20.0	50.0
Methyl methacrylate	FB	Ave	3092 254746	6012 416318	12660 531033	55282	122359	2.00 200	4.00 300	10.0 400	40.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 18:55 Calibration End Date: 10/09/2017 21:58 Calibration ID: 25585

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2-Nitropropane	CBNZ d5	Ave	940 86284	2318 139805	4405 182313	18913	42036	2.00 200	4.00 300	10.0 400	40.0	100
n-Butyl acetate	CBNZ d5	Ave	3574 229820	6738 368563	12949 474976	51148	113110	1.00 100	2.00 150	5.00 200	20.0	50.0
1-Chlorohexane	CBNZ d5	Lin2	7807 492659	12971 778268	26932 1014715	106058	231383	1.00 100	2.00 150	5.00 200	20.0	50.0
Cyclohexanone	DCBd 4	Ave	6829 513792	11338 961001	25842 1085391	104713	231496	100 10000	200 15000	500 20000	2000	5000
2-Ethyltoluene	DCBd 4	Ave	22649 1803813	38083 2576214	88629 3535480	358865	860579	1.00 100	2.00 150	5.00 200	20.0	50.0
Pentachloroethane	DCBd 4	Ave	1919 189419	2870 242178	8290 316670	35892	87509	1.00 100	2.00 150	5.00 200	20.0	50.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	15053 1320543	27216 2150152	63026 2819285	272492	622573	1.00 100	2.00 150	5.00 200	20.0	50.0
Benzyl chloride	DCBd 4	Ave	809 81570	1817 134463	3388 169231	15236	36995	1.00 100	2.00 150	5.00 200	20.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	6001 511418	11138 878826	25228 1152603	103856	243419	1.00 100	2.00 150	5.00 200	20.0	50.0
2-Methylnaphthalene	DCBd 4	Qua2	1174 265776	2622 506785	7101 662058	36399	107283	1.00 100	2.00 150	5.00 200	20.0	50.0
1-Methylnaphthalene	DCBd 4	Qua2	1254 195046	2457 369152	5473 484755	29154	81258	1.00 100	2.00 150	5.00 200	20.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua2 = Quadratic 1/conc^2 ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 18:55 Calibration End Date: 10/09/2017 21:58 Calibration ID: 25585

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD03AP 500-404536/15	22J1009C.D
Level 2	STD04AP 500-404536/16	22J1009D.D
Level 3	STD05AP 500-404536/17	22J1009E.D
Level 4	STD06AP 500-404536/18	22J1009F.D
Level 5	STD07AP 500-404536/19	22J1009G.D
Level 6	STD08AP 500-404536/20	22J1009H.D
Level 7	STD09AP 500-404536/21	22J1009I.D
Level 8	STD10AP 500-404536/22	22J1009J.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol	+++++ 19.0	-12.5 5.5	-2.5	1.1	-2.3	-8.4	30	50 30	30	30	30	30
Isopropyl alcohol	+++++ 9.6	+++++ 0.1	1.0	-0.2	-7.2	-3.3	30	30	50	30	30	30
Acetonitrile	28.1 4.8	-14.7 -2.6	-11.0	-4.4	0.6	-0.9	50 30	30 30	30	30	30	30
2-Chloro-1,3-butadiene	8.2 4.2	-2.1 2.4	-6.1	0.7	-7.3	-0.1	50 30	30 30	30	30	30	30
Isopropyl ether	6.9 -0.7	-5.4 0.0	2.3	-1.2	1.0	-3.0	50 30	30 30	30	30	30	30
Tert-butyl ethyl ether	6.1 0.8	-7.6 0.6	2.5	-1.9	1.3	-1.9	50 30	30 30	30	30	30	30
Propionitrile	13.2 1.2	-7.5 -3.3	3.8	-1.6	-1.1	-4.7	50 30	30 30	30	30	30	30
Ethyl acetate	9.8 -1.2	6.2 -4.6	-3.6	0.4	-3.1	-4.0	50 30	30 30	30	30	30	30
Methacrylonitrile	13.5 0.8	-2.3 -3.1	-4.7	1.7	-1.6	-4.3	50 30	30 30	30	30	30	30
Isooctane	1.7 5.1	-2.8 2.1	-5.8	-0.5	-1.7	1.9	50 30	30 30	30	30	30	30
Tert-amyl methyl ether	6.7 -0.5	-0.6 -0.4	-1.5	-2.5	1.0	-2.3	50 30	30 30	30	30	30	30
n-Butyl alcohol	+++++ 9.2	11.5 -1.0	-0.3	-3.4	-9.2	-6.8	30	50 30	30	30	30	30
Ethyl acrylate	+++++ 2.1	0.1 -1.9	3.5	1.2	-0.1	-4.9	30	50 30	30	30	30	30
2,3-Dichloro-1-propene	8.8 0.7	-7.9 -2.1	-0.7	0.3	0.1	0.7	50 30	30 30	30	30	30	30
Methyl methacrylate	6.2 4.3	1.2 -1.6	-5.9	2.4	-3.8	-2.8	50 30	30 30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Chicago Job No.: 500-136523-1 Analy Batch No.: 404536

SDG No.:

Instrument ID: CMS22 GC Column: DB624 ID: 0.2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 18:55 Calibration End Date: 10/09/2017 21:58 Calibration ID: 25585

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
2-Nitropropane	-4.6 4.3	13.6 1.4	-5.8	0.9	-7.4	-2.4	50 30	30 30	30	30	30	30
n-Butyl acetate	26.7 -4.0	15.4 -7.7	-3.3	-4.7	-13.0	-9.2	50 30	30 30	30	30	30	30
1-Chlorohexane	2.9 6.0	-4.6 3.1	-3.0	1.5	-7.5	1.6	50 30	30 30	30	30	30	30
Cyclohexanone	20.2 16.3	-1.2 -6.6	-5.0	-3.1	-14.9	-5.7	50 30	30 30	30	30	30	30
2-Ethyltoluene	20.3 -6.0	0.1 -8.2	-1.7	0.2	-4.6	-0.1	50 30	30 30	30	30	30	30
Pentachloroethane	9.9 -4.7	-18.6 -11.4	-0.9	8.0	4.6	13.1	50 30	30 30	30	30	30	30
1,2,3-Trimethylbenzene	8.2 6.2	-3.2 -1.0	-5.4	2.9	-6.6	-1.1	50 30	30 30	30	30	30	30
Benzyl chloride	-1.8 12.2	9.2 0.4	-14.1	-2.8	-6.2	3.2	50 30	30 30	30	30	30	30
1,3,5-Trichlorobenzene	8.3 9.0	-0.5 1.7	-4.9	-1.5	-8.3	-3.8	50 30	30 30	30	30	30	30
2-Methylnaphthalene	5.4 7.9	-7.2 -6.4	-9.5	0.8	1.8	3.2	50 30	30 30	30	30	30	30
1-Methylnaphthalene	4.7 7.6	-4.4 -6.1	-14.2	4.5	2.1	2.4	50 30	30 30	30	30	30	30

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009C.D
Lims ID: STD03AP
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Oct-2017 18:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD03AP
Misc. Info.: 500-0048264-015
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:34 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
18 Acetonitrile	41	4.027	4.011	0.016	48	3468	10.0	12.8	
* 22 TBA-d9 (IS)	65	4.288	4.288	0.000	0	128279	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	84	12189	1.00	1.07	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	71	7389	1.00	1.08	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	92	10586	1.00	1.06	
36 Propionitrile	54	5.807	5.791	0.016	35	2637	10.0	11.3	
37 Ethyl acetate	43	5.807	5.796	0.011	42	3009	2.00	2.20	M
38 Methacrylonitrile	41	5.965	5.959	0.006	73	10604	10.0	11.3	
51 Isooctane	57	6.760	6.760	0.000	95	18396	1.00	1.02	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	76	8189	1.00	1.07	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	678725	50.0	50.0	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	73	6082	1.00	1.09	
* 61 1,4-Dioxane-d8	96	7.756	7.761	-0.005	0	15009	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	47	3092	2.00	2.12	
66 2-Nitropropane	43	8.229	8.229	0.000	17	940	2.00	1.91	M
79 n-Butyl acetate	43	9.748	9.748	0.000	63	3574	1.00	1.27	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	511175	50.0	50.0	
83 1-Chlorohexane	91	10.445	10.445	0.000	32	7807	1.00	1.03	
91 Cyclohexanone	55	12.127	12.127	0.000	73	6829	100.0	120.2	
102 2-Ethyltoluene	105	13.210	13.210	0.000	89	22649	1.00	1.20	
103 Pentachloroethane	167	13.401	13.406	-0.005	17	1919	1.00	1.10	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	240872	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.000	14.005	-0.005	79	15053	1.00	1.08	
112 Benzyl chloride	126	14.114	14.114	0.000	60	809	1.00	0.9820	
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	76	6001	1.00	1.08	
121 2-Methylnaphthalene	142	17.424	17.424	0.000	1	1174	1.00	1.05	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	1	1254	1.00	1.05	

QC Flag Legend

Review Flags

M - Manually Integrated

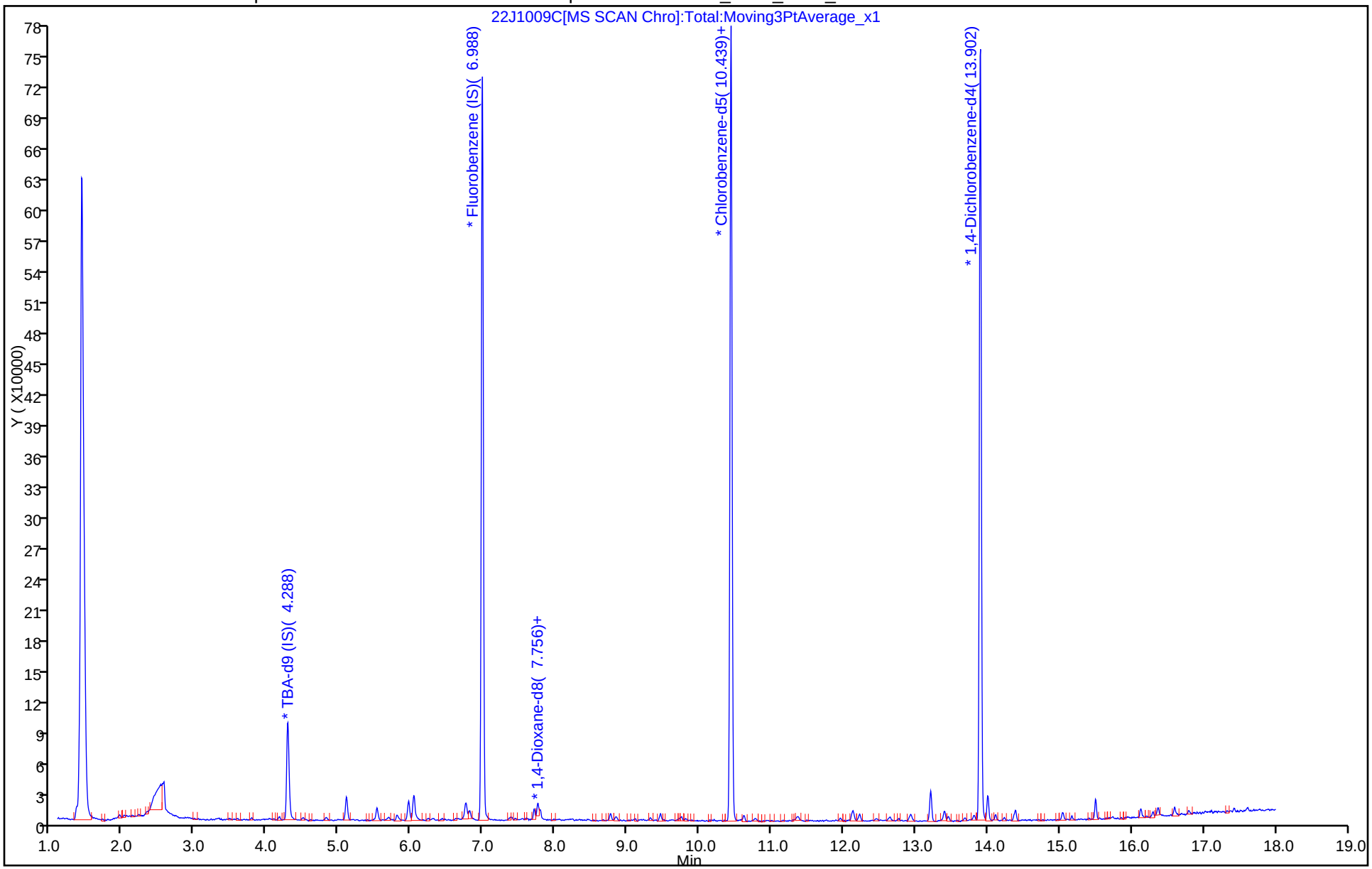
Reagents:

LO8260ADDS_00034	Amount Added:	1.00	Units: uL
LO8260POLRADD_00093	Amount Added:	1.00	Units: uL
LOW8260STD2_00151	Amount Added:	1.00	Units: uL
LOWCYCHXWK_00153	Amount Added:	1.00	Units: uL
LOW2,3-DICP_00063	Amount Added:	1.00	Units: uL
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL
LOW2ETTOL STD_00018	Amount Added:	1.00	Units: uL

Report Date: 10-Oct-2017 10:35:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009C.D				
Injection Date:	09-Oct-2017 18:55:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD03AP			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



Manual Integration/User Assign Peak Report

TestAmerica Chicago

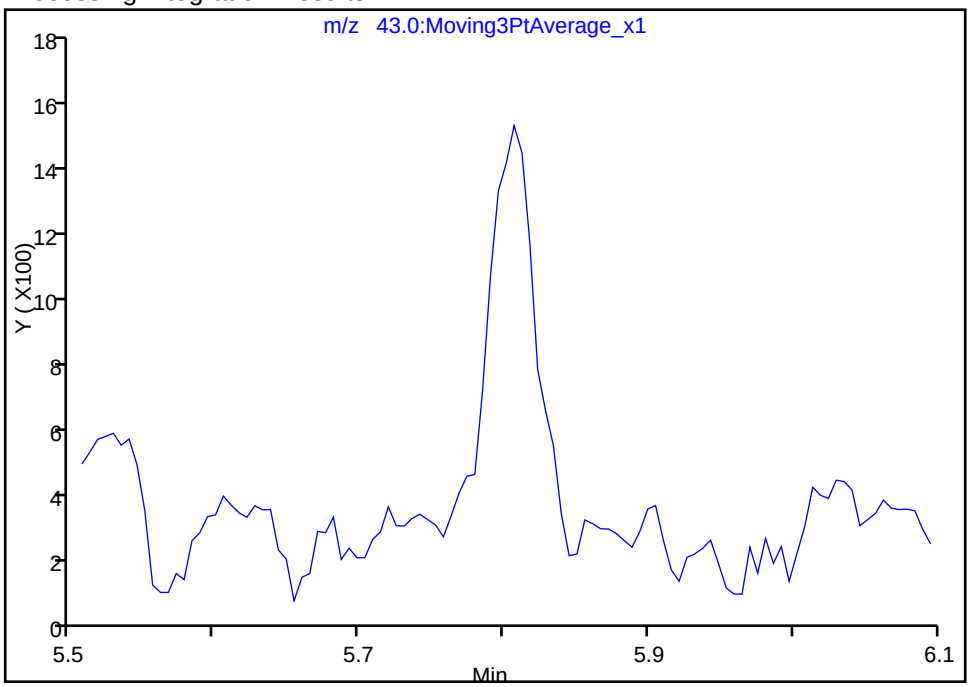
Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009C.D				
Injection Date:	09-Oct-2017 18:55:30	Instrument ID:	CMS22		
Lims ID:	STD03AP				
Client ID:					
Operator ID:	EA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

37 Ethyl acetate, CAS: 141-78-6

Signal: 1

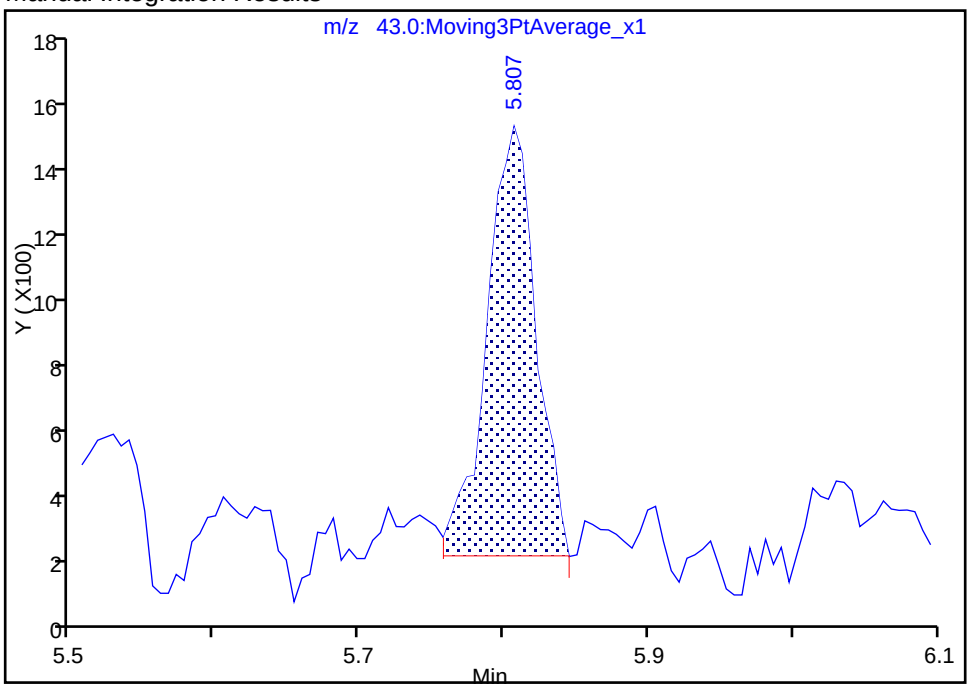
Not Detected
Expected RT: 5.80

Processing Integration Results



Manual Integration Results

RT: 5.81
Area: 3009
Amount: 2.196753
Amount Units: ug/L



Reviewer: alikpalae, 10-Oct-2017 10:10:24
Audit Action: Assigned Compound ID Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Chicago

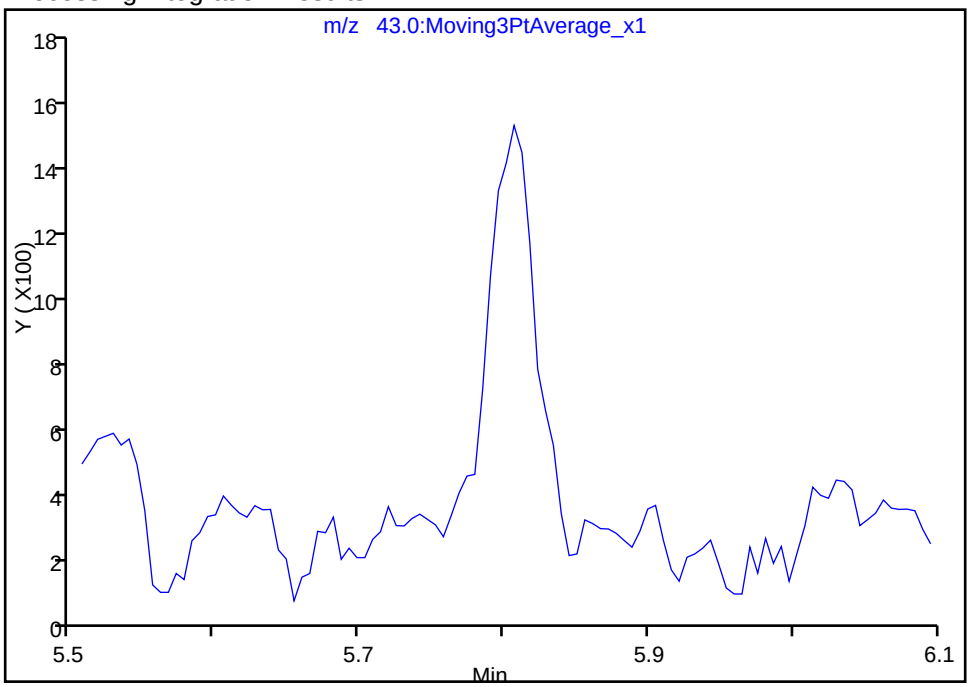
Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009C.D				
Injection Date:	09-Oct-2017 18:55:30	Instrument ID:	CMS22		
Lims ID:	STD03AP				
Client ID:					
Operator ID:	EA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

37 Ethyl acetate, CAS: 141-78-6

Signal: 1

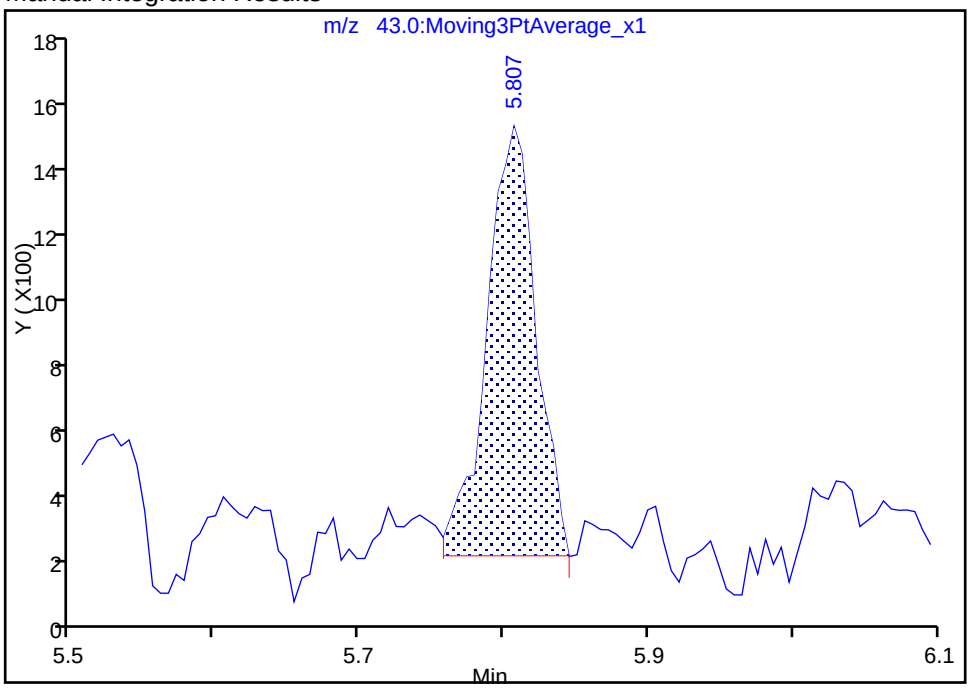
Processing Integration Results

Not Detected
Expected RT: 5.80



Manual Integration Results

RT: 5.81
Area: 3009
Amount: 2.196753
Amount Units: ug/L



Reviewer: alikpalae, 10-Oct-2017 10:13:45
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Chicago

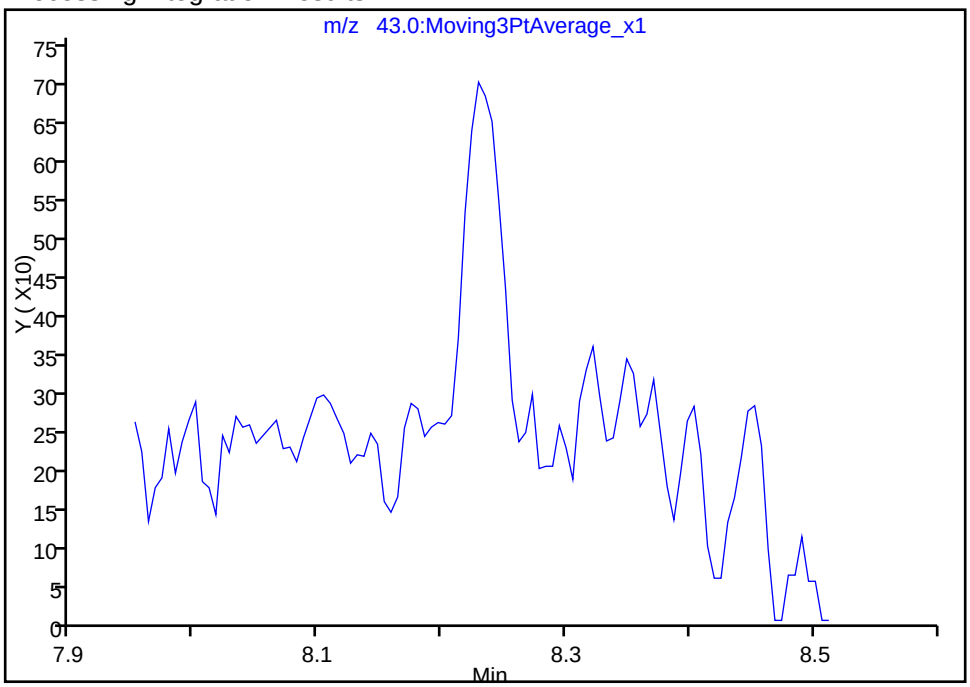
Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009C.D				
Injection Date:	09-Oct-2017 18:55:30	Instrument ID:	CMS22		
Lims ID:	STD03AP				
Client ID:					
Operator ID:	EA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

66 2-Nitropropane, CAS: 79-46-9

Signal: 1

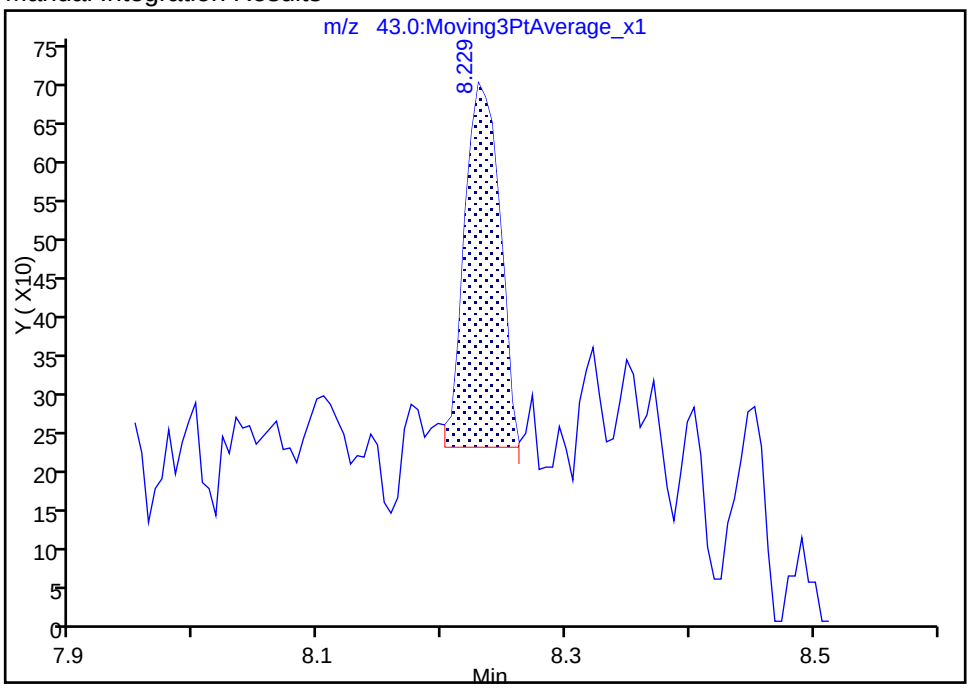
Not Detected
Expected RT: 8.23

Processing Integration Results



Manual Integration Results

RT: 8.23
Area: 940
Amount: 1.908085
Amount Units: ug/L



Reviewer: alikpalae, 10-Oct-2017 10:10:43
Audit Action: Assigned Compound ID Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Chicago

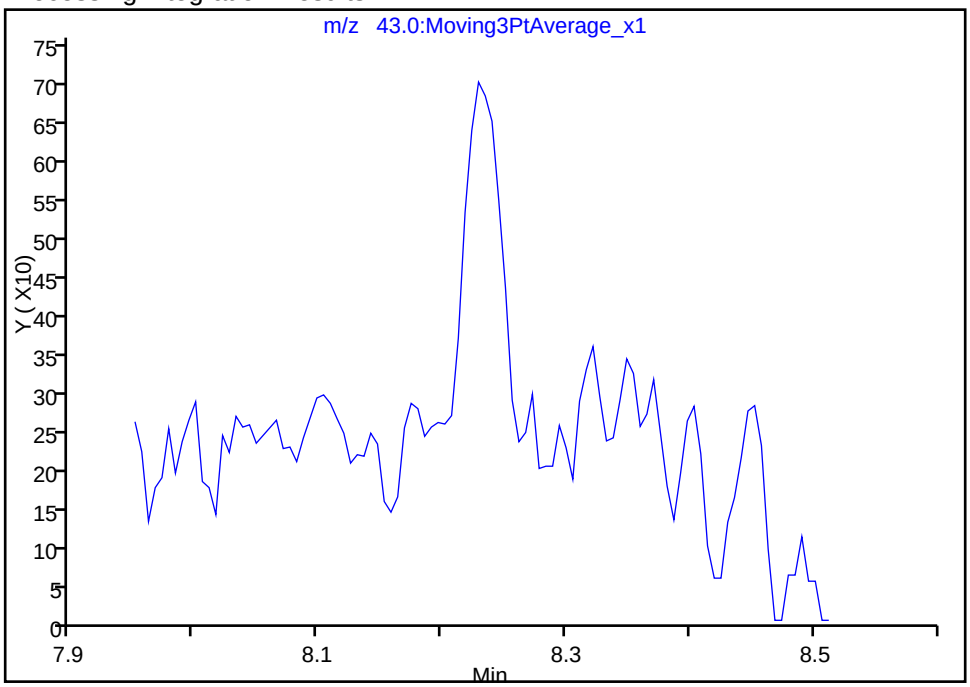
Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009C.D				
Injection Date:	09-Oct-2017 18:55:30	Instrument ID:	CMS22		
Lims ID:	STD03AP				
Client ID:					
Operator ID:	EA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

66 2-Nitropropane, CAS: 79-46-9

Signal: 1

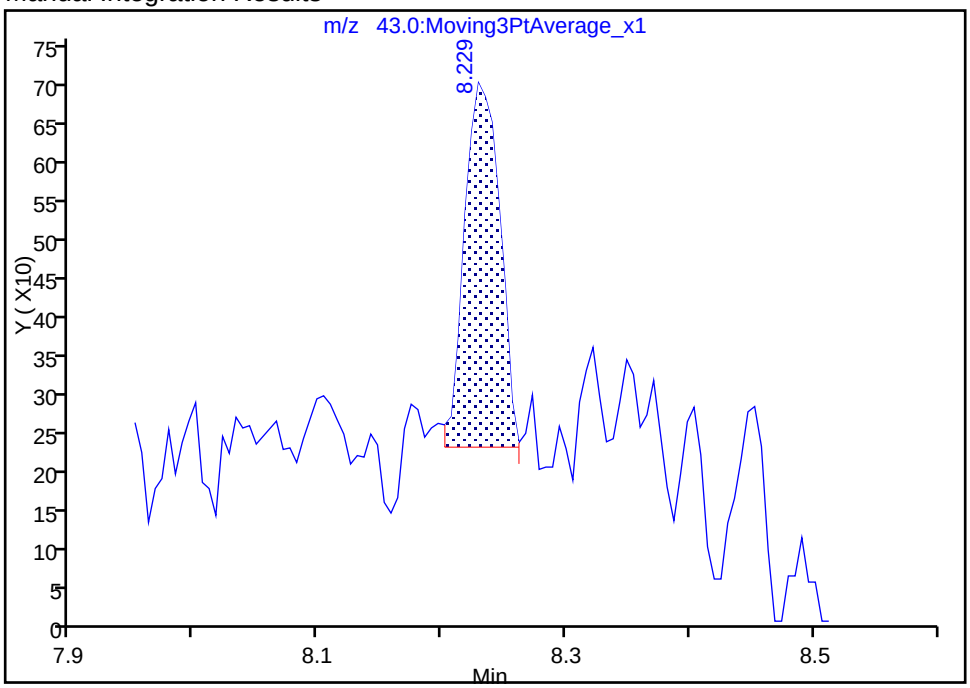
Not Detected
Expected RT: 8.23

Processing Integration Results



Manual Integration Results

RT: 8.23
Area: 940
Amount: 1.908085
Amount Units: ug/L



Reviewer: alikpalae, 10-Oct-2017 10:15:20
Audit Action: Manually Integrated Audit Reason: Missed Peak

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009D.D
Lims ID: STD04AP
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 09-Oct-2017 19:21:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD04AP
Misc. Info.: 500-0048264-016
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:39 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.292	3.259	0.033	29	1232	80.0	70.0	
18 Acetonitrile	41	4.032	4.011	0.021	54	4409	20.0	17.1	
* 22 TBA-d9 (IS)	65	4.288	4.288	0.000	0	127792	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	88	22013	2.00	1.89	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	85	13636	2.00	1.96	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	98	18812	2.00	1.85	
36 Propionitrile	54	5.812	5.791	0.021	52	4395	20.0	18.5	
37 Ethyl acetate	43	5.807	5.796	0.011	69	5933	4.00	4.25	
38 Methacrylonitrile	41	5.965	5.959	0.006	85	18616	20.0	19.5	
51 Isooctane	57	6.760	6.760	0.000	94	35844	2.00	1.94	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	93	15552	2.00	1.99	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	692196	50.0	50.0	
55 n-Butanol	56	7.375	7.358	0.017	26	2436	50.0	55.8	
57 Ethyl acrylate	55	7.543	7.538	0.005	64	4708	2.00	2.00	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	82	10499	2.00	1.84	
* 61 1,4-Dioxane-d8	96	7.756	7.761	-0.005	0	15273	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	72	6012	4.00	4.05	
66 2-Nitropropane	43	8.235	8.229	0.006	33	2318	4.00	4.55	
79 n-Butyl acetate	43	9.748	9.748	0.000	85	6738	2.00	2.31	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	529107	50.0	50.0	
83 1-Chlorohexane	91	10.445	10.445	0.000	35	12971	2.00	1.91	
91 Cyclohexanone	55	12.132	12.127	0.005	78	11338	200.0	197.6	
102 2-Ethyltoluene	105	13.210	13.210	0.000	95	38083	2.00	2.00	
103 Pentachloroethane	167	13.406	13.406	0.000	49	2870	2.00	1.63	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	243288	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	89	27216	2.00	1.94	
112 Benzyl chloride	126	14.114	14.114	0.000	78	1817	2.00	2.18	
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	91	11138	2.00	1.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
121 2-Methylnaphthalene	142	17.424	17.424	0.000	18	2622	2.00	1.86	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	2	2457	2.00	1.91	

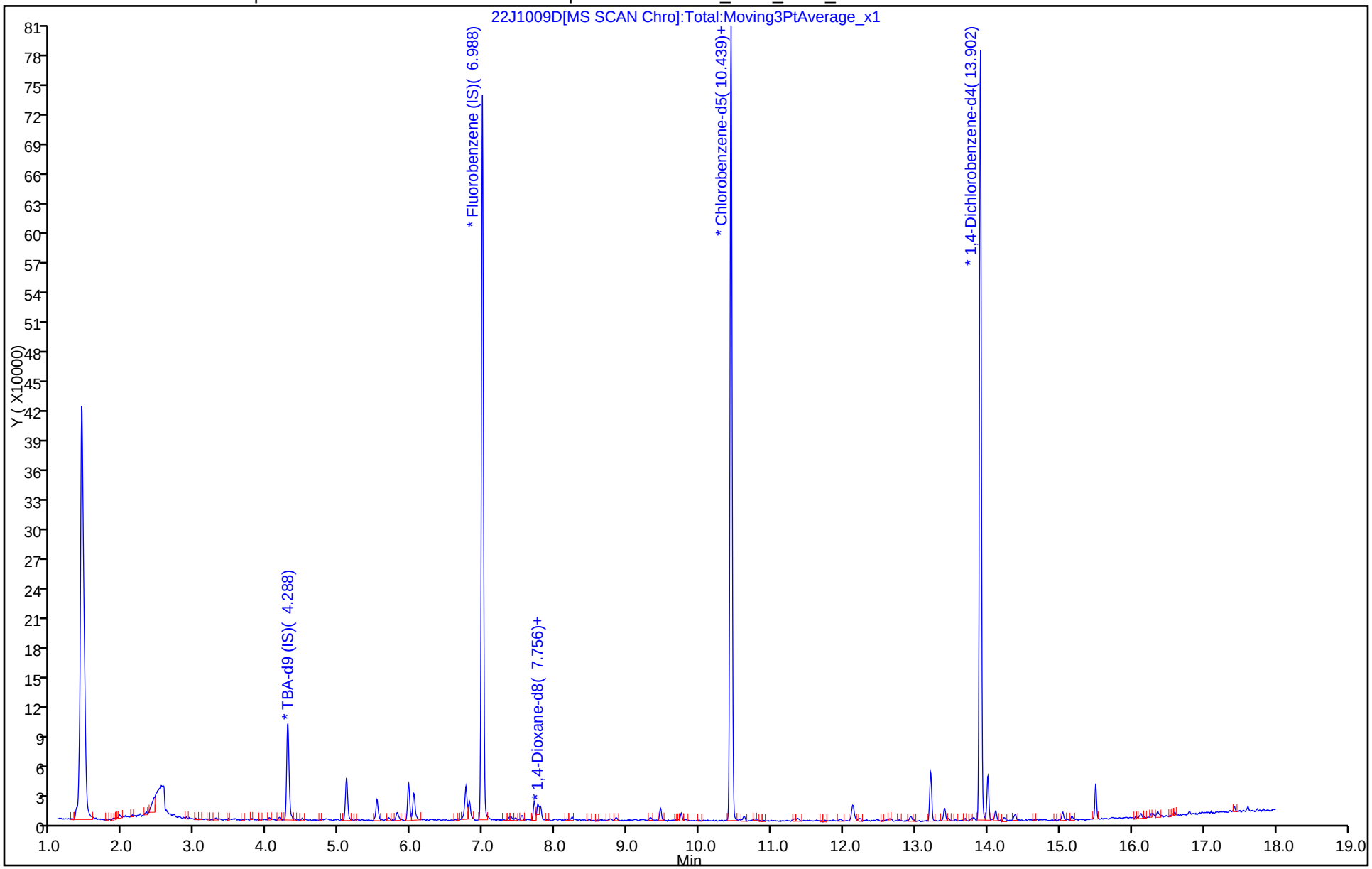
Reagents:

LO8260POLRADD_00093	Amount Added:	2.00	Units: uL
LOW8260STD2_00151	Amount Added:	2.00	Units: uL
LOWCYCHXWK_00153	Amount Added:	2.00	Units: uL
LOW2,3-DICP_00063	Amount Added:	2.00	Units: uL
LO8260ADDS_00034	Amount Added:	2.00	Units: uL
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL
LOW2ETTOL STD_00018	Amount Added:	2.00	Units: uL

Report Date: 10-Oct-2017 10:35:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009D.D				
Injection Date:	09-Oct-2017 19:21:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD04AP			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009E.D
Lims ID: STD05AP
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 09-Oct-2017 19:47:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD05AP
Misc. Info.: 500-0048264-017
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:44 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.276	3.259	0.017	45	3309	200.0	195.0	M
17 Isopropyl alcohol	45	3.918	3.902	0.016	28	4310	50.0	50.5	
18 Acetonitrile	41	4.027	4.011	0.016	75	9093	50.0	44.5	
* 22 TBA-d9 (IS)	65	4.283	4.288	-0.005	0	123122	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	94	53898	5.00	5.12	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	70	29609	5.00	4.70	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	98	47244	5.00	5.13	
36 Propionitrile	54	5.802	5.791	0.011	68	11169	50.0	51.9	
37 Ethyl acetate	43	5.796	5.796	0.000	92	12203	10.0	9.64	
38 Methacrylonitrile	41	5.959	5.959	0.000	88	41131	50.0	47.7	
51 Isooctane	57	6.760	6.760	0.000	94	78689	5.00	4.71	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	97	34919	5.00	4.93	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	626968	50.0	50.0	
55 n-Butanol	56	7.364	7.358	0.006	61	5243	125.0	124.6	
57 Ethyl acrylate	55	7.538	7.538	0.000	92	11028	5.00	5.18	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	89	25651	5.00	4.97	
* 61 1,4-Dioxane-d8	96	7.756	7.761	-0.005	0	15176	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	83	12660	10.0	9.41	
66 2-Nitropropane	43	8.235	8.229	0.006	50	4405	10.0	9.42	
79 n-Butyl acetate	43	9.748	9.748	0.000	90	12949	5.00	4.83	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	485437	50.0	50.0	
83 1-Chlorohexane	91	10.445	10.445	0.000	37	26932	5.00	4.85	
91 Cyclohexanone	55	12.127	12.127	0.000	85	25842	500.0	475.1	
102 2-Ethyltoluene	105	13.210	13.210	0.000	97	88629	5.00	4.92	
103 Pentachloroethane	167	13.401	13.406	-0.005	82	8290	5.00	4.96	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	230651	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	91	63026	5.00	4.73	
112 Benzyl chloride	126	14.114	14.114	0.000	92	3388	5.00	4.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	96	25228	5.00	4.75	
121 2-Methylnaphthalene	142	17.424	17.424	0.000	66	7101	5.00	4.53	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	60	5473	5.00	4.29	

QC Flag Legend

Review Flags

M - Manually Integrated

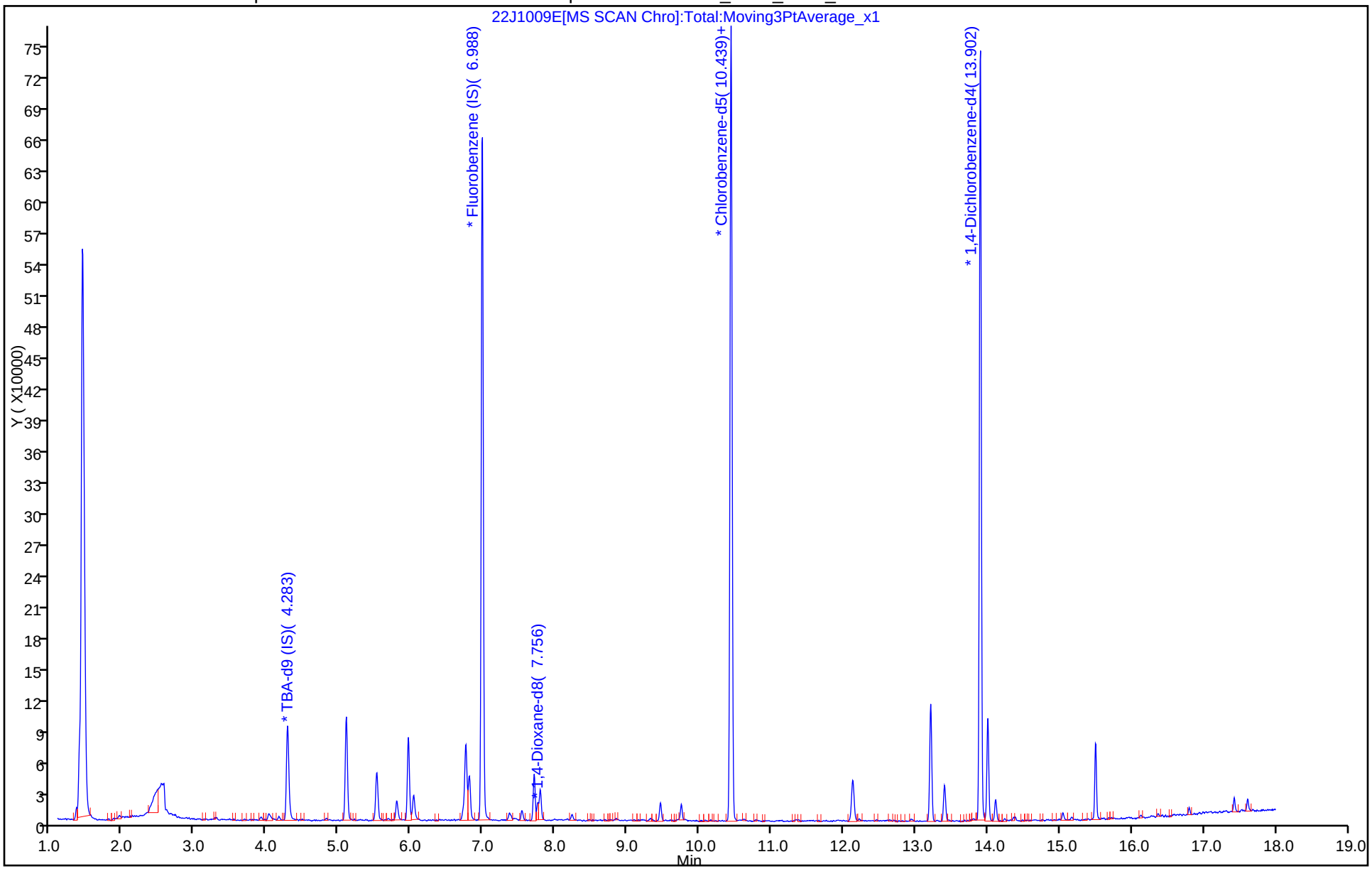
Reagents:

LO8260POLRADD_00093	Amount Added:	5.00	Units: uL
LOW8260STD2_00151	Amount Added:	5.00	Units: uL
LOWCYCHXWK_00153	Amount Added:	5.00	Units: uL
LOW2,3-DICP_00063	Amount Added:	5.00	Units: uL
LO8260ADDS_00034	Amount Added:	5.00	Units: uL
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL
LOW2ETTOL STD_00018	Amount Added:	5.00	Units: uL

Report Date: 10-Oct-2017 10:35:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009E.D				
Injection Date:	09-Oct-2017 19:47:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD05AP			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



Manual Integration/User Assign Peak Report

TestAmerica Chicago

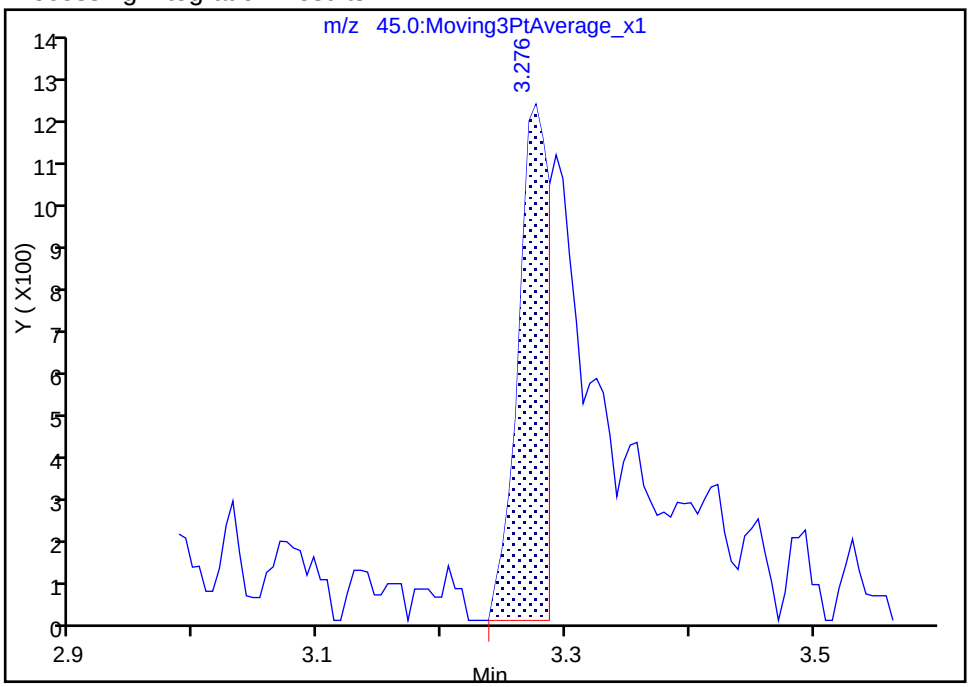
Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009E.D				
Injection Date:	09-Oct-2017 19:47:30	Instrument ID:	CMS22		
Lims ID:	STD05AP				
Client ID:					
Operator ID:	EA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

9 Ethanol, CAS: 64-17-5

Signal: 1

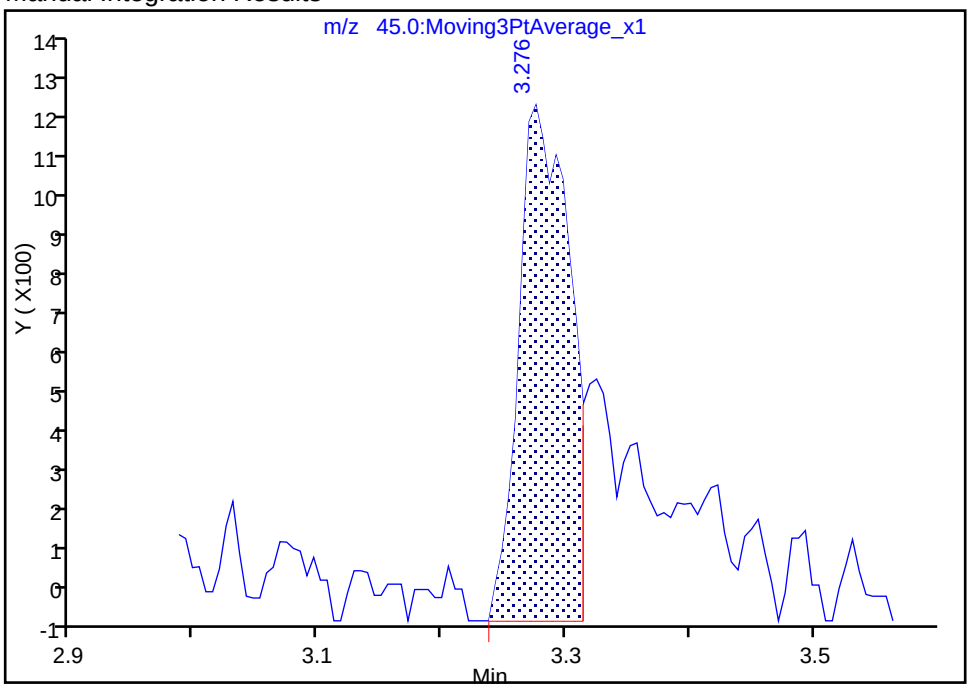
Processing Integration Results

RT: 3.28
Area: 1999
Amount: 129.9199
Amount Units: ug/L



Manual Integration Results

RT: 3.28
Area: 3309
Amount: 195.0385
Amount Units: ug/L



Reviewer: alikpalae, 10-Oct-2017 10:09:28

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009F.D
Lims ID: STD06AP
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 09-Oct-2017 20:13:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD06AP
Misc. Info.: 500-0048264-018
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:49 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.270	3.259	0.011	80	13775	800.0	808.7	
17 Isopropyl alcohol	45	3.907	3.902	0.005	87	17113	200.0	199.7	
18 Acetonitrile	41	4.022	4.011	0.011	94	36473	200.0	191.2	
* 22 TBA-d9 (IS)	65	4.283	4.288	-0.005	0	123606	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	93	209086	20.0	19.8	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	76	127515	20.0	20.1	
32 Tert-butyl ethyl ether	59	5.519	5.519	-0.001	99	181615	20.0	19.6	
36 Propionitrile	54	5.796	5.791	0.005	84	42496	200.0	196.8	
37 Ethyl acetate	43	5.796	5.796	0.000	97	51013	40.0	40.2	
38 Methacrylonitrile	41	5.959	5.959	0.000	91	176321	200.0	203.5	
51 Isooctane	57	6.760	6.760	0.000	96	333797	20.0	19.9	
52 Tert-amyl methyl ether	73	6.803	6.809	-0.006	96	138789	20.0	19.5	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	629411	50.0	50.0	
55 n-Butanol	56	7.364	7.358	0.006	86	20401	500.0	482.9	
57 Ethyl acrylate	55	7.538	7.538	0.000	97	43264	20.0	20.2	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	90	104028	20.0	20.1	
* 61 1,4-Dioxane-d8	96	7.756	7.761	-0.005	0	13072	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	89	55282	40.0	40.9	
66 2-Nitropropane	43	8.229	8.229	0.000	87	18913	40.0	40.4	
79 n-Butyl acetate	43	9.748	9.748	0.000	94	51148	20.0	19.1	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	84	486133	50.0	50.0	
83 1-Chlorohexane	91	10.450	10.445	0.005	56	106058	20.0	20.3	
91 Cyclohexanone	55	12.127	12.127	0.000	93	104713	2000.0	1938.0	
102 2-Ethyltoluene	105	13.210	13.210	0.000	98	358865	20.0	20.0	
103 Pentachloroethane	167	13.406	13.406	0.000	89	35892	20.0	21.6	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	229119	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	93	272492	20.0	20.6	
112 Benzyl chloride	126	14.114	14.114	0.000	97	15236	20.0	19.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	96	103856	20.0	19.7	
121 2-Methylnaphthalene	142	17.424	17.424	0.000	87	36399	20.0	20.2	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	92	29154	20.0	20.9	

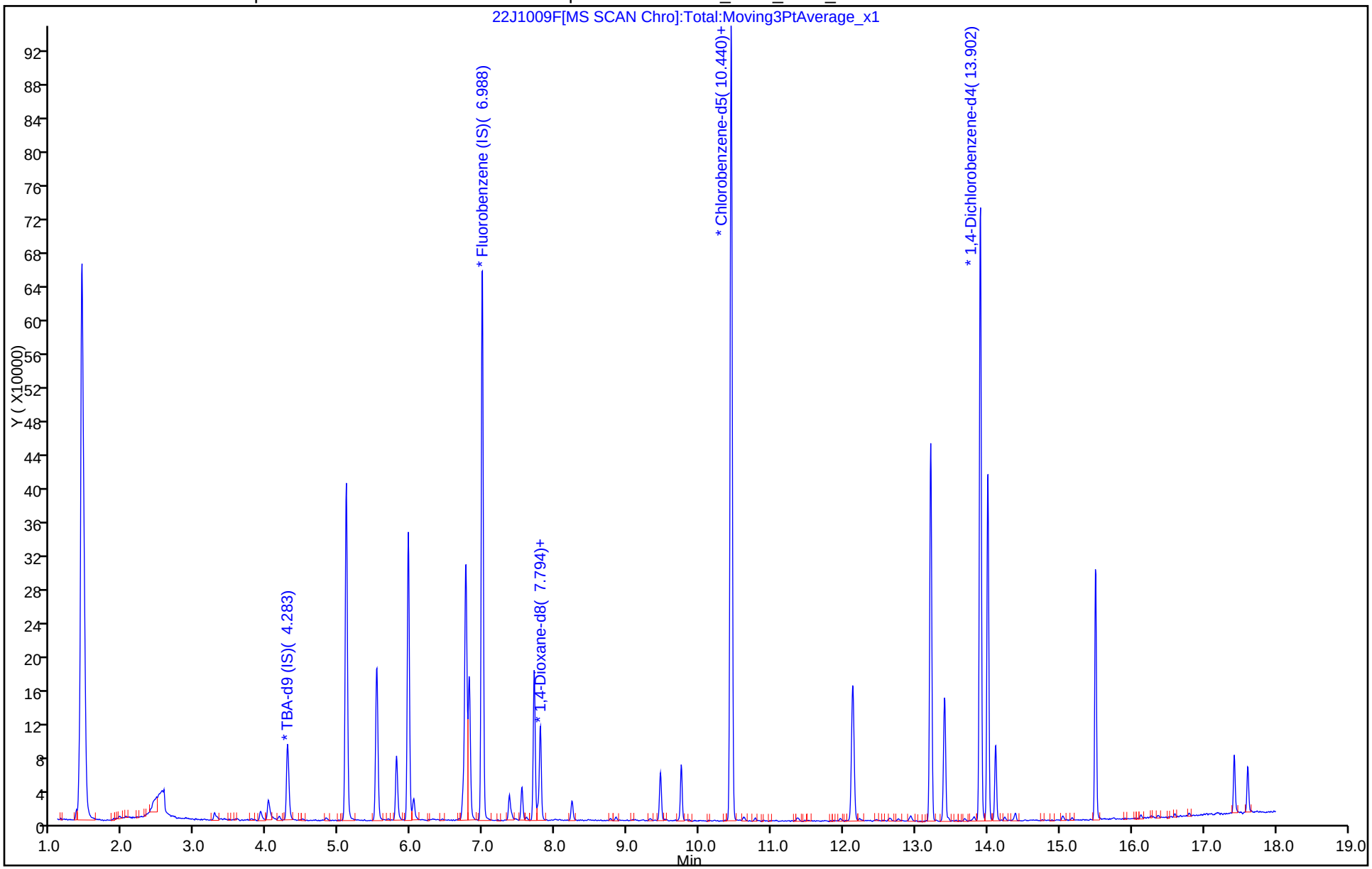
Reagents:

LO8260ADDS_00034	Amount Added: 20.00	Units: uL
LO8260POLRADD_00093	Amount Added: 20.00	Units: uL
LOW8260STD2_00151	Amount Added: 20.00	Units: uL
LOWCYCHXWK_00153	Amount Added: 20.00	Units: uL
LOW2,3-DICP_00063	Amount Added: 20.00	Units: uL
8260 LOWIS1_00112	Amount Added: 5.00	Units: uL
LOW2ETTOL STD_00018	Amount Added: 20.00	Units: uL

Report Date: 10-Oct-2017 10:35:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009F.D				
Injection Date:	09-Oct-2017 20:13:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD06AP			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009G.D
Lims ID: STD07AP
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Oct-2017 20:40:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD07AP
Misc. Info.: 500-0048264-019
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:54 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.259	3.259	0.000	98	32738	2000.0	1954.7	
17 Isopropyl alcohol	45	3.902	3.902	0.000	93	39093	500.0	463.9	
18 Acetonitrile	41	4.011	4.011	0.000	98	89103	500.0	503.0	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	121544	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	94	503207	50.0	50.5	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	74	276451	50.0	46.4	
32 Tert-butyl ethyl ether	59	5.519	5.519	0.000	99	441442	50.0	50.7	
36 Propionitrile	54	5.791	5.791	0.000	94	100565	500.0	494.4	
37 Ethyl acetate	43	5.796	5.796	0.000	98	115902	100.0	96.9	
38 Methacrylonitrile	41	5.959	5.959	0.000	90	401710	500.0	492.2	
51 Isooctane	57	6.760	6.760	0.000	96	775870	50.0	49.1	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	96	338326	50.0	50.5	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	98	592775	50.0	50.0	
55 n-Butanol	56	7.358	7.358	0.000	90	47151	1250.0	1135.0	
57 Ethyl acrylate	55	7.538	7.538	0.000	97	100599	50.0	49.9	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	90	244429	50.0	50.1	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	12925	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	89	122359	100.0	96.2	
66 2-Nitropropane	43	8.229	8.229	0.000	96	42036	100.0	92.6	
79 n-Butyl acetate	43	9.748	9.748	0.000	95	113110	50.0	43.5	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	84	470947	50.0	50.0	
83 1-Chlorohexane	91	10.445	10.445	0.000	72	231383	50.0	46.3	
91 Cyclohexanone	55	12.127	12.127	0.000	93	231496	5000.0	4254.5	
102 2-Ethyltoluene	105	13.210	13.210	0.000	97	860579	50.0	47.7	
103 Pentachloroethane	167	13.406	13.406	0.000	91	87509	50.0	52.3	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	95	230733	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	94	622573	50.0	46.7	
112 Benzyl chloride	126	14.114	14.114	0.000	98	36995	50.0	46.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	98	243419	50.0	45.9	
121 2-Methylnaphthalene	142	17.424	17.424	0.000	91	107283	50.0	50.9	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	89	81258	50.0	51.1	

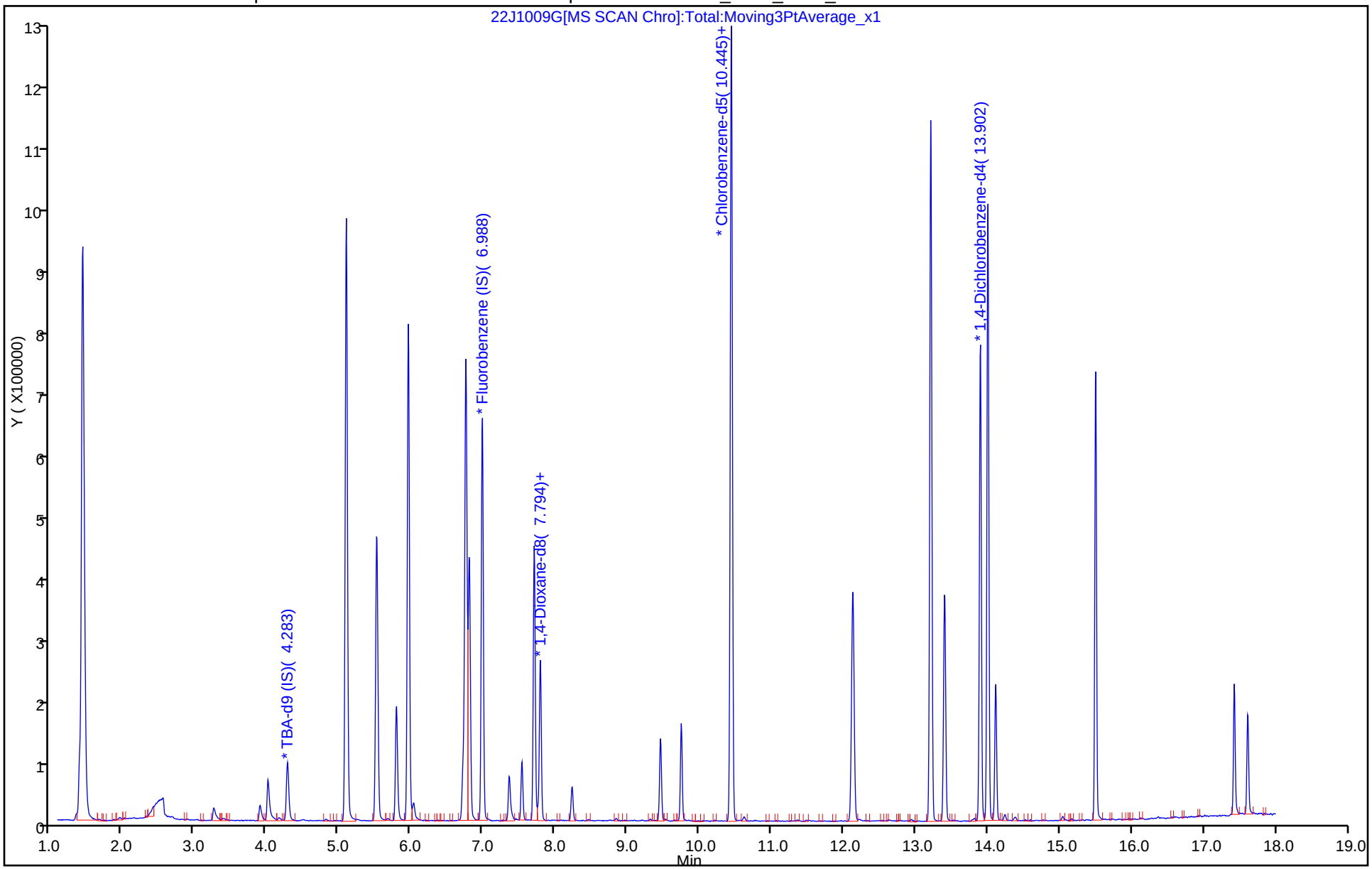
Reagents:

8260ADDS 2016_00054	Amount Added:	2.50	Units: uL
8260POLR ADDS_00129	Amount Added:	2.50	Units: uL
8260/624STD2_00170	Amount Added:	2.50	Units: uL
8260CYCHXWK_00175	Amount Added:	2.50	Units: uL
8260 23DCP WK_00104	Amount Added:	2.50	Units: uL
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL
2ETTOL WK STD_00039	Amount Added:	2.50	Units: uL

Report Date: 10-Oct-2017 10:35:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009G.D				
Injection Date:	09-Oct-2017 20:40:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD07AP			Worklist Smp#:	19
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009H.D
Lims ID: STD08AP
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 09-Oct-2017 21:06:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD08AP
Misc. Info.: 500-0048264-020
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:35:59 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:35:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.254	3.259	-0.005	95	60437	4000.0	3664.7	
17 Isopropyl alcohol	45	3.902	3.902	0.000	97	80238	1000.0	967.0	
18 Acetonitrile	41	4.011	4.011	0.000	99	180032	1000.0	990.9	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	119682	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	93	994983	100.0	97.0	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	79	613879	100.0	99.9	
32 Tert-butyl ethyl ether	59	5.518	5.519	-0.001	99	880554	100.0	98.1	
36 Propionitrile	54	5.791	5.791	0.000	92	199674	1000.0	952.9	
37 Ethyl acetate	43	5.796	5.796	0.000	99	236656	200.0	192.0	
38 Methacrylonitrile	41	5.959	5.959	0.000	91	804257	1000.0	956.6	
51 Isooctane	57	6.760	6.760	0.000	96	1658162	100.0	101.9	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	97	674664	100.0	97.7	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	610641	50.0	50.0	
55 n-Butanol	56	7.358	7.358	0.000	88	95266	2500.0	2328.9	
57 Ethyl acrylate	55	7.538	7.538	0.000	98	197273	100.0	95.1	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	91	506346	100.0	100.7	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	14281	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	89	254746	200.0	194.5	
66 2-Nitropropane	43	8.235	8.229	0.006	94	86284	200.0	195.2	
79 n-Butyl acetate	43	9.748	9.748	0.000	95	229820	100.0	90.8	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	83	458725	50.0	50.0	
83 1-Chlorohexane	91	10.445	10.445	0.000	96	492659	100.0	101.6	
91 Cyclohexanone	55	12.127	12.127	0.000	93	513792	10000	9428.3	
102 2-Ethyltoluene	105	13.210	13.210	0.000	98	1803813	100.0	99.9	
103 Pentachloroethane	167	13.406	13.406	0.000	91	189419	100.0	113.1	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	231085	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	94	1320543	100.0	98.9	
112 Benzyl chloride	126	14.114	14.114	0.000	98	81570	100.0	103.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	97	511418	100.0	96.2	
121 2-Methylnaphthalene	142	17.424	17.424	0.000	94	265776	100.0	103.2	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	88	195046	100.0	102.4	

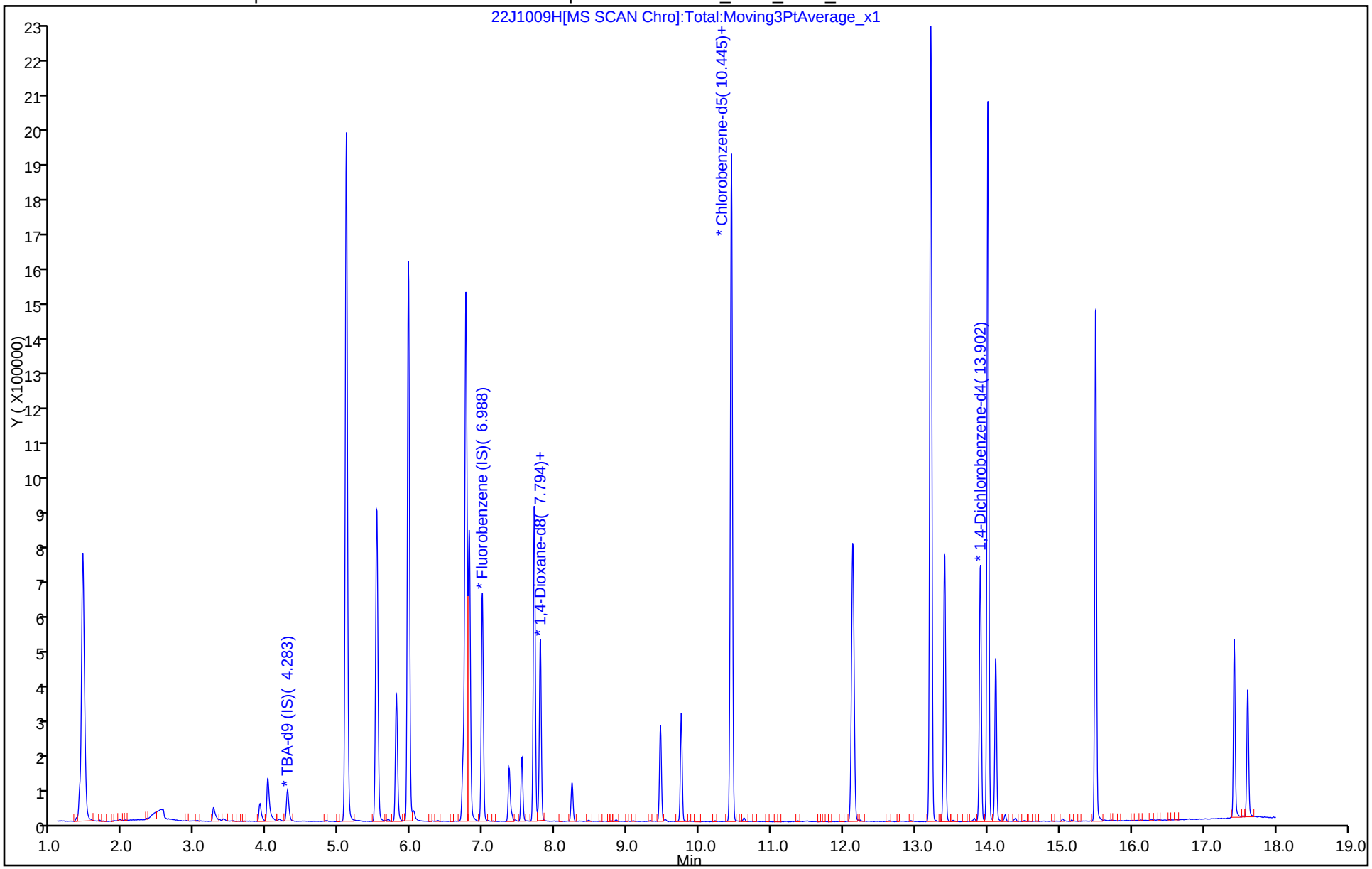
Reagents:

8260ADDS 2016_00054	Amount Added:	5.00	Units: uL
8260POLR ADDS_00129	Amount Added:	5.00	Units: uL
8260/624STD2_00170	Amount Added:	5.00	Units: uL
8260CYCHXWK_00175	Amount Added:	5.00	Units: uL
8260 23DCP WK_00104	Amount Added:	5.00	Units: uL
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL
2ETTOL WK STD_00039	Amount Added:	5.00	Units: uL

Report Date: 10-Oct-2017 10:36:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009H.D				
Injection Date:	09-Oct-2017 21:06:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD08AP			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009I.D
Lims ID: STD09AP
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 09-Oct-2017 21:32:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD09AP
Misc. Info.: 500-0048264-021
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:36:04 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:36:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.276	3.259	0.017	95	135903	6000.0	7143.0	
17 Isopropyl alcohol	45	3.913	3.902	0.011	98	157403	1500.0	1644.3	
18 Acetonitrile	41	4.011	4.011	0.000	100	289682	1500.0	1572.4	
* 22 TBA-d9 (IS)	65	4.294	4.283	0.011	0	138073	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	94	1553156	150.0	149.0	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	79	974662	150.0	156.2	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	99	1379183	150.0	151.3	
36 Propionitrile	54	5.796	5.791	0.005	88	323245	1500.0	1518.7	
37 Ethyl acetate	43	5.796	5.796	0.000	99	370996	300.0	296.4	
38 Methacrylonitrile	41	5.965	5.959	0.006	91	1291258	1500.0	1512.2	
51 Isooctane	57	6.760	6.760	0.000	96	2604958	150.0	157.6	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	96	1046428	150.0	149.2	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	620228	50.0	50.0	
55 n-Butanol	56	7.364	7.358	0.006	88	193281	3750.0	4095.6	
57 Ethyl acrylate	55	7.538	7.538	0.000	98	322789	150.0	153.2	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	91	771887	150.0	151.1	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	15545	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	89	416318	300.0	312.9	
66 2-Nitropropane	43	8.229	8.229	0.000	95	139805	300.0	312.8	
79 n-Butyl acetate	43	9.748	9.748	0.000	95	368563	150.0	144.0	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	71	463801	50.0	50.0	
83 1-Chlorohexane	91	10.450	10.445	0.005	96	778268	150.0	159.0	
91 Cyclohexanone	55	12.132	12.127	0.005	93	961001	15000	17440	
102 2-Ethyltoluene	105	13.210	13.210	0.000	97	2576214	150.0	141.0	
103 Pentachloroethane	167	13.406	13.406	0.000	91	242178	150.0	142.9	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	233668	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	94	2150152	150.0	159.3	
112 Benzyl chloride	126	14.114	14.114	0.000	98	134463	150.0	168.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	97	878826	150.0	163.5	
121 2-Methylnaphthalene	142	17.424	17.424	0.000	92	506785	150.0	161.9	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	89	369152	150.0	161.4	

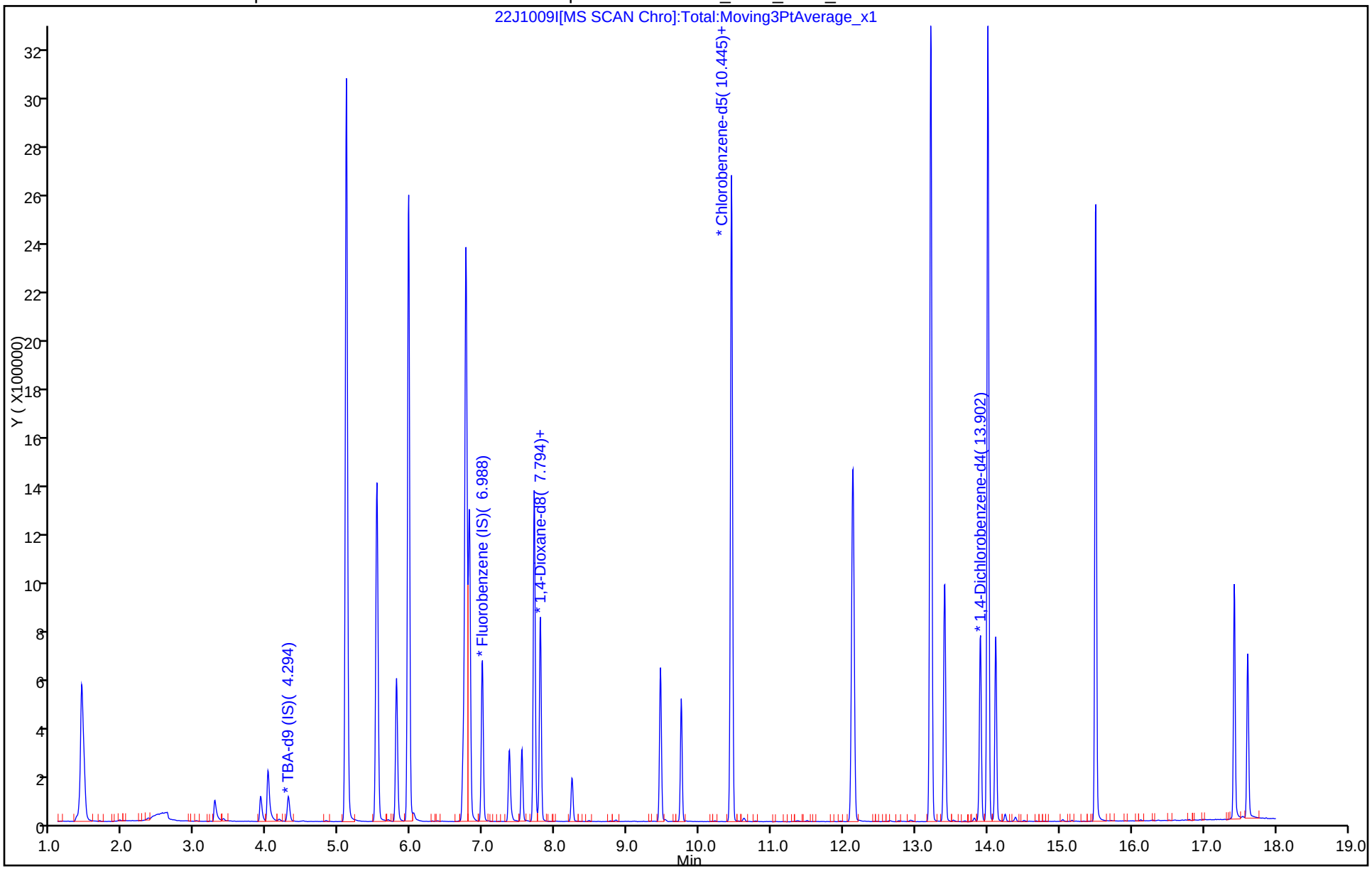
Reagents:

8260ADDS 2016_00054	Amount Added:	7.50	Units: uL
8260POLR ADDS_00129	Amount Added:	7.50	Units: uL
8260/624STD2_00170	Amount Added:	7.50	Units: uL
8260CYCHXWK_00175	Amount Added:	7.50	Units: uL
8260 23DCP WK_00104	Amount Added:	7.50	Units: uL
8260 LOWIS1_00112	Amount Added:	5.00	Units: uL
2ETTOL WK STD_00039	Amount Added:	7.50	Units: uL

Report Date: 10-Oct-2017 10:36:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009I.D				
Injection Date:	09-Oct-2017 21:32:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD09AP			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D
Lims ID: STD10AP
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 09-Oct-2017 21:58:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10AP
Misc. Info.: 500-0048264-022
Operator ID: EA Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub59
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:36:09 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:36:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.254	3.259	-0.005	96	144835	8000.0	8442.7	
17 Isopropyl alcohol	45	3.896	3.902	-0.006	98	172715	2000.0	2001.1	
18 Acetonitrile	41	4.005	4.011	-0.006	99	363722	2000.0	1948.0	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	124495	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	94	2114143	200.0	200.0	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	78	1295185	200.0	204.7	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	99	1860484	200.0	201.2	
36 Propionitrile	54	5.791	5.791	0.000	90	417203	2000.0	1933.1	
37 Ethyl acetate	43	5.796	5.796	0.000	99	484536	400.0	381.7	
38 Methacrylonitrile	41	5.965	5.959	0.006	91	1677848	2000.0	1937.7	
51 Isooctane	57	6.760	6.760	0.000	96	3419973	200.0	204.1	
52 Tert-amyl methyl ether	73	6.808	6.809	-0.001	96	1416725	200.0	199.3	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	628927	50.0	50.0	
55 n-Butanol	56	7.358	7.358	0.000	88	210699	5000.0	4951.7	
57 Ethyl acrylate	55	7.538	7.538	0.000	99	419426	200.0	196.3	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	92	1014688	200.0	195.9	
* 61 1,4-Dioxane-d8	96	7.761	7.756	0.005	0	14710	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	91	531033	400.0	393.6	
66 2-Nitropropane	43	8.235	8.229	0.006	96	182313	400.0	405.6	
79 n-Butyl acetate	43	9.748	9.748	0.000	96	474976	200.0	184.5	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	64	466346	50.0	50.0	
83 1-Chlorohexane	91	10.450	10.445	0.005	96	1014715	200.0	206.3	
91 Cyclohexanone	55	12.132	12.127	0.005	92	1085391	20000	18681	
102 2-Ethyltoluene	105	13.210	13.210	0.000	96	3535480	200.0	183.6	
103 Pentachloroethane	167	13.406	13.406	0.000	90	316670	200.0	177.3	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	94	246376	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	94	2819285	200.0	198.1	
112 Benzyl chloride	126	14.114	14.114	0.000	98	169231	200.0	200.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	97	1152603	200.0	203.4	
121 2-Methylnaphthalene	142	17.423	17.424	-0.001	91	662058	200.0	187.1	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	92	484755	200.0	187.8	

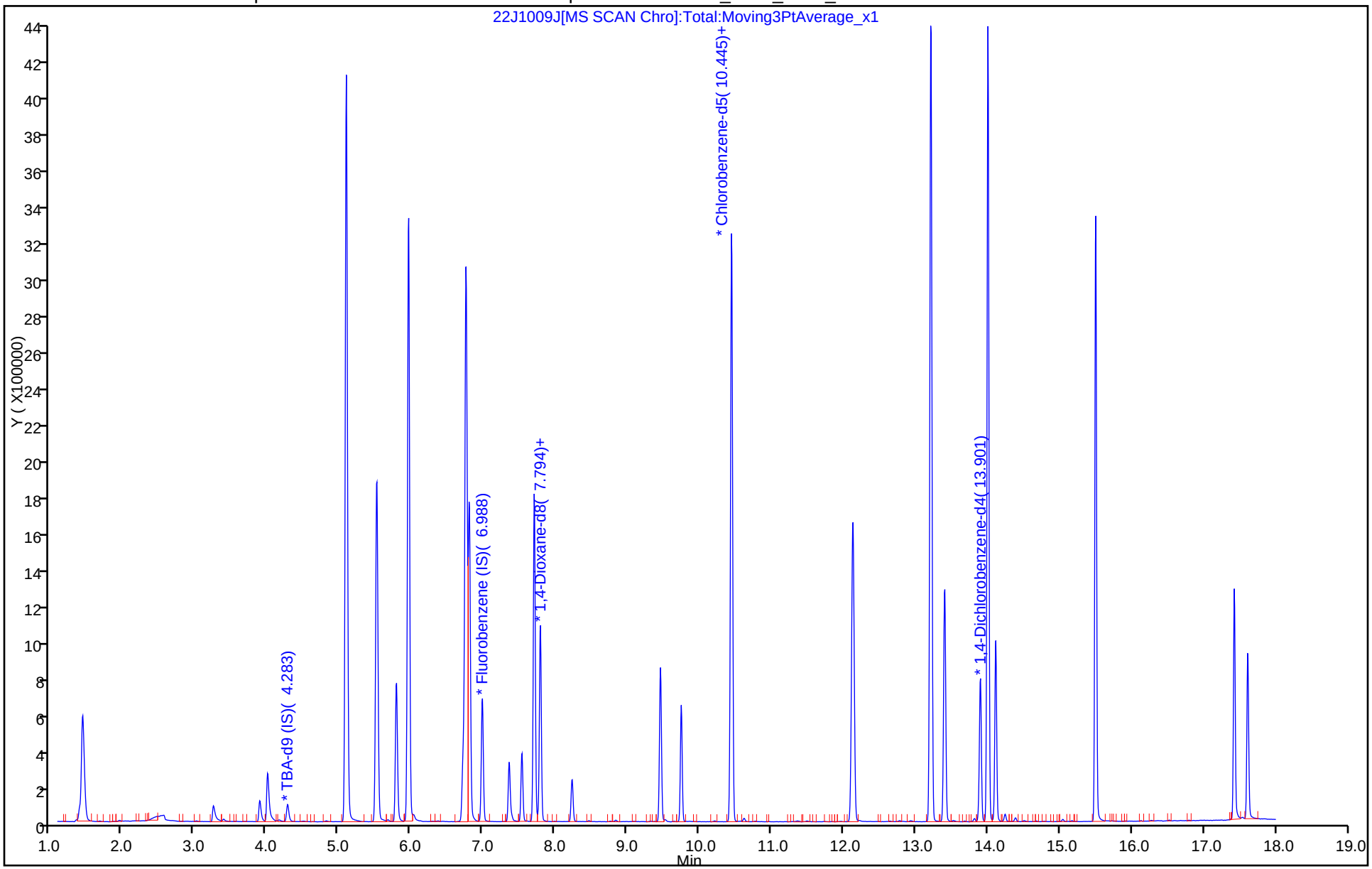
Reagents:

8260ADDS 2016_00054	Amount Added: 10.00	Units: uL
8260POLR ADDS_00129	Amount Added: 10.00	Units: uL
8260/624STD2_00170	Amount Added: 10.00	Units: uL
8260CYCHXWK_00175	Amount Added: 10.00	Units: uL
8260 23DCP WK_00104	Amount Added: 10.00	Units: uL
8260 LOWIS1_00112	Amount Added: 5.00	Units: uL
2ETTOL WK STD_00039	Amount Added: 10.00	Units: uL

Report Date: 10-Oct-2017 10:36:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D				
Injection Date:	09-Oct-2017 21:58:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	STD10AP			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 500-404536/24 Calibration Date: 10/09/2017 22:50

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22S1009ICV1.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3019	0.3037	0.0100	50.3	50.0	0.6	30.0
Chloromethane	Ave	0.4362	0.4079	0.1000	46.8	50.0	-6.5	30.0
Vinyl chloride	Lin2		0.3447	0.0100	49.5	50.0	-1.1	30.0
Butadiene	Ave	0.2861	0.2726	0.0100	47.6	50.0	-4.7	30.0
Bromomethane	Ave	0.2242	0.2063	0.0100	46.0	50.0	-8.0	30.0
Chloroethane	Ave	0.2217	0.1986	0.0100	44.8	50.0	-10.4	30.0
Dichlorofluoromethane	Ave	0.5175	0.5324	0.0100	51.4	50.0	2.9	30.0
Trichlorofluoromethane	Ave	0.5075	0.4681	0.0100	46.1	50.0	-7.8	30.0
Ethyl ether	Ave	0.1566	0.1583	0.0100	50.6	50.0	1.1	30.0
Acrolein	Ave	0.0198	0.0161	0.0010	1630	2000	-18.4	30.0
1,1-Dichloroethene	Ave	0.2737	0.2646	0.0100	48.3	50.0	-3.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3013	0.3021	0.0100	50.1	50.0	0.3	30.0
Acetone	Lin1		0.0250	0.0100	37.9	50.0	-24.1	30.0
Iodomethane	Ave	0.5027	0.5097	0.0100	50.7	50.0	1.4	30.0
Carbon disulfide	Ave	0.9006	0.9119	0.0100	50.6	50.0	1.3	30.0
3-Chloropropene	Ave	0.1517	0.1559	0.0100	51.4	50.0	2.8	30.0
Methyl acetate	Ave	0.0863	0.0786	0.0100	228	250	-8.9	30.0
Methylene Chloride	Ave	0.2565	0.2633	0.0100	51.3	50.0	2.7	30.0
tert-Butyl alcohol	Ave	1.148	1.153	0.0100	502	500	0.5	30.0
Acrylonitrile	Ave	0.0476	0.0465	0.0010	488	500	-2.4	30.0
trans-1,2-Dichloroethene	Ave	0.2951	0.2856	0.0100	48.4	50.0	-3.2	30.0
Methyl tert-butyl ether	Ave	0.4908	0.4845	0.0100	49.4	50.0	-1.3	30.0
Hexane	Ave	0.4928	0.4658	0.0100	47.3	50.0	-5.5	30.0
1,1-Dichloroethane	Ave	0.5117	0.5030	0.1000	49.2	50.0	-1.7	30.0
Vinyl acetate	Ave	0.2502	0.2306	0.0100	46.1	50.0	-7.8	30.0
2,2-Dichloropropane	Ave	0.3839	0.3771	0.0100	49.1	50.0	-1.8	30.0
cis-1,2-Dichloroethene	Ave	0.3108	0.2986	0.0100	48.0	50.0	-3.9	30.0
Methyl Ethyl Ketone	Ave	0.0438	0.0338	0.0100	38.7	50.0	-22.7	30.0
Bromochloromethane	Ave	0.1235	0.1211	0.0100	49.0	50.0	-1.9	30.0
Tetrahydrofuran	Lin1		0.0303	0.0100	94.6	100	-5.4	30.0
Chloroform	Ave	0.4702	0.4452	0.0100	47.3	50.0	-5.3	30.0
1,1,1-Trichloroethane	Ave	0.4585	0.4455	0.0100	48.6	50.0	-2.8	30.0
Cyclohexane	Ave	0.5745	0.5589	0.0100	48.6	50.0	-2.7	30.0
1,1-Dichloropropene	Ave	0.3830	0.3736	0.0100	48.8	50.0	-2.5	30.0
Carbon tetrachloride	Ave	0.4227	0.4123	0.0100	48.8	50.0	-2.5	30.0
Isobutyl alcohol	Ave	0.4710	0.4697	0.0010	1250	1250	-0.3	30.0
Benzene	Ave	1.073	1.031	0.0100	48.1	50.0	-3.8	30.0
1,2-Dichloroethane	Ave	0.2862	0.2748	0.0100	48.0	50.0	-4.0	30.0
Heptane	Ave	0.4621	0.4441	0.0100	48.1	50.0	-3.9	30.0
Trichloroethene	Ave	0.3130	0.3026	0.0100	48.3	50.0	-3.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 500-404536/24 Calibration Date: 10/09/2017 22:50

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22S1009ICV1.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5392	0.5203	0.0100	48.2	50.0	-3.5	30.0
1,2-Dichloropropane	Ave	0.2621	0.2554	0.0100	48.7	50.0	-2.5	30.0
Dibromomethane	Ave	0.1166	0.1160	0.0100	49.7	50.0	-0.5	30.0
1,4-Dioxane	Ave	1.060	0.9768	0.0010	922	1000	-7.8	30.0
Bromodichloromethane	Ave	0.3134	0.3007	0.0100	48.0	50.0	-4.0	30.0
2-Chloroethyl vinyl ether	Ave	0.1084	0.1118	0.0100	51.6	50.0	3.2	30.0
cis-1,3-Dichloropropene	Ave	0.4686	0.4769	0.0100	50.9	50.0	1.8	30.0
methyl isobutyl ketone	Ave	0.1406	0.1070	0.0100	38.0	50.0	-23.9	30.0
Toluene	Ave	0.8815	0.8725	0.0100	49.5	50.0	-1.0	30.0
trans-1,3-Dichloropropene	Ave	0.3771	0.3656	0.0100	48.5	50.0	-3.1	30.0
Ethyl methacrylate	Ave	0.2431	0.2261	0.0100	46.5	50.0	-7.0	30.0
1,1,2-Trichloroethane	Ave	0.2058	0.1992	0.0100	48.4	50.0	-3.2	30.0
Tetrachloroethene	Ave	0.4452	0.4227	0.0100	47.5	50.0	-5.0	30.0
1,3-Dichloropropane	Ave	0.3536	0.3393	0.0100	48.0	50.0	-4.1	30.0
2-Hexanone	Ave	0.0928	0.0700	0.0100	37.7	50.0	-24.6	30.0
Dibromochloromethane	Ave	0.2732	0.2665	0.0100	48.8	50.0	-2.4	30.0
1,2-Dibromoethane	Ave	0.2042	0.1964	0.0100	48.1	50.0	-3.8	30.0
Chlorobenzene	Ave	1.003	0.9753	0.3000	48.6	50.0	-2.7	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3555	0.3653	0.0100	51.4	50.0	2.7	30.0
Ethylbenzene	Ave	0.5595	0.5331	0.0100	47.6	50.0	-4.7	30.0
m&p-Xylene	Ave	1.384	1.288	0.0100	46.5	50.0	-6.9	30.0
o-Xylene	Ave	1.403	1.349	0.0100	48.1	50.0	-3.8	30.0
Styrene	Ave	1.054	1.029	0.0100	48.9	50.0	-2.3	30.0
Bromoform	Ave	0.1543	0.1504	0.1000	48.7	50.0	-2.5	30.0
Isopropylbenzene	Ave	3.797	3.533	0.0100	46.5	50.0	-6.9	30.0
Bromobenzene	Ave	0.8318	0.7979	0.0100	48.0	50.0	-4.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4462	0.4184	0.3000	46.9	50.0	-6.2	30.0
1,2,3-Trichloropropane	Ave	0.4825	0.4577	0.0100	47.4	50.0	-5.1	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1231	0.1170	0.0100	47.5	50.0	-5.0	30.0
N-Propylbenzene	Ave	4.454	4.069	0.0100	45.7	50.0	-8.7	30.0
2-Chlorotoluene	Ave	2.473	2.300	0.0100	46.5	50.0	-7.0	30.0
1,3,5-Trimethylbenzene	Ave	3.053	2.860	0.0100	46.8	50.0	-6.3	30.0
4-Chlorotoluene	Ave	2.814	2.598	0.0100	46.2	50.0	-7.7	30.0
tert-Butylbenzene	Ave	2.831	2.696	0.0100	47.6	50.0	-4.8	30.0
1,2,4-Trimethylbenzene	Ave	3.066	2.822	0.0100	46.0	50.0	-7.9	30.0
sec-Butylbenzene	Ave	4.148	3.879	0.0100	46.8	50.0	-6.5	30.0
1,3-Dichlorobenzene	Ave	1.651	1.541	0.0100	46.7	50.0	-6.6	30.0
p-Isopropyltoluene	Ave	3.535	3.278	0.0100	46.4	50.0	-7.3	30.0
1,4-Dichlorobenzene	Ave	1.609	1.491	0.0100	46.3	50.0	-7.3	30.0
1,2-Dichlorobenzene	Ave	1.405	1.337	0.0100	47.6	50.0	-4.8	30.0
n-Butylbenzene	Ave	3.076	2.802	0.0100	45.6	50.0	-8.9	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 500-404536/24 Calibration Date: 10/09/2017 22:50

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22S1009ICV1.D Conc. Units: ug/L 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	0.0641	0.0658	0.0100	51.4	50.0	2.7	30.0
1,2,4-Trichlorobenzene	Ave	0.8221	0.7687	0.0100	46.7	50.0	-6.5	30.0
Hexachlorobutadiene	Ave	0.7151	0.6540	0.0100	45.7	50.0	-8.5	30.0
Naphthalene	Ave	1.155	1.116	0.0100	48.3	50.0	-3.4	30.0
1,2,3-Trichlorobenzene	Ave	0.6414	0.6280	0.0100	48.9	50.0	-2.1	30.0
Dibromofluoromethane	Ave	0.2675	0.2492	0.0100	46.6	50.0	-6.8	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2405	0.2165	0.0100	45.0	50.0	-10.0	30.0
Toluene-d8 (Surr)	Ave	1.368	1.280	0.0100	46.8	50.0	-6.5	30.0
4-Bromofluorobenzene (Surr)	Ave	0.9866	0.9084	0.0100	46.0	50.0	-7.9	30.0

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV1.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 09-Oct-2017 22:50:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV 1
Misc. Info.: 500-0048264-024
Operator ID: EA Instrument ID: CMS22
Sublist:
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:40:14 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:41:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.626	1.626	0.000	88	189403	50.0	50.3	
2 Chloromethane	50	1.866	1.871	-0.005	88	254408	50.0	46.8	
3 Vinyl chloride	62	2.013	2.018	-0.005	83	214970	50.0	49.5	
4 Butadiene	39	2.045	2.046	-0.001	85	169998	50.0	47.6	
5 Bromomethane	94	2.426	2.427	-0.001	92	128697	50.0	46.0	
6 Chloroethane	64	2.552	2.557	-0.005	93	123847	50.0	44.8	
7 Dichlorofluoromethane	67	2.867	2.868	-0.001	82	332067	50.0	51.4	
8 Trichlorofluoromethane	101	2.884	2.889	-0.005	80	291957	50.0	46.1	
10 Ethyl ether	59	3.303	3.303	0.000	92	98754	50.0	50.6	
11 Acrolein	56	3.455	3.461	-0.006	96	402615	2000.0	1631.5	
12 1,1-Dichloroethene	96	3.548	3.548	0.000	88	165059	50.0	48.3	
13 1,1,2-Trichloro-1,2,2-trif	101	3.586	3.592	-0.006	85	188426	50.0	50.1	
14 Acetone	43	3.678	3.679	-0.001	93	15574	50.0	37.9	M
15 Iodomethane	142	3.722	3.722	0.000	98	317910	50.0	50.7	
16 Carbon disulfide	76	3.782	3.782	0.000	100	568763	50.0	50.6	
19 3-Chloro-1-propene	76	4.010	4.016	-0.006	89	97262	50.0	51.4	
20 Methyl acetate	43	4.070	4.076	-0.006	98	244982	250.0	227.6	
21 Methylene Chloride	84	4.168	4.169	-0.001	96	164256	50.0	51.3	
* 22 TBA-d9 (IS)	65	4.288	4.283	0.005	0	121316	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.381	4.386	-0.005	99	69941	500.0	502.3	
24 Acrylonitrile	53	4.490	4.490	0.000	98	289828	500.0	488.2	
25 trans-1,2-Dichloroethene	96	4.490	4.495	-0.005	92	178152	50.0	48.4	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	91	302220	50.0	49.4	
27 Hexane	57	4.822	4.822	0.000	90	290551	50.0	47.3	
28 1,1-Dichloroethane	63	4.996	4.996	0.000	86	313751	50.0	49.2	
29 Vinyl acetate	43	5.083	5.089	-0.005	99	143837	50.0	46.1	
33 2,2-Dichloropropane	77	5.671	5.671	0.000	74	235231	50.0	49.1	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	88	186259	50.0	48.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.725	5.725	0.000	92	21099	50.0	38.7	M
39 Chlorobromomethane	128	5.954	5.954	0.000	93	75518	50.0	49.0	
40 Tetrahydrofuran	42	6.014	6.014	0.000	80	37792	100.0	94.6	
41 Chloroform	83	6.057	6.057	0.000	84	277712	50.0	47.3	
$ 42 Dibromofluoromethane	113	6.242	6.243	-0.001	71	155448	50.0	46.6	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	91	277886	50.0	48.6	
44 Cyclohexane	56	6.302	6.302	0.000	91	348581	50.0	48.6	
46 1,1-Dichloropropene	75	6.433	6.433	0.000	91	233021	50.0	48.8	
45 Carbon tetrachloride	117	6.433	6.433	0.000	81	257162	50.0	48.8	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.613	6.613	0.000	0	135028	50.0	45.0	
48 Isobutyl alcohol	43	6.623	6.624	-0.001	75	71222	1250.0	1246.5	
49 Benzene	78	6.667	6.673	-0.006	98	643357	50.0	48.1	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	90	171414	50.0	48.0	
54 n-Heptane	43	6.972	6.977	-0.005	89	277019	50.0	48.1	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	96	623740	50.0	50.0	
56 Trichloroethene	130	7.396	7.397	-0.001	89	188716	50.0	48.3	
58 Methylcyclohexane	83	7.603	7.603	0.000	94	324556	50.0	48.2	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	92	159309	50.0	48.7	
* 61 1,4-Dioxane-d8	96	7.761	7.756	0.005	0	15504	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	92	72348	50.0	49.7	
63 1,4-Dioxane	88	7.816	7.816	0.000	89	15144	1000.0	921.6	
65 Dichlorobromomethane	83	7.963	7.968	-0.005	91	187579	50.0	48.0	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	89	53378	50.0	51.6	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	93	227626	50.0	50.9	
69 4-Methyl-2-pentanone (MIBK	43	8.648	8.649	-0.001	94	51049	50.0	38.0	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	94	610687	50.0	46.8	
71 Toluene	92	8.839	8.839	0.000	94	416437	50.0	49.5	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	91	174468	50.0	48.5	
73 Ethyl methacrylate	69	9.204	9.204	0.000	89	107890	50.0	46.5	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	87	95055	50.0	48.4	
75 Tetrachloroethene	166	9.460	9.460	0.000	90	201749	50.0	47.5	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	91	161915	50.0	48.0	
77 2-Hexanone	43	9.601	9.601	0.000	95	33389	50.0	37.7	
78 Chlorodibromomethane	129	9.759	9.759	0.000	85	127205	50.0	48.8	
80 Ethylene Dibromide	107	9.890	9.890	0.000	99	93712	50.0	48.1	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	85	477275	50.0	50.0	
82 Chlorobenzene	112	10.477	10.478	-0.001	94	465486	50.0	48.6	
84 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	90	174325	50.0	51.4	
85 Ethylbenzene	106	10.619	10.619	0.000	98	254434	50.0	47.6	
86 m-Xylene & p-Xylene	91	10.777	10.777	0.000	0	614535	50.0	46.5	
87 o-Xylene	91	11.348	11.349	-0.001	94	643846	50.0	48.1	
88 Styrene	104	11.370	11.370	0.000	93	491328	50.0	48.9	
89 Bromoform	173	11.664	11.664	0.000	96	71761	50.0	48.7	
90 Isopropylbenzene	105	11.958	11.958	0.000	97	846310	50.0	46.5	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	92	217609	50.0	46.0	
94 Bromobenzene	156	12.459	12.459	0.000	92	191141	50.0	48.0	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.486	0.000	90	100234	50.0	46.9	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	87	109642	50.0	47.4	
97 trans-1,4-Dichloro-2-buten	53	12.579	12.579	0.000	87	28021	50.0	47.5	
98 N-Propylbenzene	91	12.649	12.650	-0.001	97	974594	50.0	45.7	
99 2-Chlorotoluene	91	12.769	12.769	0.000	97	550844	50.0	46.5	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	91	685089	50.0	46.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
100 4-Chlorotoluene	91	12.933	12.933	-0.001	93	622275	50.0	46.2	
104 tert-Butylbenzene	119	13.384	13.385	-0.001	91	645730	50.0	47.6	
105 1,2,4-Trimethylbenzene	105	13.455	13.455	0.000	94	676025	50.0	46.0	
106 sec-Butylbenzene	105	13.684	13.684	0.000	94	929110	50.0	46.8	
107 1,3-Dichlorobenzene	146	13.814	13.815	-0.001	98	369239	50.0	46.7	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	94	785205	50.0	46.4	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	95	239545	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	94	357099	50.0	46.3	
113 1,2-Dichlorobenzene	146	14.386	14.386	0.000	67	320321	50.0	47.6	
114 n-Butylbenzene	91	14.386	14.386	0.000	95	671217	50.0	45.6	
115 1,2-Dibromo-3-Chloropropan	75	15.279	15.279	0.000	55	15763	50.0	51.4	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	93	184126	50.0	46.7	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	95	156662	50.0	45.7	
119 Naphthalene	128	16.367	16.368	-0.001	99	267393	50.0	48.3	
120 1,2,3-Trichlorobenzene	180	16.596	16.596	0.000	93	150425	50.0	48.9	
S 123 1,2-Dichloroethene, Total	96				0		100.0	96.4	
S 124 Xylenes, Total	91				0		100.0	94.6	

QC Flag Legend

Review Flags

M - Manually Integrated

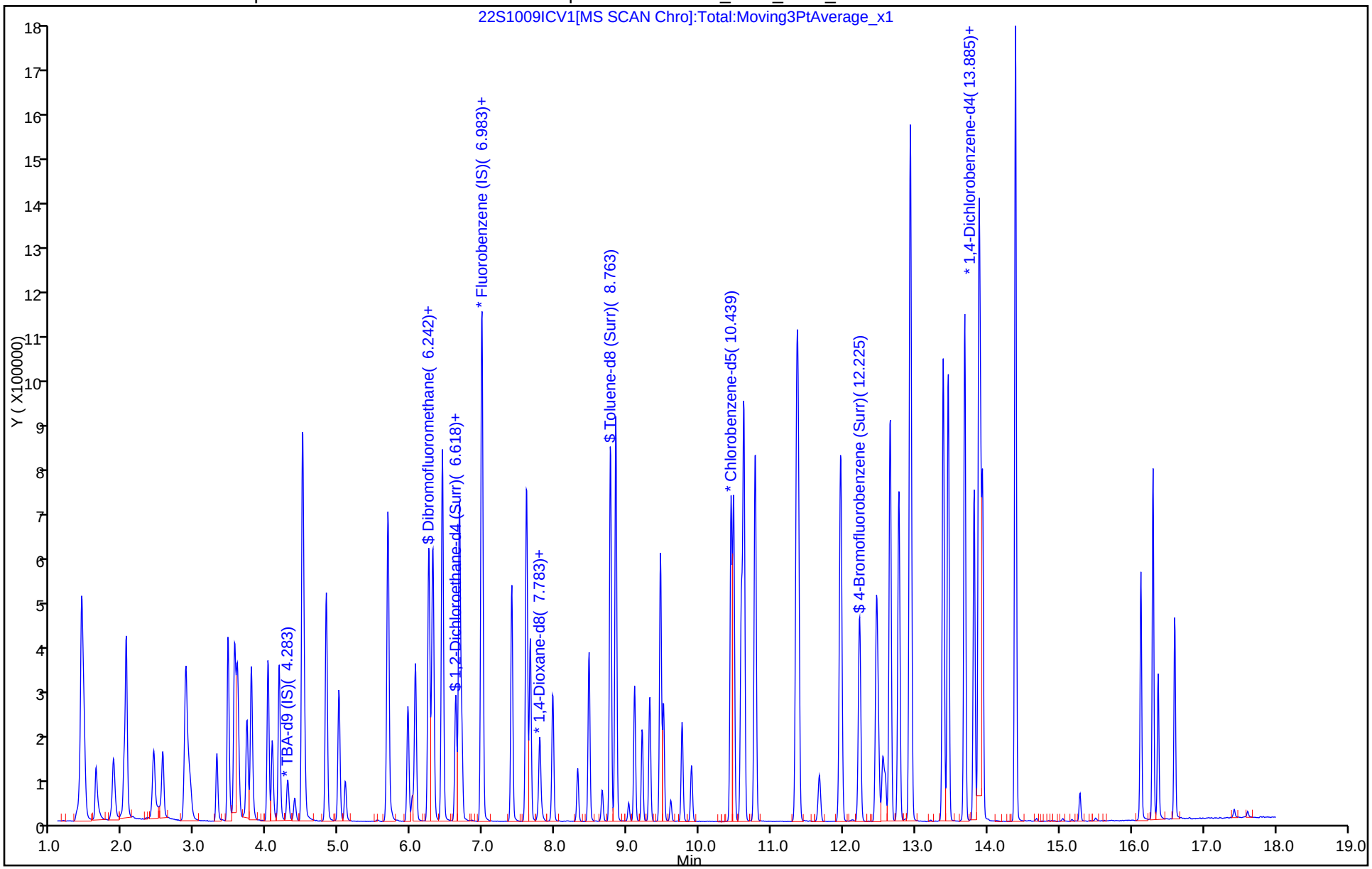
Reagents:

8260 ACR SPK_00133	Amount Added:	5.00	Units: uL	
8260 GAS SPK_00133	Amount Added:	5.00	Units: uL	
8260 KET SPK_00104	Amount Added:	5.00	Units: uL	
8260 MEGA SPK_00108	Amount Added:	5.00	Units: uL	
VA/2CEVE SPK_00118	Amount Added:	5.00	Units: uL	
8260LOW IS/SS_00153	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 10-Oct-2017 10:41:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV1.D				
Injection Date:	09-Oct-2017 22:50:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	ICV			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



Manual Integration/User Assign Peak Report

TestAmerica Chicago

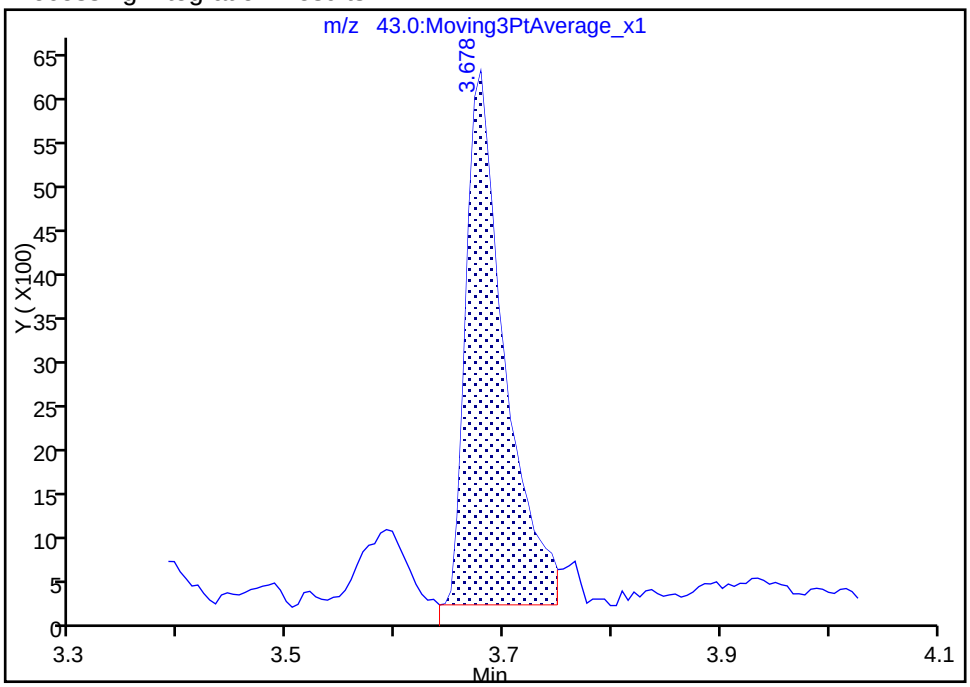
Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV1.D				
Injection Date:	09-Oct-2017 22:50:30	Instrument ID:	CMS22		
Lims ID:	ICV				
Client ID:					
Operator ID:	EA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

14 Acetone, CAS: 67-64-1

Signal: 1

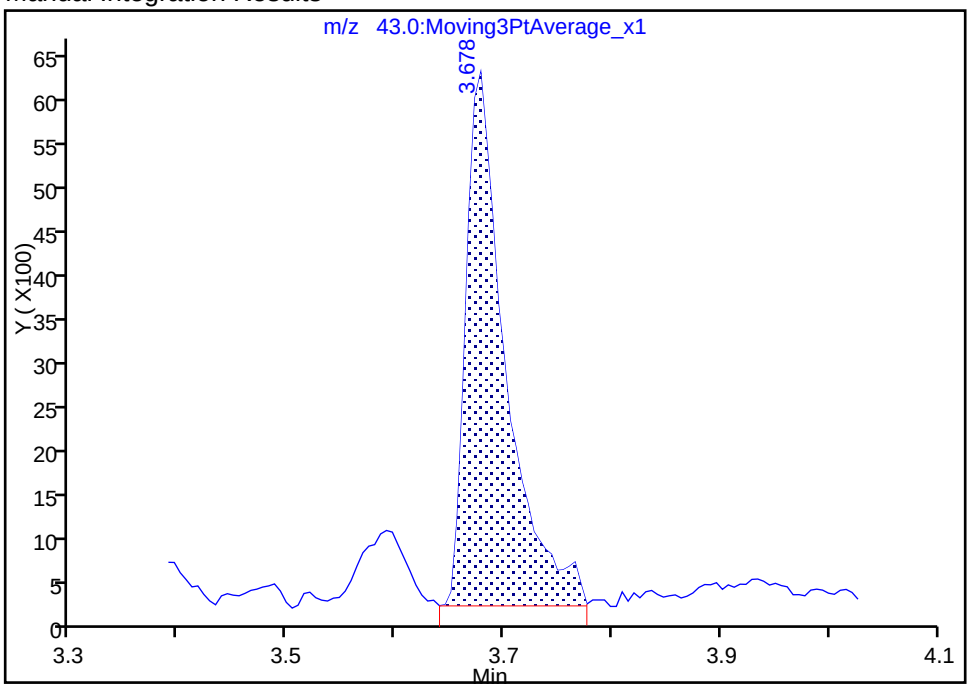
Processing Integration Results

RT: 3.68
Area: 15027
Amount: 36.486231
Amount Units: ug/L



Manual Integration Results

RT: 3.68
Area: 15574
Amount: 37.944695
Amount Units: ug/L



Reviewer: alikpalae, 10-Oct-2017 10:32:14

Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Chicago

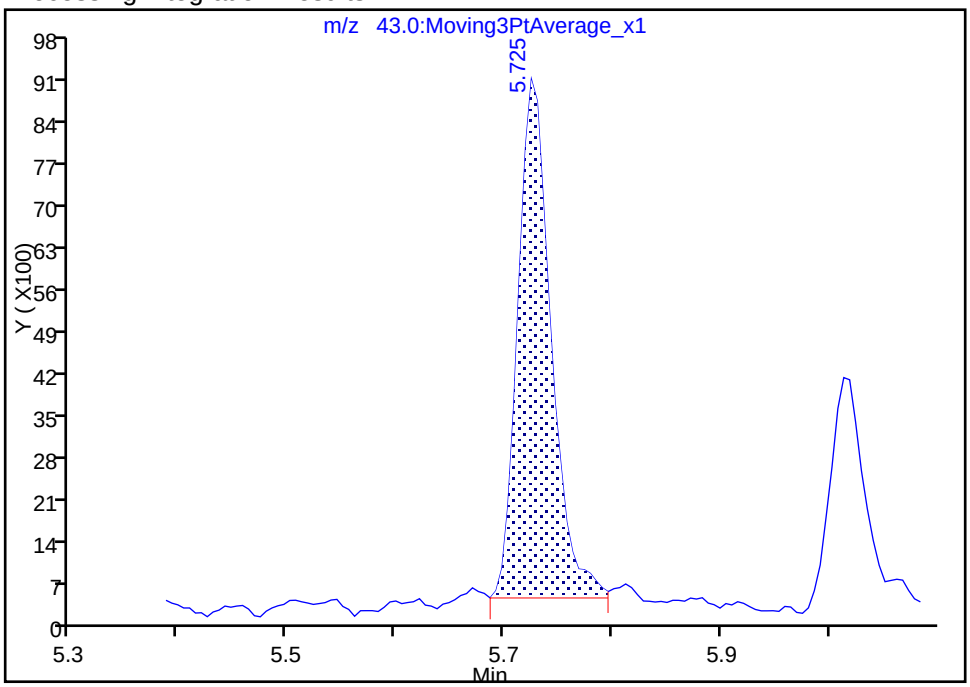
Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV1.D				
Injection Date:	09-Oct-2017 22:50:30	Instrument ID:	CMS22		
Lims ID:	ICV				
Client ID:					
Operator ID:	EA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Column:		Detector	MS SCAN		

35 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

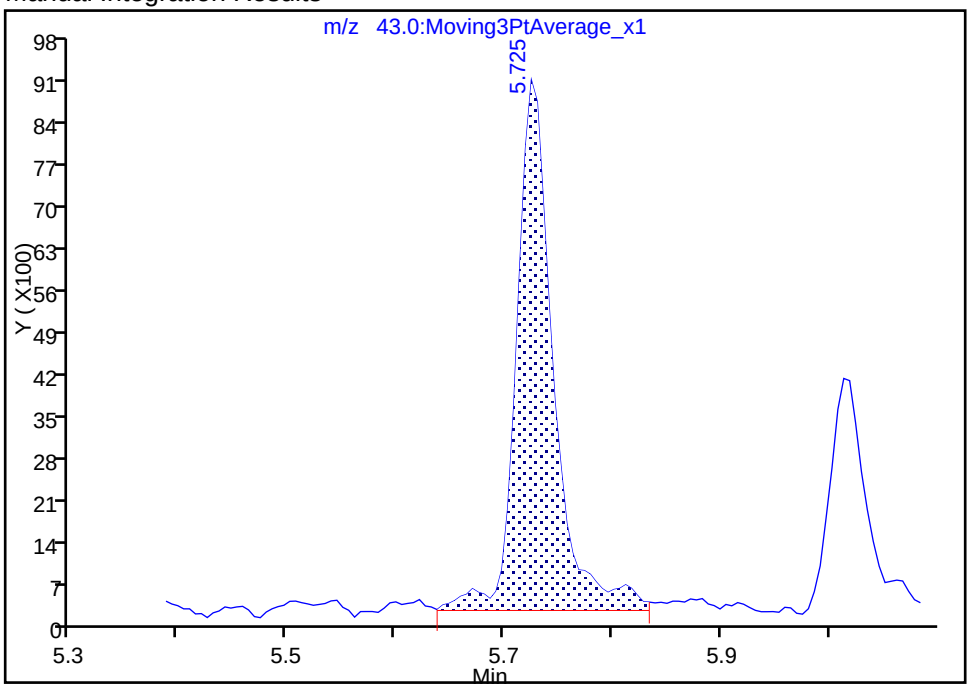
Processing Integration Results

RT: 5.73
Area: 18492
Amount: 33.878451
Amount Units: ug/L



Manual Integration Results

RT: 5.73
Area: 21099
Amount: 38.654631
Amount Units: ug/L



Reviewer: alikpalae, 10-Oct-2017 10:31:06

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 500-404536/25 Calibration Date: 10/09/2017 23:16

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22S1009ICV2.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane	Ave	0.2675	0.2488	0.0100	46.5	50.0	-7.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2405	0.2188	0.0100	45.5	50.0	-9.0	30.0
Toluene-d8 (Surr)	Ave	1.368	1.298	0.0100	47.4	50.0	-5.1	30.0
4-Bromofluorobenzene (Surr)	Ave	0.9866	0.9123	0.0100	46.2	50.0	-7.5	30.0

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV2.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 09-Oct-2017 23:16:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV 2
Misc. Info.: 500-0048264-025
Operator ID: EA Instrument ID: CMS22
Sublist:
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:40:14 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:41:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.265	3.259	0.006	97	40357	2000.0	2416.4	
17 Isopropyl alcohol	45	3.902	3.902	0.000	93	47359	500.0	563.6	
18 Acetonitrile	41	4.016	4.011	0.005	100	90872	500.0	487.6	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	121200	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	93	529062	50.0	50.5	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	77	314506	50.0	50.2	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	99	450871	50.0	49.2	
36 Propionitrile	54	5.796	5.791	0.005	88	108500	500.0	507.1	
37 Ethyl acetate	43	5.796	5.796	0.000	98	126985	100.0	100.9	
38 Methacrylonitrile	41	5.959	5.959	0.000	91	433166	500.0	504.7	
$ 42 Dibromofluoromethane	113	6.237	6.243	-0.006	80	155095	50.0	46.5	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.613	6.613	0.000	0	136427	50.0	45.5	
51 Isooctane	57	6.760	6.760	0.000	96	834336	50.0	50.2	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	97	346299	50.0	49.1	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	623453	50.0	50.0	
55 n-Butanol	56	7.364	7.358	0.006	88	52874	1250.0	1276.4	
57 Ethyl acrylate	55	7.538	7.538	0.000	98	109044	50.0	51.5	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	91	257775	50.0	50.2	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	15641	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	88	137302	100.0	102.7	
66 2-Nitropropane	43	8.229	8.229	0.000	95	48067	100.0	105.7	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	94	612567	50.0	47.4	
79 n-Butyl acetate	43	9.748	9.748	0.000	94	126184	50.0	48.4	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	471866	50.0	50.0	
83 1-Chlorohexane	91	10.445	10.445	0.000	78	266071	50.0	53.1	
91 Cyclohexanone	55	12.127	12.127	0.000	92	272822	5000.0	4880.6	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	93	216253	50.0	46.2	
102 2-Ethyltoluene	105	13.210	13.210	0.000	96	893983	50.0	48.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
103 Pentachloroethane	167	13.406	13.406	0.000	90	99065	50.0	57.6	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	95	237043	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	94	733969	50.0	53.6	
112 Benzyl chloride	126	14.114	14.114	0.000	98	40309	50.0	49.7	
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	97	280945	50.0	51.5	
121 2-Methylnaphthalene	142	17.423	17.424	-0.001	81	113112	50.0	52.0	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	85	92628	50.0	55.7	

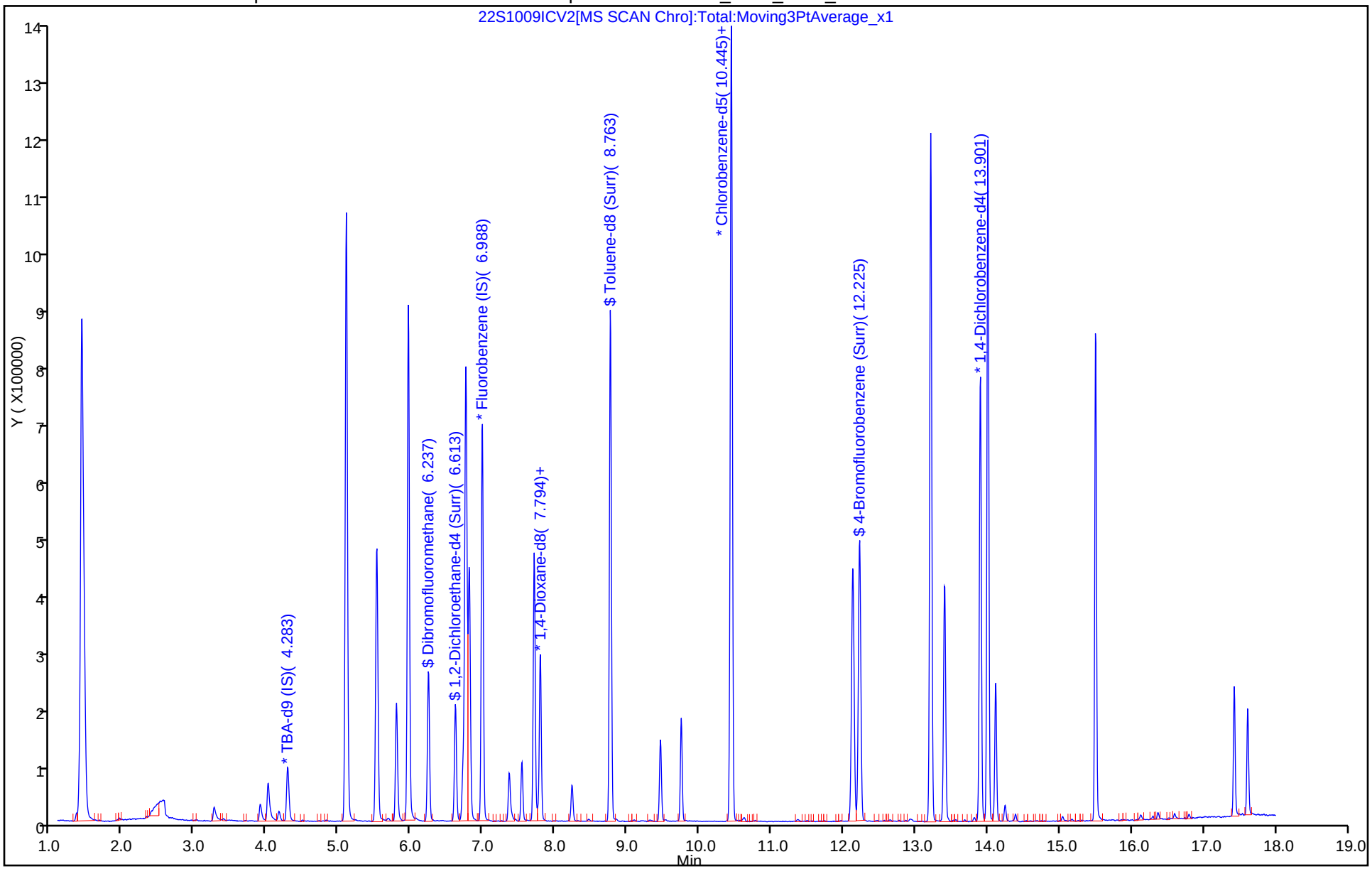
Reagents:

2,3DCLP SPK_00047	Amount Added:	5.00	Units: uL	
2ETTOL SPK_00014	Amount Added:	5.00	Units: uL	
8260 ADDS SPK_00093	Amount Added:	5.00	Units: uL	
CYCLOHEX SPK_00228	Amount Added:	5.00	Units: uL	
POLRADDSSPK_00074	Amount Added:	5.00	Units: uL	
STD 2 SPK_00096	Amount Added:	5.00	Units: uL	
8260LOW IS/SS_00153	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 10-Oct-2017 10:41:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV2.D				
Injection Date:	09-Oct-2017 23:16:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	ICV			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 500-404536/25 Calibration Date: 10/09/2017 23:16

Instrument ID: CMS22 Calib Start Date: 10/09/2017 18:55

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 21:58

Lab File ID: 22S1009ICV2.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Ave	0.1378	0.1665	0.0010	2420	2000	20.8	30.0
Isopropyl alcohol	Ave	0.6933	0.7815	0.0010	564	500	12.7	30.0
Acetonitrile	Lin1		0.0146	0.0010	488	500	-2.5	30.0
2-Chloro-1,3-butadiene	Ave	0.5029	0.5045	0.0100	50.2	50.0	0.3	30.0
Isopropyl ether	Ave	0.8402	0.8486	0.0100	50.5	50.0	1.0	30.0
Tert-butyl ethyl ether	Ave	0.7351	0.7232	0.0010	49.2	50.0	-1.6	30.0
Ethyl acetate	Ave	0.1009	0.1018	0.0100	101	100	0.9	30.0
Propionitrile	Ave	0.0172	0.0174	0.0010	507	500	1.4	30.0
Methacrylonitrile	Ave	0.0688	0.0695	0.0100	505	500	0.9	30.0
Isooctane	Ave	1.332	1.338	0.0100	50.2	50.0	0.5	30.0
Tert-amyl methyl ether	Ave	0.5652	0.5555	0.0100	49.1	50.0	-1.7	30.0
n-Butyl alcohol	Ave	0.3418	0.3490	0.0010	1280	1250	2.1	30.0
Ethyl acrylate	Ave	0.1699	0.1749	0.0010	51.5	50.0	3.0	30.0
2,3-Dichloro-1-propene	Ave	0.4118	0.4135	0.0010	50.2	50.0	0.4	30.0
Methyl methacrylate	Ave	0.1073	0.1101	0.0100	103	100	2.7	30.0
2-Nitropropane	Ave	0.0482	0.0509	0.0100	106	100	5.7	30.0
n-Butyl acetate	Ave	0.2760	0.2674	0.0010	48.4	50.0	-3.1	30.0
1-Chlorohexane	Lin2		0.5639	0.0100	53.1	50.0	6.3	30.0
Cyclohexanone	Ave	0.0118	0.0115	0.0100	4880	5000	-2.4	30.0
2-Ethyltoluene	Ave	3.909	3.771	0.0010	48.2	50.0	-3.5	30.0
Pentachloroethane	Ave	0.3625	0.4179	0.0100	57.6	50.0	15.3	30.0
1,2,3-Trimethylbenzene	Ave	2.889	3.096	0.0010	53.6	50.0	7.2	30.0
Benzyl chloride	Ave	0.1710	0.1701	0.0010	49.7	50.0	-0.6	30.0
1,3,5-Trichlorobenzene	Ave	1.150	1.185	0.0100	51.5	50.0	3.0	30.0
2-Methylnaphthalene	Qua2		0.4772	0.0100	52.0	50.0	4.0	30.0
1-Methylnaphthalene	Qua2		0.3908	0.0100	55.7	50.0	11.3	30.0

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV2.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 09-Oct-2017 23:16:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV 2
Misc. Info.: 500-0048264-025
Operator ID: EA Instrument ID: CMS22
Sublist:
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 10-Oct-2017 10:40:14 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: alikpalae Date: 10-Oct-2017 10:41:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.265	3.259	0.006	97	40357	2000.0	2416.4	
17 Isopropyl alcohol	45	3.902	3.902	0.000	93	47359	500.0	563.6	
18 Acetonitrile	41	4.016	4.011	0.005	100	90872	500.0	487.6	
* 22 TBA-d9 (IS)	65	4.283	4.283	0.000	0	121200	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	93	529062	50.0	50.5	
30 2-Chloro-1,3-butadiene	53	5.099	5.099	0.000	77	314506	50.0	50.2	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	99	450871	50.0	49.2	
36 Propionitrile	54	5.796	5.791	0.005	88	108500	500.0	507.1	
37 Ethyl acetate	43	5.796	5.796	0.000	98	126985	100.0	100.9	
38 Methacrylonitrile	41	5.959	5.959	0.000	91	433166	500.0	504.7	
$ 42 Dibromofluoromethane	113	6.237	6.243	-0.006	80	155095	50.0	46.5	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.613	6.613	0.000	0	136427	50.0	45.5	
51 Isooctane	57	6.760	6.760	0.000	96	834336	50.0	50.2	
52 Tert-amyl methyl ether	73	6.809	6.809	0.000	97	346299	50.0	49.1	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	623453	50.0	50.0	
55 n-Butanol	56	7.364	7.358	0.006	88	52874	1250.0	1276.4	
57 Ethyl acrylate	55	7.538	7.538	0.000	98	109044	50.0	51.5	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	91	257775	50.0	50.2	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	15641	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	88	137302	100.0	102.7	
66 2-Nitropropane	43	8.229	8.229	0.000	95	48067	100.0	105.7	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	94	612567	50.0	47.4	
79 n-Butyl acetate	43	9.748	9.748	0.000	94	126184	50.0	48.4	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	84	471866	50.0	50.0	
83 1-Chlorohexane	91	10.445	10.445	0.000	78	266071	50.0	53.1	
91 Cyclohexanone	55	12.127	12.127	0.000	92	272822	5000.0	4880.6	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.225	0.000	93	216253	50.0	46.2	
102 2-Ethyltoluene	105	13.210	13.210	0.000	96	893983	50.0	48.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
103 Pentachloroethane	167	13.406	13.406	0.000	90	99065	50.0	57.6	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	95	237043	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	94	733969	50.0	53.6	
112 Benzyl chloride	126	14.114	14.114	0.000	98	40309	50.0	49.7	
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	97	280945	50.0	51.5	
121 2-Methylnaphthalene	142	17.423	17.424	-0.001	81	113112	50.0	52.0	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	85	92628	50.0	55.7	

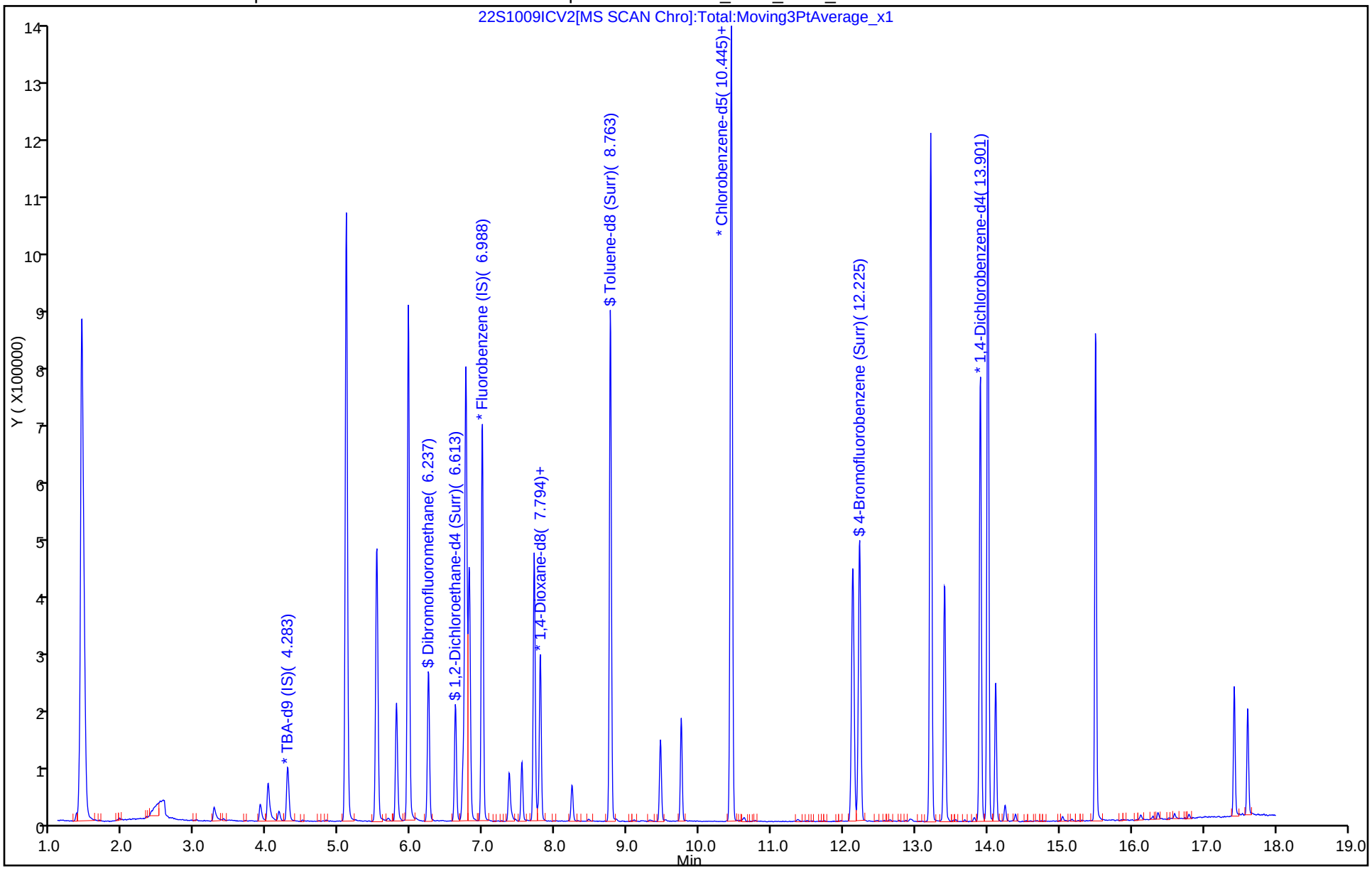
Reagents:

2,3DCLP SPK_00047	Amount Added:	5.00	Units: uL	
2ETTOL SPK_00014	Amount Added:	5.00	Units: uL	
8260 ADDS SPK_00093	Amount Added:	5.00	Units: uL	
CYCLOHEX SPK_00228	Amount Added:	5.00	Units: uL	
POLRADDSSPK_00074	Amount Added:	5.00	Units: uL	
STD 2 SPK_00096	Amount Added:	5.00	Units: uL	
8260LOW IS/SS_00153	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 10-Oct-2017 10:41:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22S1009ICV2.D				
Injection Date:	09-Oct-2017 23:16:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	ICV			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCVIS 500-408477/2 Calibration Date: 11/05/2017 11:33

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22C1105.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3019	0.1976	0.0100	32.7	50.0	-34.6	50.0
Chloromethane	Ave	0.4362	0.3027	0.1000	34.7	50.0	-30.6	50.0
Vinyl chloride	Lin2		0.2889	0.0100	41.4	50.0	-17.1	20.0
Butadiene	Ave	0.2861	0.2064	0.0100	36.1	50.0	-27.9	50.0
Bromomethane	Ave	0.2242	0.1521	0.0100	33.9	50.0	-32.2	50.0
Chloroethane	Ave	0.2217	0.1827	0.0100	41.2	50.0	-17.6	50.0
Dichlorofluoromethane	Ave	0.5175	0.4392	0.0100	42.4	50.0	-15.1	50.0
Trichlorofluoromethane	Ave	0.5075	0.4029	0.0100	39.7	50.0	-20.6	50.0
Ethyl ether	Ave	0.1566	0.1622	0.0100	51.8	50.0	3.6	50.0
Acrolein	Ave	0.0198	0.0161	0.0010	1630	2000	-18.6	50.0
1,1-Dichloroethene	Ave	0.2737	0.2655	0.0100	48.5	50.0	-3.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3013	0.2846	0.0100	47.2	50.0	-5.6	50.0
Acetone	Lin1		0.0273	0.0100	41.9	50.0	-16.2	50.0
Iodomethane	Ave	0.5027	0.4751	0.0100	47.3	50.0	-5.5	50.0
Carbon disulfide	Ave	0.9006	0.9147	0.0100	50.8	50.0	1.6	50.0
3-Chloropropene	Ave	0.1517	0.1575	0.0100	51.9	50.0	3.8	50.0
Methyl acetate	Ave	0.0863	0.0768	0.0100	89.0	100	-11.0	50.0
Methylene Chloride	Ave	0.2565	0.2540	0.0100	49.5	50.0	-1.0	50.0
tert-Butyl alcohol	Ave	1.148	1.125	0.0100	490	500	-2.0	50.0
Acrylonitrile	Ave	0.0476	0.0488	0.0010	512	500	2.4	50.0
trans-1,2-Dichloroethene	Ave	0.2951	0.2865	0.0100	48.5	50.0	-2.9	50.0
Methyl tert-butyl ether	Ave	0.4908	0.4746	0.0100	48.4	50.0	-3.3	50.0
Hexane	Ave	0.4928	0.5189	0.0100	52.6	50.0	5.3	50.0
1,1-Dichloroethane	Ave	0.5117	0.5074	0.1000	49.6	50.0	-0.8	50.0
Vinyl acetate	Ave	0.2502	0.2312	0.0100	46.2	50.0	-7.6	50.0
2,2-Dichloropropane	Ave	0.3839	0.3747	0.0100	48.8	50.0	-2.4	50.0
cis-1,2-Dichloroethene	Ave	0.3108	0.2939	0.0100	47.3	50.0	-5.4	50.0
Methyl Ethyl Ketone	Ave	0.0438	0.0378	0.0100	43.2	50.0	-13.7	50.0
Bromochloromethane	Ave	0.1235	0.1150	0.0100	46.6	50.0	-6.8	50.0
Tetrahydrofuran	Lin1		0.0283	0.0100	87.9	100	-12.1	50.0
Chloroform	Ave	0.4702	0.4335	0.0100	46.1	50.0	-7.8	20.0
1,1,1-Trichloroethane	Ave	0.4585	0.4400	0.0100	48.0	50.0	-4.0	50.0
Cyclohexane	Ave	0.5745	0.6016	0.0100	52.4	50.0	4.7	50.0
Carbon tetrachloride	Ave	0.4227	0.4136	0.0100	48.9	50.0	-2.2	50.0
1,1-Dichloropropene	Ave	0.3830	0.3746	0.0100	48.9	50.0	-2.2	50.0
Isobutyl alcohol	Ave	0.4710	0.4094	0.0010	1090	1250	-13.1	50.0
Benzene	Ave	1.073	1.040	0.0100	48.5	50.0	-3.0	50.0
1,2-Dichloroethane	Ave	0.2862	0.2615	0.0100	45.7	50.0	-8.6	50.0
Heptane	Ave	0.4621	0.4221	0.0100	45.7	50.0	-8.7	50.0
Trichloroethene	Ave	0.3130	0.2950	0.0100	47.1	50.0	-5.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCVIS 500-408477/2 Calibration Date: 11/05/2017 11:33

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22C1105.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5392	0.5463	0.0100	50.7	50.0	1.3	50.0
1,2-Dichloropropane	Ave	0.2621	0.2523	0.0100	48.1	50.0	-3.7	20.0
Dibromomethane	Ave	0.1166	0.1062	0.0100	45.5	50.0	-9.0	50.0
1,4-Dioxane	Ave	1.060	1.046	0.0010	987	1000	-1.3	50.0
Bromodichloromethane	Ave	0.3134	0.2905	0.0100	46.4	50.0	-7.3	50.0
2-Chloroethyl vinyl ether	Ave	0.1084	0.0824	0.0100	38.0	50.0	-24.0	50.0
cis-1,3-Dichloropropene	Ave	0.4686	0.4541	0.0100	48.5	50.0	-3.1	50.0
methyl isobutyl ketone	Ave	0.1406	0.1144	0.0100	40.7	50.0	-18.6	50.0
Toluene	Ave	0.8815	0.9182	0.0100	52.1	50.0	4.2	20.0
trans-1,3-Dichloropropene	Ave	0.3771	0.3551	0.0100	47.1	50.0	-5.9	50.0
Ethyl methacrylate	Ave	0.2431	0.2332	0.0100	48.0	50.0	-4.1	50.0
1,1,2-Trichloroethane	Ave	0.2058	0.2022	0.0100	49.1	50.0	-1.8	50.0
Tetrachloroethene	Ave	0.4452	0.4754	0.0100	53.4	50.0	6.8	50.0
1,3-Dichloropropane	Ave	0.3536	0.3325	0.0100	47.0	50.0	-6.0	50.0
2-Hexanone	Ave	0.0928	0.0768	0.0100	41.4	50.0	-17.2	50.0
Dibromochloromethane	Ave	0.2732	0.2702	0.0100	49.4	50.0	-1.1	50.0
1,2-Dibromoethane	Ave	0.2042	0.1937	0.0100	47.4	50.0	-5.1	50.0
Chlorobenzene	Ave	1.003	0.996	0.3000	49.6	50.0	-0.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3555	0.3559	0.0100	50.1	50.0	0.1	50.0
Ethylbenzene	Ave	0.5595	0.5545	0.0100	49.6	50.0	-0.9	20.0
m&p-Xylene	Ave	1.384	1.383	0.0100	50.0	50.0	-0.0	50.0
o-Xylene	Ave	1.403	1.417	0.0100	50.5	50.0	1.0	50.0
Styrene	Ave	1.054	1.071	0.0100	50.8	50.0	1.6	50.0
Bromoform	Ave	0.1543	0.1671	0.1000	54.1	50.0	8.3	50.0
Isopropylbenzene	Ave	3.797	3.441	0.0100	45.3	50.0	-9.4	50.0
Bromobenzene	Ave	0.8318	0.7694	0.0100	46.2	50.0	-7.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.4462	0.3938	0.3000	44.1	50.0	-11.7	50.0
1,2,3-Trichloropropane	Ave	0.4825	0.4206	0.0100	43.6	50.0	-12.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1231	0.1113	0.0100	45.2	50.0	-9.6	50.0
N-Propylbenzene	Ave	4.454	4.095	0.0100	46.0	50.0	-8.1	50.0
2-Chlorotoluene	Ave	2.473	2.253	0.0100	45.5	50.0	-8.9	50.0
1,3,5-Trimethylbenzene	Ave	3.053	2.901	0.0100	47.5	50.0	-5.0	50.0
4-Chlorotoluene	Ave	2.814	2.616	0.0100	46.5	50.0	-7.1	50.0
tert-Butylbenzene	Ave	2.831	2.673	0.0100	47.2	50.0	-5.6	50.0
1,2,4-Trimethylbenzene	Ave	3.066	2.910	0.0100	47.5	50.0	-5.1	50.0
sec-Butylbenzene	Ave	4.148	3.904	0.0100	47.1	50.0	-5.9	50.0
1,3-Dichlorobenzene	Ave	1.651	1.612	0.0100	48.8	50.0	-2.4	50.0
p-Isopropyltoluene	Ave	3.535	3.467	0.0100	49.0	50.0	-1.9	50.0
1,4-Dichlorobenzene	Ave	1.609	1.542	0.0100	47.9	50.0	-4.2	50.0
1,2-Dichlorobenzene	Ave	1.405	1.383	0.0100	49.2	50.0	-1.6	50.0
n-Butylbenzene	Ave	3.076	3.060	0.0100	49.8	50.0	-0.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCVIS 500-408477/2 Calibration Date: 11/05/2017 11:33

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22C1105.D Conc. Units: ug/L 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	0.0641	0.0575	0.0100	44.9	50.0	-10.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8221	0.8518	0.0100	51.8	50.0	3.6	50.0
Hexachlorobutadiene	Ave	0.7151	0.7644	0.0100	53.4	50.0	6.9	50.0
Naphthalene	Ave	1.155	1.089	0.0100	47.1	50.0	-5.8	50.0
1,2,3-Trichlorobenzene	Ave	0.6414	0.6641	0.0100	51.8	50.0	3.5	50.0
Dibromofluoromethane	Ave	0.2675	0.2420	0.0100	45.2	50.0	-9.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2405	0.2052	0.0100	42.7	50.0	-14.7	50.0
Toluene-d8 (Surr)	Ave	1.368	1.320	0.0100	48.2	50.0	-3.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.9866	0.8364	0.0100	42.4	50.0	-15.2	50.0

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22C1105.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Nov-2017 11:33:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 500-0048838-002
Operator ID: JH Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub3
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 05-Nov-2017 13:49:20 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: huntjj Date: 05-Nov-2017 11:55:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.632	1.632	0.000	87	127127	50.0	32.7	
2 Chloromethane	50	1.882	1.882	0.000	88	194801	50.0	34.7	
3 Vinyl chloride	62	2.024	2.024	0.000	83	185913	50.0	41.4	
4 Butadiene	39	2.062	2.062	0.000	81	132819	50.0	36.1	
5 Bromomethane	94	2.443	2.443	0.000	92	97850	50.0	33.9	
6 Chloroethane	64	2.574	2.574	0.000	94	117550	50.0	41.2	
7 Dichlorofluoromethane	67	2.884	2.884	0.000	82	282620	50.0	42.4	
8 Trichlorofluoromethane	101	2.889	2.889	0.000	53	259274	50.0	39.7	
10 Ethyl ether	59	3.303	3.303	0.000	92	104380	50.0	51.8	
11 Acrolein	56	3.461	3.461	0.000	96	414414	2000.0	1627.7	
12 1,1-Dichloroethene	96	3.553	3.553	0.000	89	170846	50.0	48.5	
13 1,1,2-Trichloro-1,2,2-trif	101	3.608	3.608	0.000	84	183110	50.0	47.2	
14 Acetone	43	3.673	3.673	0.000	92	17589	50.0	41.9	
15 Iodomethane	142	3.728	3.728	0.000	98	305703	50.0	47.3	
16 Carbon disulfide	76	3.787	3.787	0.000	99	588592	50.0	50.8	
19 3-Chloro-1-propene	76	4.016	4.016	0.000	86	101344	50.0	51.9	
20 Methyl acetate	43	4.076	4.076	0.000	96	98857	100.0	89.0	
21 Methylene Chloride	84	4.174	4.174	0.000	93	163417	50.0	49.5	
* 22 TBA-d9 (IS)	65	4.277	4.277	0.000	0	119592	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.375	4.375	0.000	99	67256	500.0	490.0	
24 Acrylonitrile	53	4.490	4.490	0.000	98	313773	500.0	512.2	
25 trans-1,2-Dichloroethene	96	4.495	4.495	0.000	93	184363	50.0	48.5	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	89	305427	50.0	48.4	
27 Hexane	57	4.827	4.827	0.000	85	333887	50.0	52.6	
28 1,1-Dichloroethane	63	5.001	5.001	0.000	85	326522	50.0	49.6	
29 Vinyl acetate	43	5.088	5.088	0.000	99	148774	50.0	46.2	
33 2,2-Dichloropropane	77	5.676	5.676	0.000	66	241103	50.0	48.8	
34 cis-1,2-Dichloroethene	96	5.682	5.682	0.000	86	189115	50.0	47.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
35 2-Butanone (MEK)	43	5.720	5.720	0.000	95	24307	50.0	43.2	
39 Chlorobromomethane	128	5.954	5.954	0.000	93	74031	50.0	46.6	
40 Tetrahydrofuran	42	6.014	6.014	0.000	84	36425	100.0	87.9	
41 Chloroform	83	6.063	6.063	0.000	95	278934	50.0	46.1	
$ 42 Dibromofluoromethane	113	6.243	6.243	0.000	57	155757	50.0	45.2	
43 1,1,1-Trichloroethane	97	6.248	6.248	0.000	91	283137	50.0	48.0	
44 Cyclohexane	56	6.302	6.302	0.000	90	387161	50.0	52.4	
45 Carbon tetrachloride	117	6.433	6.433	0.000	83	266177	50.0	48.9	
46 1,1-Dichloropropene	75	6.438	6.438	0.000	95	241071	50.0	48.9	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	132061	50.0	42.7	
48 Isobutyl alcohol	43	6.618	6.618	0.000	56	61195	1250.0	1086.5	
49 Benzene	78	6.673	6.673	0.000	97	669381	50.0	48.5	
50 1,2-Dichloroethane	62	6.700	6.700	0.000	90	168280	50.0	45.7	
54 n-Heptane	43	6.977	6.977	0.000	83	271636	50.0	45.7	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	96	643512	50.0	50.0	
56 Trichloroethene	130	7.397	7.397	0.000	89	189859	50.0	47.1	
58 Methylcyclohexane	83	7.603	7.603	0.000	91	351549	50.0	50.7	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	95	162368	50.0	48.1	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	13698	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	88	68315	50.0	45.5	
63 1,4-Dioxane	88	7.810	7.810	0.000	92	14327	1000.0	986.8	
65 Dichlorobromomethane	83	7.968	7.968	0.000	93	186963	50.0	46.4	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	90	38333	50.0	38.0	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	93	211270	50.0	48.5	
69 4-Methyl-2-pentanone (MIBK	43	8.649	8.649	0.000	92	53214	50.0	40.7	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	93	614204	50.0	48.2	
71 Toluene	92	8.839	8.839	0.000	92	427173	50.0	52.1	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	88	165191	50.0	47.1	
73 Ethyl methacrylate	69	9.204	9.204	0.000	95	108483	50.0	48.0	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	85	94073	50.0	49.1	
75 Tetrachloroethene	166	9.460	9.460	0.000	88	221194	50.0	53.4	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	88	154689	50.0	47.0	
77 2-Hexanone	43	9.601	9.601	0.000	91	35740	50.0	41.4	
78 Chlorodibromomethane	129	9.759	9.759	0.000	88	125705	50.0	49.4	
80 Ethylene Dibromide	107	9.890	9.890	0.000	100	90110	50.0	47.4	
* 81 Chlorobenzene-d5	117	10.440	10.440	0.000	83	465247	50.0	50.0	
82 Chlorobenzene	112	10.472	10.472	0.000	93	463262	50.0	49.6	
84 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	91	165591	50.0	50.1	
85 Ethylbenzene	106	10.614	10.614	0.000	98	257991	50.0	49.6	
86 m-Xylene & p-Xylene	91	10.772	10.772	0.000	0	643442	50.0	50.0	
87 o-Xylene	91	11.349	11.349	0.000	93	659426	50.0	50.5	
88 Styrene	104	11.370	11.370	0.000	95	498082	50.0	50.8	
89 Bromoform	173	11.664	11.664	0.000	97	77726	50.0	54.1	
90 Isopropylbenzene	105	11.958	11.958	0.000	98	874457	50.0	45.3	
$ 93 4-Bromofluorobenzene (Surr	95	12.220	12.220	0.000	95	212591	50.0	42.4	
94 Bromobenzene	156	12.459	12.459	0.000	89	195547	50.0	46.2	
95 1,1,2,2-Tetrachloroethane	83	12.481	12.481	0.000	91	100080	50.0	44.1	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	83	106910	50.0	43.6	
97 trans-1,4-Dichloro-2-buten	53	12.579	12.579	0.000	87	28276	50.0	45.2	
98 N-Propylbenzene	91	12.644	12.644	0.000	97	1040870	50.0	46.0	
99 2-Chlorotoluene	91	12.769	12.769	0.000	97	572563	50.0	45.5	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	90	737274	50.0	47.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
100 4-Chlorotoluene	91	12.933	12.933	0.000	92	664770	50.0	46.5	
104 tert-Butylbenzene	119	13.384	13.384	0.000	90	679333	50.0	47.2	
105 1,2,4-Trimethylbenzene	105	13.450	13.450	0.000	94	739680	50.0	47.5	
106 sec-Butylbenzene	105	13.684	13.684	0.000	94	992123	50.0	47.1	
107 1,3-Dichlorobenzene	146	13.815	13.815	0.000	98	409581	50.0	48.8	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	95	881241	50.0	49.0	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	254162	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	95	391928	50.0	47.9	
114 n-Butylbenzene	91	14.386	14.386	0.000	95	777801	50.0	49.8	
113 1,2-Dichlorobenzene	146	14.386	14.386	0.000	65	351448	50.0	49.2	
115 1,2-Dibromo-3-Chloropropan	75	15.279	15.279	0.000	54	14618	50.0	44.9	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	93	216488	50.0	51.8	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	92	194287	50.0	53.4	
119 Naphthalene	128	16.368	16.368	0.000	99	276713	50.0	47.1	
120 1,2,3-Trichlorobenzene	180	16.596	16.596	0.000	95	168790	50.0	51.8	
S 123 1,2-Dichloroethene, Total	96				0		100.0	95.8	
S 124 Xylenes, Total	91				0		100.0	100.5	

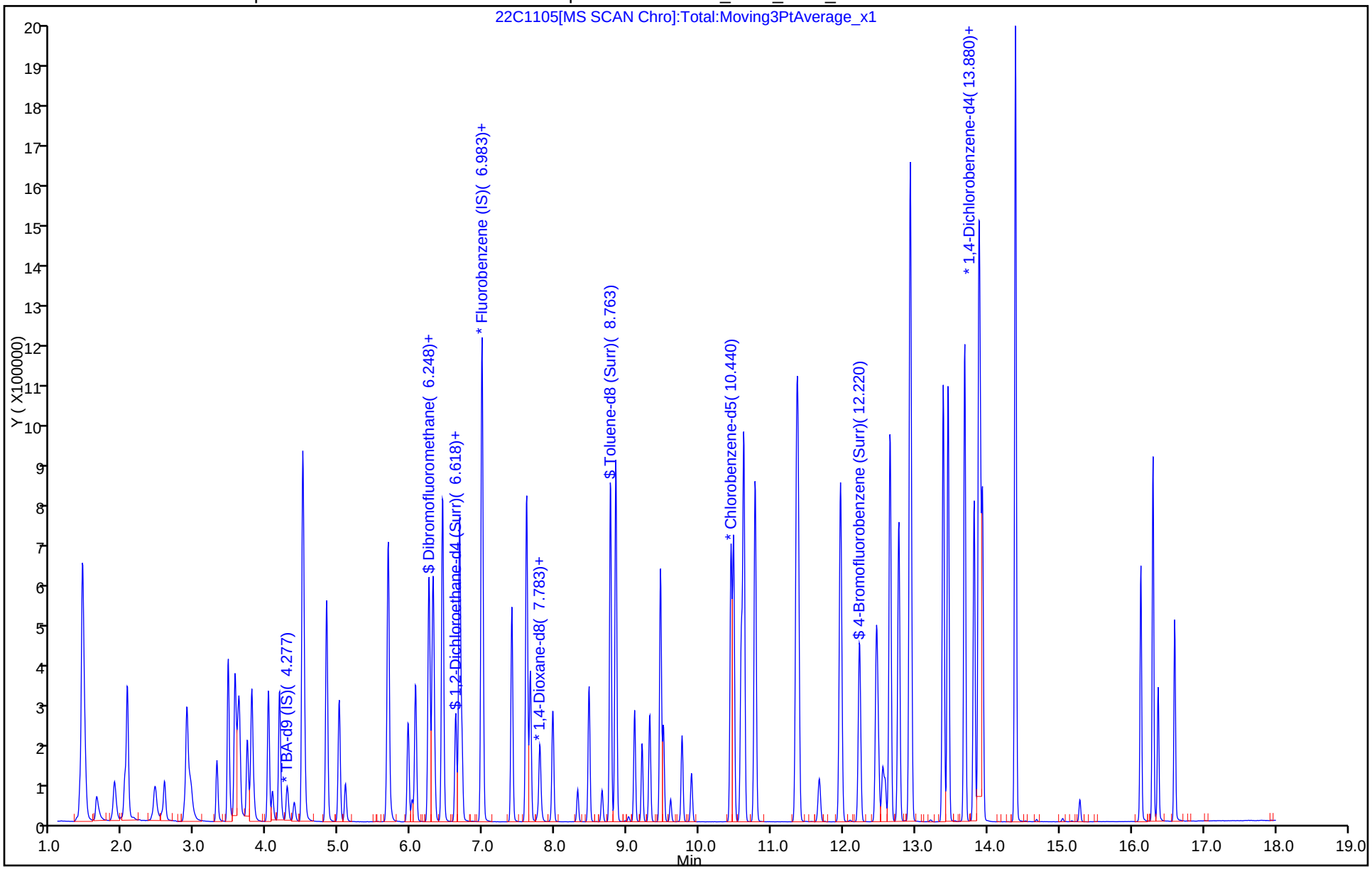
Reagents:

8260VA/2CEVE_00298	Amount Added:	2.50	Units: uL	
8260/624KETWK_00284	Amount Added:	2.50	Units: uL	
8260/624MEGWK_00417	Amount Added:	2.50	Units: uL	
8260/624GASWK_00478	Amount Added:	2.50	Units: uL	
8260/624ACRWK_00360	Amount Added:	2.50	Units: uL	
8260LOW IS/SS_00155	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 05-Nov-2017 13:49:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22C1105.D				
Injection Date:	05-Nov-2017 11:33:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCV 500-408477/3 Calibration Date: 11/05/2017 12:02

Instrument ID: CMS22 Calib Start Date: 10/09/2017 14:05

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 18:02

Lab File ID: 22D1105.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane	Ave	0.2675	0.2378	0.0100	44.5	50.0	-11.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2405	0.2117	0.0100	44.0	50.0	-12.0	50.0
Toluene-d8 (Surr)	Ave	1.368	1.290	0.0100	47.1	50.0	-5.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.9866	0.8831	0.0100	44.8	50.0	-10.5	50.0

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22D1105.D
Lims ID: CCV IX
Client ID:
Sample Type: CCV
Inject. Date: 05-Nov-2017 12:02:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV IX
Misc. Info.: 500-0048838-003
Operator ID: JH Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub54
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 05-Nov-2017 13:49:39 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: huntjj Date: 05-Nov-2017 12:57:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.227	3.259	-0.032	93	24312	2000.0	1365.5	
17 Isopropyl alcohol	45	3.880	3.902	-0.022	94	38107	500.0	425.4	
18 Acetonitrile	41	4.010	4.011	-0.001	99	80898	500.0	412.7	
* 22 TBA-d9 (IS)	65	4.266	4.277	-0.011	0	129203	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	95	505279	50.0	45.9	
30 2-Chloro-1,3-butadiene	53	5.105	5.099	0.006	84	322047	50.0	48.9	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	99	467115	50.0	48.5	
36 Propionitrile	54	5.791	5.791	-0.001	93	116664	500.0	519.3	
37 Ethyl acetate	43	5.796	5.796	0.000	98	125420	100.0	94.9	
38 Methacrylonitrile	41	5.959	5.959	0.000	86	413861	500.0	459.1	
$ 42 Dibromofluoromethane	113	6.242	6.243	0.000	59	155687	50.0	44.5	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	138622	50.0	44.0	
51 Isooctane	57	6.765	6.760	0.005	94	915740	50.0	52.5	
52 Tert-amyl methyl ether	73	6.808	6.809	-0.001	98	350000	50.0	47.3	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	654710	50.0	50.0	
55 n-Butanol	56	7.353	7.358	-0.005	82	47248	1250.0	1069.9	
57 Ethyl acrylate	55	7.538	7.538	0.000	98	118505	50.0	53.3	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	91	258817	50.0	48.0	
* 61 1,4-Dioxane-d8	96	7.750	7.756	-0.006	0	13664	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	88	129142	100.0	91.9	
66 2-Nitropropane	43	8.235	8.229	0.006	96	38477	100.0	81.0	
$ 70 Toluene-d8 (Surr)	98	8.768	8.763	0.005	93	636070	50.0	47.1	
79 n-Butyl acetate	43	9.748	9.748	0.000	92	117442	50.0	43.1	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	83	493125	50.0	50.0	
83 1-Chlorohexane	91	10.450	10.445	0.005	88	268937	50.0	51.4	
91 Cyclohexanone	55	12.127	12.127	0.000	89	265348	5000.0	4489.9	
$ 93 4-Bromofluorobenzene (Surr	95	12.219	12.220	-0.001	94	221318	50.0	44.8	
102 2-Ethyltoluene	105	13.210	13.210	0.000	97	956930	50.0	48.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
103 Pentachloroethane	167	13.401	13.406	-0.005	89	122853	50.0	67.6	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	93	250610	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	93	724819	50.0	50.1	
112 Benzyl chloride	126	14.114	14.114	0.000	98	44629	50.0	52.1	
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	97	317108	50.0	55.0	
121 2-Methylnaphthalene	142	17.423	17.424	-0.001	83	143043	50.0	60.1	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	88	115818	50.0	63.9	

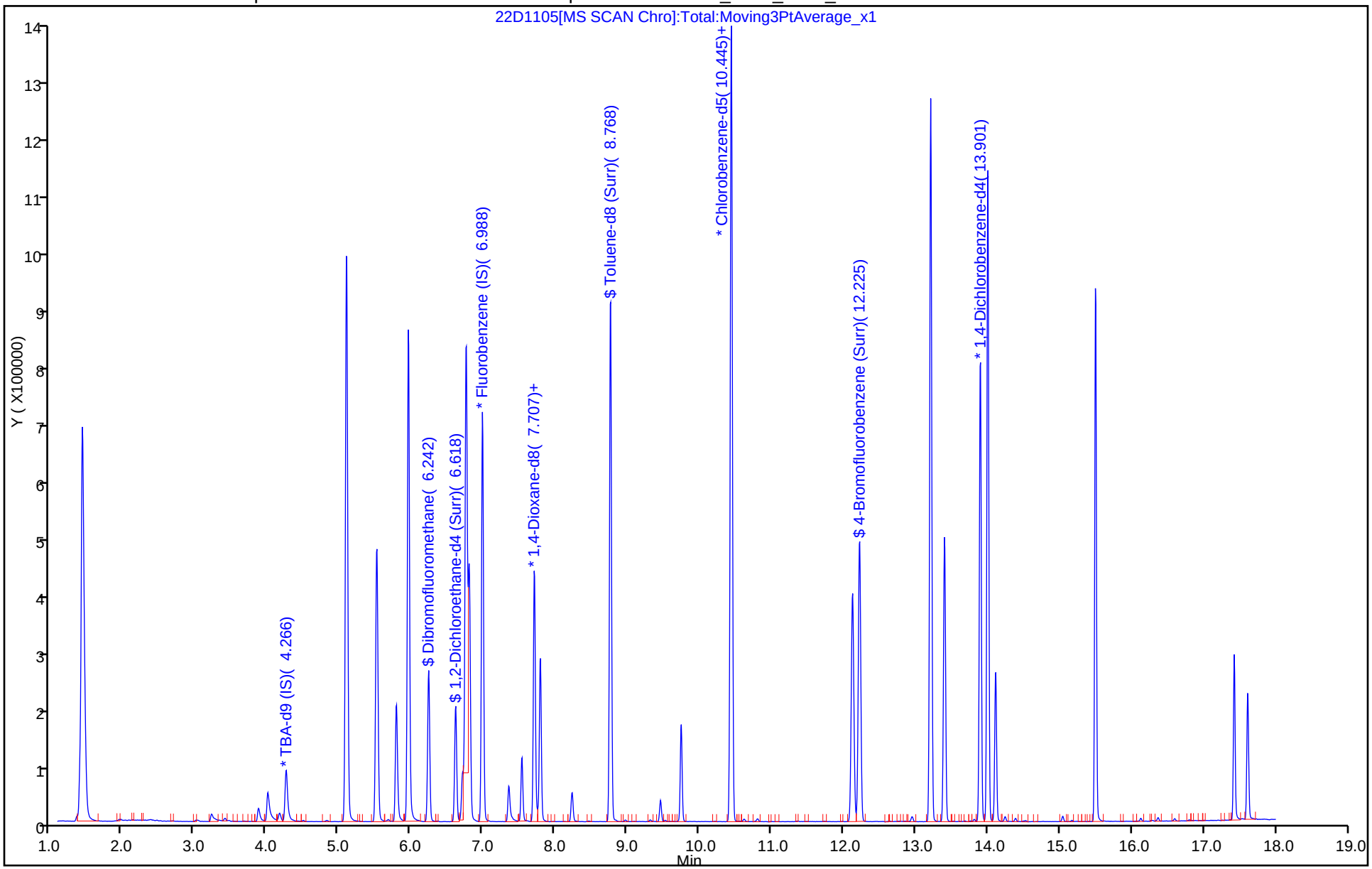
Reagents:

8260ADDS 2016_00056	Amount Added:	2.50	Units: uL	
8260POLR ADDS_00131	Amount Added:	2.50	Units: uL	
8260/624STD2_00172	Amount Added:	2.50	Units: uL	
8260CYCHXWK_00177	Amount Added:	2.50	Units: uL	
8260 23DCP WK_00106	Amount Added:	2.50	Units: uL	
2ETTOL WK STD_00041	Amount Added:	2.50	Units: uL	
8260LOW IS/SS_00155	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 05-Nov-2017 13:49:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22D1105.D				
Injection Date:	05-Nov-2017 12:02:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	CCV IX			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCV 500-408477/3 Calibration Date: 11/05/2017 12:02

Instrument ID: CMS22 Calib Start Date: 10/09/2017 18:55

GC Column: DB624 ID: 0.20(mm) Calib End Date: 10/09/2017 21:58

Lab File ID: 22D1105.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Ave	0.1378	0.0941	0.0010	1370	2000	-31.7	50.0
Isopropyl alcohol	Ave	0.6933	0.5899	0.0010	425	500	-14.9	50.0
Acetonitrile	Lin1		0.0124	0.0010	413	500	-17.5	50.0
Isopropyl ether	Ave	0.8402	0.7718	0.0100	45.9	50.0	-8.1	50.0
2-Chloro-1,3-butadiene	Ave	0.5029	0.4919	0.0100	48.9	50.0	-2.2	50.0
Tert-butyl ethyl ether	Ave	0.7351	0.7135	0.0010	48.5	50.0	-2.9	50.0
Propionitrile	Ave	0.0172	0.0178	0.0010	519	500	3.9	50.0
Ethyl acetate	Ave	0.1009	0.0958	0.0100	94.9	100	-5.1	50.0
Methacrylonitrile	Ave	0.0688	0.0632	0.0100	459	500	-8.2	50.0
Isooctane	Ave	1.332	1.399	0.0100	52.5	50.0	5.0	50.0
Tert-amyl methyl ether	Ave	0.5652	0.5346	0.0100	47.3	50.0	-5.4	50.0
n-Butyl alcohol	Ave	0.3418	0.2926	0.0010	1070	1250	-14.4	50.0
Ethyl acrylate	Ave	0.1699	0.1810	0.0010	53.3	50.0	6.5	50.0
2,3-Dichloro-1-propene	Ave	0.4118	0.3953	0.0010	48.0	50.0	-4.0	50.0
Methyl methacrylate	Ave	0.1073	0.0986	0.0100	91.9	100	-8.1	50.0
2-Nitropropane	Ave	0.0482	0.0390	0.0100	81.0	100	-19.0	50.0
n-Butyl acetate	Ave	0.2760	0.2382	0.0010	43.1	50.0	-13.7	50.0
1-Chlorohexane	Lin2		0.5454	0.0100	51.4	50.0	2.8	50.0
Cyclohexanone	Ave	0.0118	0.0106	0.0100	4490	5000	-10.2	50.0
2-Ethyltoluene	Ave	3.909	3.818	0.0010	48.8	50.0	-2.3	50.0
Pentachloroethane	Ave	0.3625	0.4902	0.0100	67.6	50.0	35.2	50.0
1,2,3-Trimethylbenzene	Ave	2.889	2.892	0.0010	50.1	50.0	0.1	50.0
Benzyl chloride	Ave	0.1710	0.1781	0.0010	52.1	50.0	4.1	50.0
1,3,5-Trichlorobenzene	Ave	1.150	1.265	0.0100	55.0	50.0	10.0	50.0
2-Methylnaphthalene	Qua2		0.5708	0.0100	60.1	50.0	20.3	50.0
1-Methylnaphthalene	Qua2		0.4621	0.0100	63.9	50.0	27.8	50.0

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22D1105.D
Lims ID: CCV IX
Client ID:
Sample Type: CCV
Inject. Date: 05-Nov-2017 12:02:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV IX
Misc. Info.: 500-0048838-003
Operator ID: JH Instrument ID: CMS22
Sublist: chrom-8260w22cps*sub54
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 05-Nov-2017 13:49:39 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: huntjj Date: 05-Nov-2017 12:57:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
9 Ethanol	45	3.227	3.259	-0.032	93	24312	2000.0	1365.5	
17 Isopropyl alcohol	45	3.880	3.902	-0.022	94	38107	500.0	425.4	
18 Acetonitrile	41	4.010	4.011	-0.001	99	80898	500.0	412.7	
* 22 TBA-d9 (IS)	65	4.266	4.277	-0.011	0	129203	1000.0	1000.0	
31 Isopropyl ether	45	5.099	5.099	0.000	95	505279	50.0	45.9	
30 2-Chloro-1,3-butadiene	53	5.105	5.099	0.006	84	322047	50.0	48.9	
32 Tert-butyl ethyl ether	59	5.524	5.519	0.005	99	467115	50.0	48.5	
36 Propionitrile	54	5.791	5.791	-0.001	93	116664	500.0	519.3	
37 Ethyl acetate	43	5.796	5.796	0.000	98	125420	100.0	94.9	
38 Methacrylonitrile	41	5.959	5.959	0.000	86	413861	500.0	459.1	
$ 42 Dibromofluoromethane	113	6.242	6.243	0.000	59	155687	50.0	44.5	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	138622	50.0	44.0	
51 Isooctane	57	6.765	6.760	0.005	94	915740	50.0	52.5	
52 Tert-amyl methyl ether	73	6.808	6.809	-0.001	98	350000	50.0	47.3	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	654710	50.0	50.0	
55 n-Butanol	56	7.353	7.358	-0.005	82	47248	1250.0	1069.9	
57 Ethyl acrylate	55	7.538	7.538	0.000	98	118505	50.0	53.3	
60 2,3-Dichloro-1-propene	75	7.707	7.707	0.000	91	258817	50.0	48.0	
* 61 1,4-Dioxane-d8	96	7.750	7.756	-0.006	0	13664	1000.0	1000.0	
64 Methyl methacrylate	41	7.794	7.794	0.000	88	129142	100.0	91.9	
66 2-Nitropropane	43	8.235	8.229	0.006	96	38477	100.0	81.0	
$ 70 Toluene-d8 (Surr)	98	8.768	8.763	0.005	93	636070	50.0	47.1	
79 n-Butyl acetate	43	9.748	9.748	0.000	92	117442	50.0	43.1	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	83	493125	50.0	50.0	
83 1-Chlorohexane	91	10.450	10.445	0.005	88	268937	50.0	51.4	
91 Cyclohexanone	55	12.127	12.127	0.000	89	265348	5000.0	4489.9	
$ 93 4-Bromofluorobenzene (Surr	95	12.219	12.220	-0.001	94	221318	50.0	44.8	
102 2-Ethyltoluene	105	13.210	13.210	0.000	97	956930	50.0	48.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
103 Pentachloroethane	167	13.401	13.406	-0.005	89	122853	50.0	67.6	
* 108 1,4-Dichlorobenzene-d4	152	13.901	13.902	-0.001	93	250610	50.0	50.0	
111 1,2,3-Trimethylbenzene	105	14.005	14.005	0.000	93	724819	50.0	50.1	
112 Benzyl chloride	126	14.114	14.114	0.000	98	44629	50.0	52.1	
116 1,3,5-Trichlorobenzene	180	15.502	15.502	0.000	97	317108	50.0	55.0	
121 2-Methylnaphthalene	142	17.423	17.424	-0.001	83	143043	50.0	60.1	
122 1-Methylnaphthalene	142	17.609	17.609	0.000	88	115818	50.0	63.9	

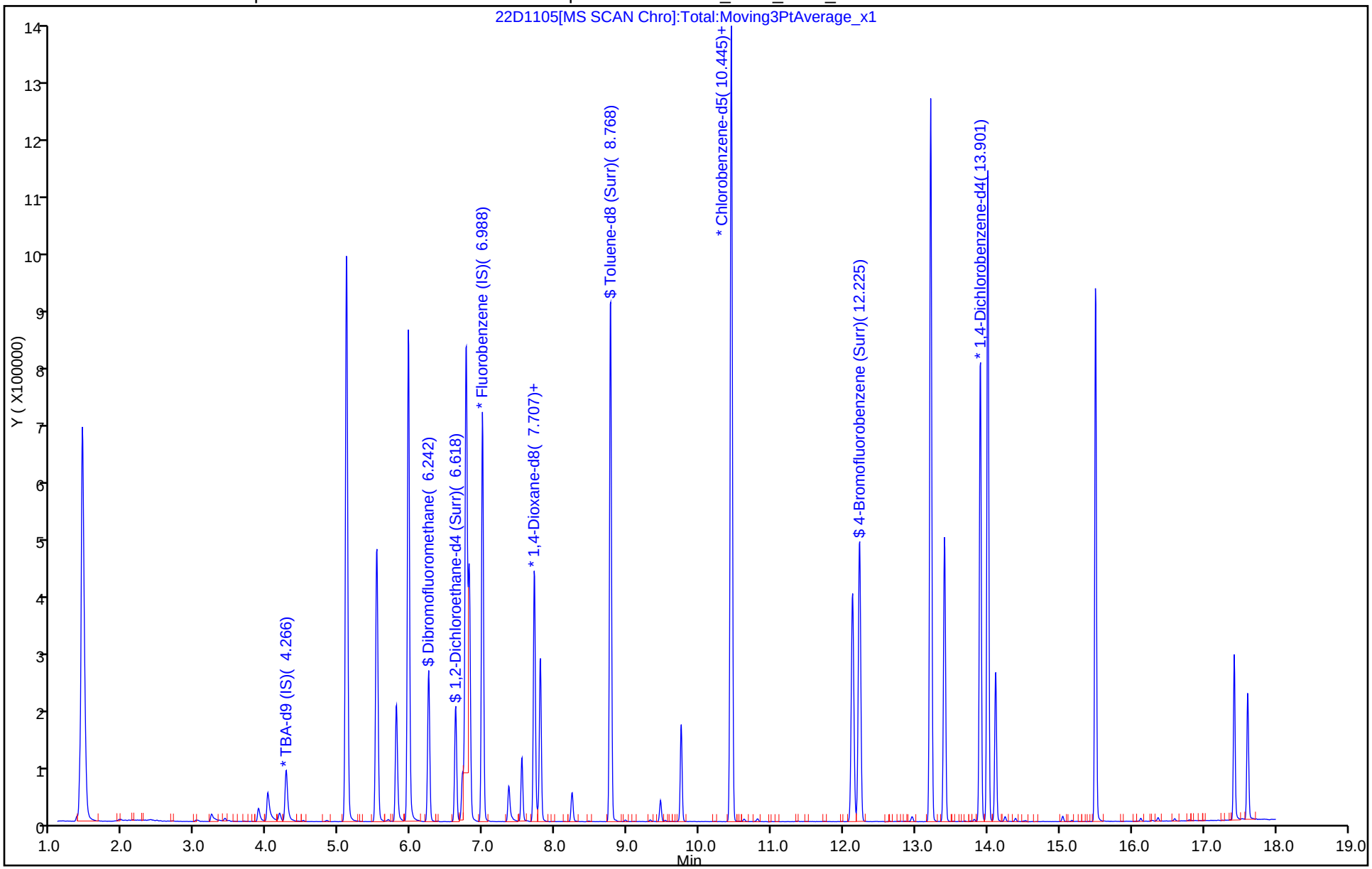
Reagents:

8260ADDS 2016_00056	Amount Added:	2.50	Units: uL	
8260POLR ADDS_00131	Amount Added:	2.50	Units: uL	
8260/624STD2_00172	Amount Added:	2.50	Units: uL	
8260CYCHXWK_00177	Amount Added:	2.50	Units: uL	
8260 23DCP WK_00106	Amount Added:	2.50	Units: uL	
2ETTOL WK STD_00041	Amount Added:	2.50	Units: uL	
8260LOW IS/SS_00155	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 05-Nov-2017 13:49:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22D1105.D				
Injection Date:	05-Nov-2017 12:02:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	CCV IX			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22B1009.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	09-Oct-2017 13:27:30	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	500-0048264-003				
Operator ID:	EA	Instrument ID:	CMS22		
Raw Data:	Smoothed				
Method:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\8260w22cps.m				
Limit Group:	MSVOA_8260_ICAL_WATER				
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT				
Last Update:	09-Oct-2017 13:48:44	Calib Date:	05-Oct-2017 23:17:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171005-48203.b\22J1005J.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK023				
First Level Reviewer: alikpalae		Date:	09-Oct-2017 13:48:44		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 92 BFB	95	12.225	12.225	0.000	91	40440	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

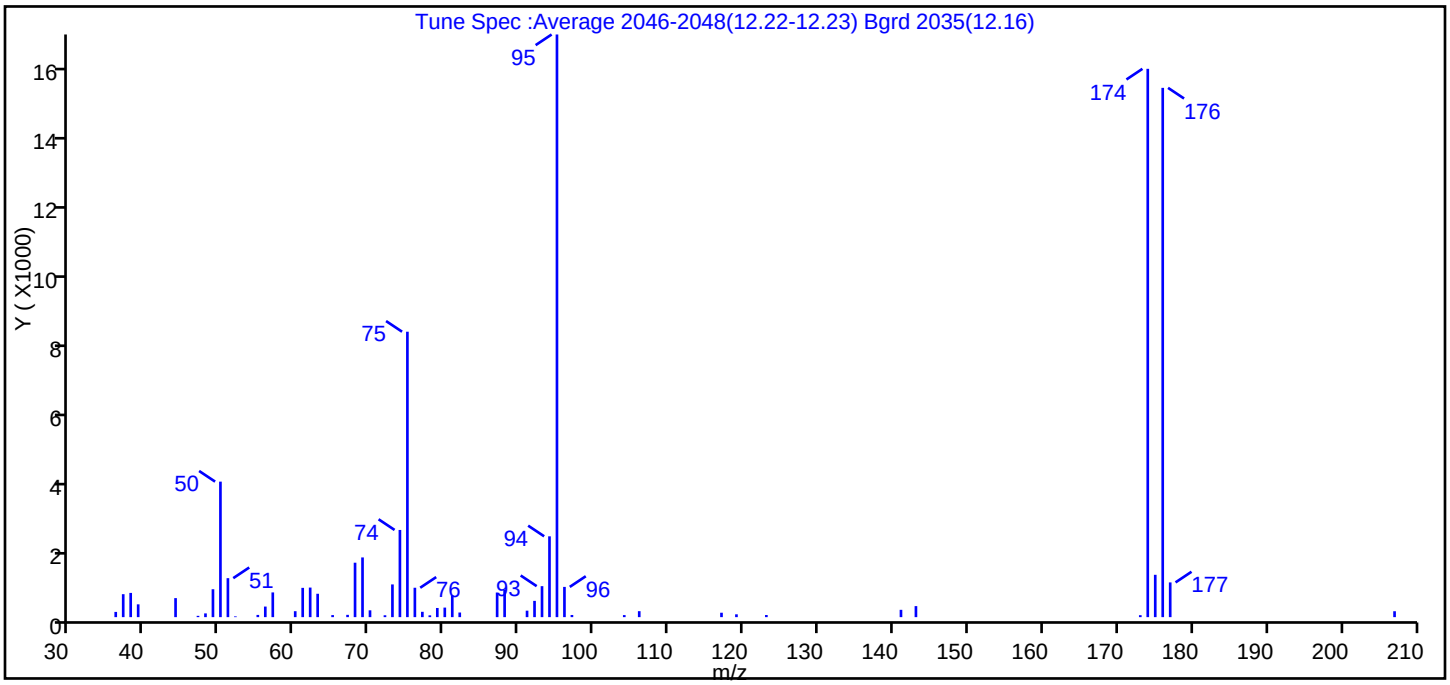
BFB STD WK_00165 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22B1009.D				
Injection Date:	09-Oct-2017 13:27:30	Instrument ID:	CMS22		
Lims ID:	BFB				
Client ID:					
Operator ID:	EA	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Tune Method:	BFB Method 8260				

$ 92 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.3
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	5.2
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	94.1
175	5 to 9% of m/z 174	7.3 (7.7)
176	Greater than 95% but less than 101% of m/z 174	90.8 (96.5)
177	5 to 9% of m/z 176	6.0 (6.6)

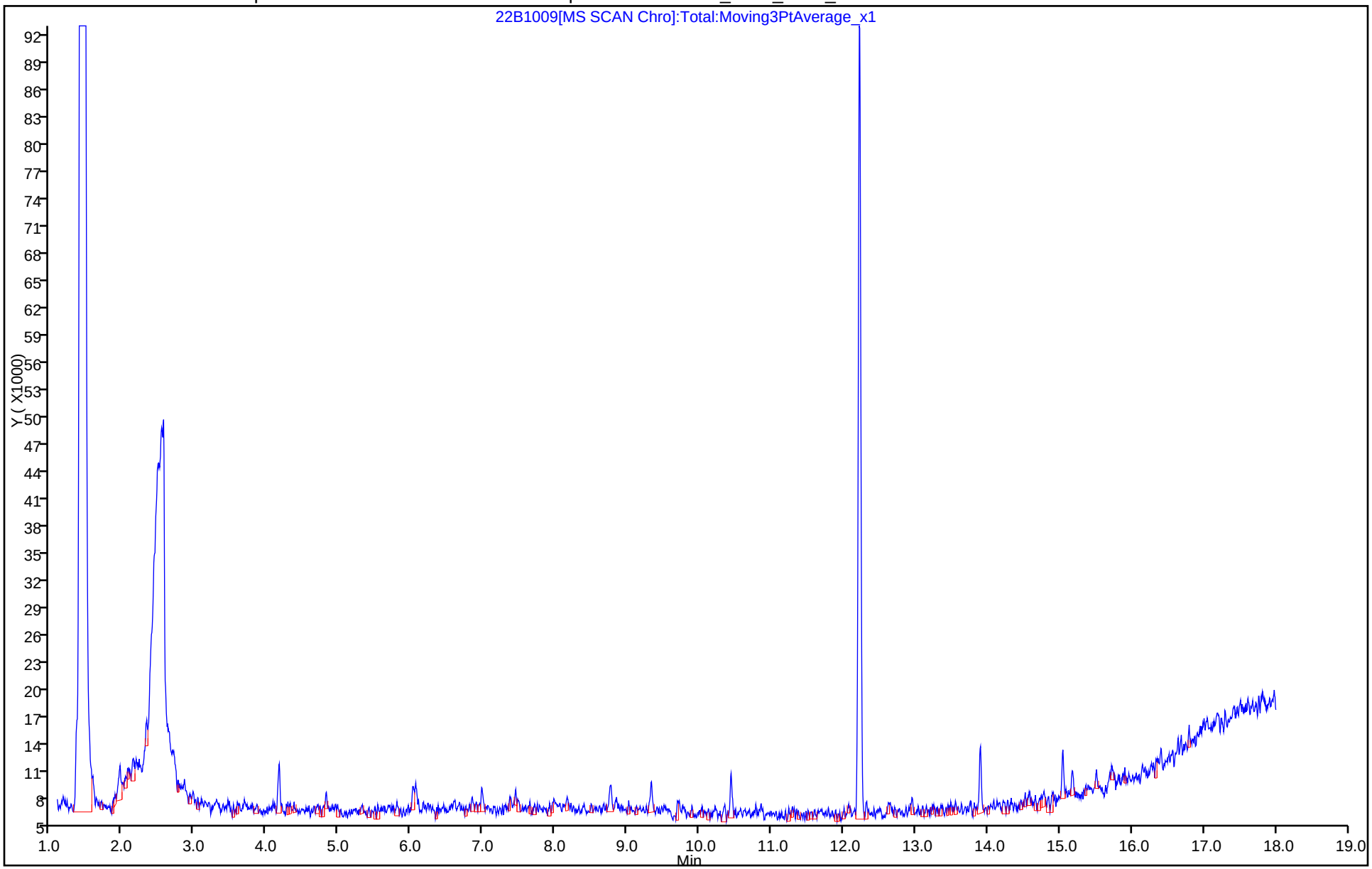
Data File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22B1009.D\8260w22cps.rslt\spectra.d
Injection Date: 09-Oct-2017 13:27:30
Spectrum: Tune Spec :Average 2046-2048(12.22-12.23) Bgrd 2035(12.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 56

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	148	60.00	168	77.00	151	97.00	61
37.00	649	61.00	828	78.00	51	104.00	58
38.00	685	62.00	836	79.00	259	106.00	169
39.00	362	63.00	661	80.00	270	117.00	125
44.00	538	65.00	58	81.00	616	119.00	80
47.00	37	67.00	65	82.00	131	123.00	60
48.00	106	68.00	1539	87.00	696	141.00	207
49.00	789	69.00	1688	88.00	773	143.00	312
50.00	3831	70.00	193	91.00	183	173.00	55
51.00	1102	72.00	53	92.00	460	174.00	15501
52.00	21	73.00	925	93.00	876	175.00	1197
55.00	63	74.00	2465	94.00	2285	176.00	14963
56.00	299	75.00	8069	95.00	16472	177.00	982
57.00	699	76.00	831	96.00	855	207.00	167

Report Date: 09-Oct-2017 13:48:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22B1009.D				
Injection Date:	09-Oct-2017 13:27:30	Instrument ID:	CMS22	Operator ID:	EA
Lims ID:	BFB			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Target Compound Quantitation Report

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22B1105.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-Nov-2017 11:05:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	500-0048838-001				
Operator ID:	JH	Instrument ID:	CMS22		
Raw Data:	Smoothed				
Method:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m				
Limit Group:	MSVOA_8260_ICAL_WATER				
Method Label:	TESTAMERICA CHICAGO GC/MS VOA REPORT				
Last Update:	05-Nov-2017 11:26:40	Calib Date:	09-Oct-2017 21:58:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK032				
First Level Reviewer: huntjj		Date:	05-Nov-2017 11:26:40		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 92 BFB	95	12.219	12.219	0.000	93	37864	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

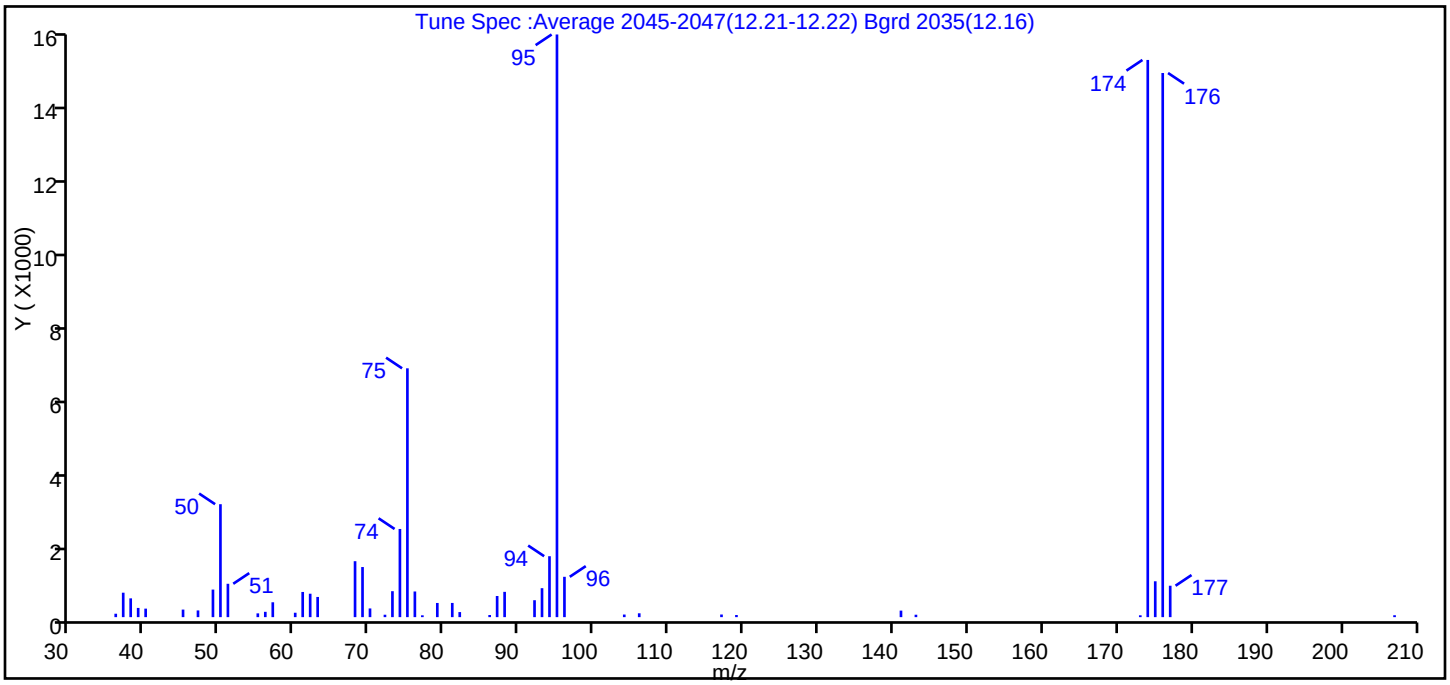
BFB STD WK_00168 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22B1105.D				
Injection Date:	05-Nov-2017 11:05:30	Instrument ID:	CMS22		
Lims ID:	BFB				
Client ID:					
Operator ID:	JH	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		
Tune Method:	BFB Method 8260				

$ 92 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.4
75	30 to 60% of m/z 95	42.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	95.6
175	5 to 9% of m/z 174	6.2 (6.4)
176	Greater than 95% but less than 101% of m/z 174	93.4 (97.7)
177	5 to 9% of m/z 176	5.4 (5.8)

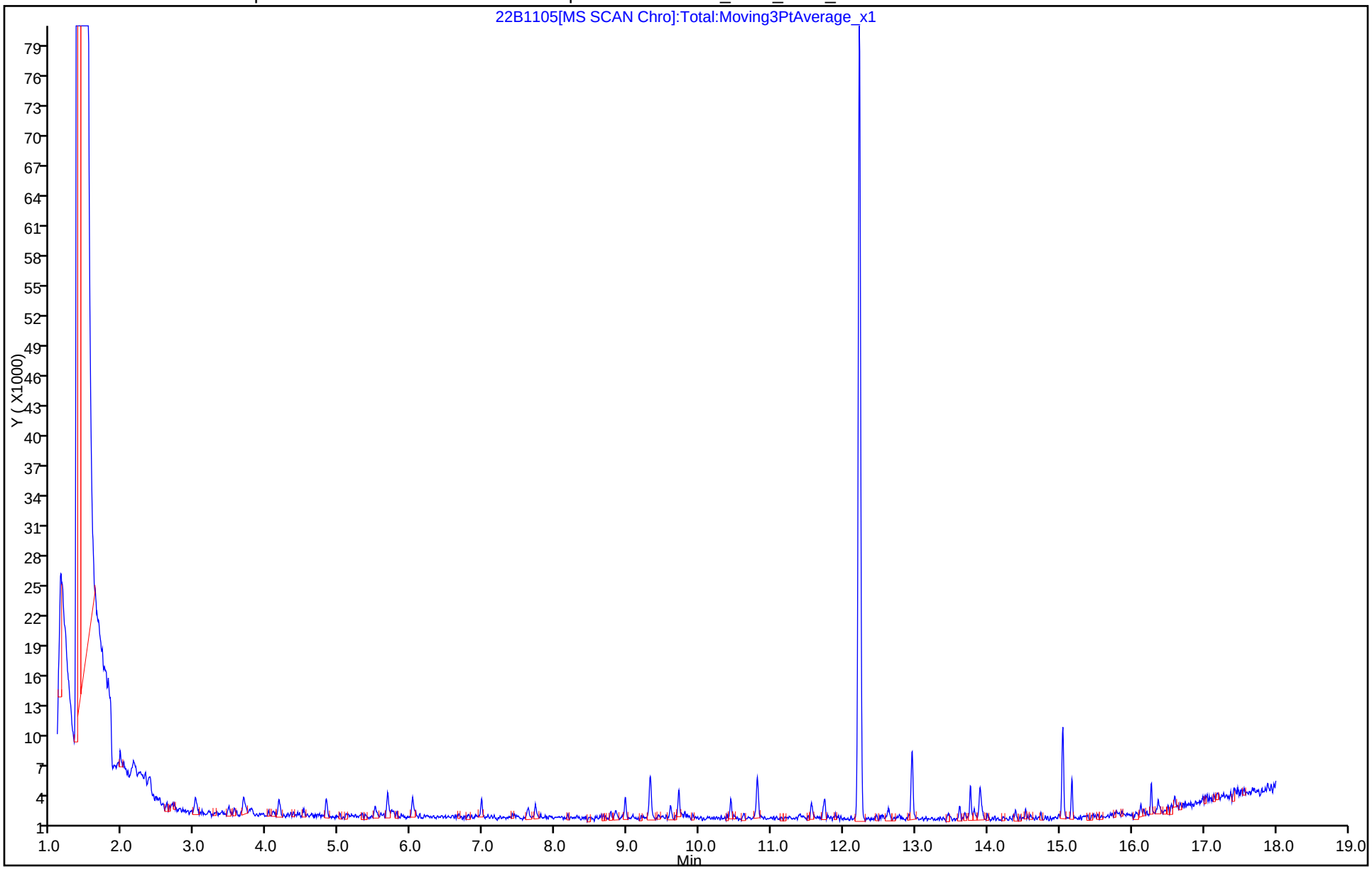
Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22B1105.D\8260w22cps.rslt\spectra.d
Injection Date: 05-Nov-2017 11:05:30
Spectrum: Tune Spec :Average 2045-2047(12.21-12.22) Bgrd 2035(12.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 49

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	93	60.00	120	79.00	386	117.00	72
37.00	666	61.00	686	81.00	387	119.00	58
38.00	512	62.00	638	82.00	138	141.00	178
39.00	251	63.00	550	86.00	58	143.00	66
40.00	232	68.00	1524	87.00	576	173.00	50
45.00	206	69.00	1365	88.00	689	174.00	15180
47.00	183	70.00	237	92.00	461	175.00	977
49.00	751	72.00	66	93.00	789	176.00	14824
50.00	3077	73.00	707	94.00	1660	177.00	856
51.00	909	74.00	2402	95.00	15874	207.00	52
55.00	103	75.00	6779	96.00	1099		
56.00	145	76.00	699	104.00	71		
57.00	405	77.00	50	106.00	105		

Report Date: 05-Nov-2017 11:26:41 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22B1105.D				
Injection Date:	05-Nov-2017 11:05:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 500-408477/6
Matrix: Water | Lab File ID: 22M1105.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 13:27
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.0010	0.00046
71-55-6	1,1,1-Trichloroethane	ND		0.0010	0.00038
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.0010	0.00040
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010	0.00046
79-00-5	1,1,2-Trichloroethane	ND		0.0010	0.00035
75-34-3	1,1-Dichloroethane	ND		0.0010	0.00041
75-35-4	1,1-Dichloroethene	ND		0.0010	0.00039
563-58-6	1,1-Dichloropropene	ND		0.0010	0.00030
87-61-6	1,2,3-Trichlorobenzene	ND		0.0010	0.00046
96-18-4	1,2,3-Trichloropropane	ND		0.0010	0.00041
120-82-1	1,2,4-Trichlorobenzene	ND		0.0010	0.00034
95-63-6	1,2,4-Trimethylbenzene	ND		0.0010	0.00036
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.0050	0.0020
106-93-4	1,2-Dibromoethane	ND		0.0010	0.00039
95-50-1	1,2-Dichlorobenzene	ND		0.0010	0.00033
107-06-2	1,2-Dichloroethane	ND		0.0010	0.00039
78-87-5	1,2-Dichloropropane	ND		0.0010	0.00043
108-67-8	1,3,5-Trimethylbenzene	ND		0.0010	0.00025
541-73-1	1,3-Dichlorobenzene	ND		0.0010	0.00040
142-28-9	1,3-Dichloropropane	ND		0.0010	0.00036
106-46-7	1,4-Dichlorobenzene	ND		0.0010	0.00036
123-91-1	1,4-Dioxane	ND		0.10	0.041
594-20-7	2,2-Dichloropropane	ND		0.0010	0.00044
110-75-8	2-Chloroethyl vinyl ether	ND		0.0020	0.00077
95-49-8	2-Chlorotoluene	ND		0.0010	0.00031
591-78-6	2-Hexanone	ND		0.0050	0.0016
106-43-4	4-Chlorotoluene	ND		0.0010	0.00035
67-64-1	Acetone	ND		0.0050	0.0017
107-02-8	Acrolein	ND		0.10	0.023
107-13-1	Acrylonitrile	ND		0.020	0.0045
71-43-2	Benzene	ND		0.00050	0.00015
108-86-1	Bromobenzene	ND		0.0010	0.00036
74-97-5	Bromochloromethane	ND		0.0010	0.00043
75-27-4	Bromodichloromethane	ND		0.0010	0.00037
75-25-2	Bromoform	ND		0.0010	0.00048

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 500-408477/6
Matrix: Water | Lab File ID: 22M1105.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 13:27
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-83-9	Bromomethane	ND		0.0020	0.00080
75-15-0	Carbon disulfide	ND		0.0020	0.00045
56-23-5	Carbon tetrachloride	ND		0.0010	0.00038
108-90-7	Chlorobenzene	ND		0.0010	0.00039
75-00-3	Chloroethane	ND		0.0010	0.00051
67-66-3	Chloroform	ND		0.0020	0.00037
74-87-3	Chloromethane	ND		0.0010	0.00032
156-59-2	cis-1,2-Dichloroethene	ND		0.0010	0.00041
10061-01-5	cis-1,3-Dichloropropene	ND		0.0010	0.00042
110-82-7	Cyclohexane	ND		0.0010	0.00049
124-48-1	Dibromochloromethane	ND		0.0010	0.00049
74-95-3	Dibromomethane	ND		0.0010	0.00027
75-71-8	Dichlorodifluoromethane	ND		0.0020	0.00067
100-41-4	Ethylbenzene	ND		0.00050	0.00018
74-88-4	Iodomethane	ND		0.0025	0.00066
108-20-3	Isopropyl ether	ND		0.0010	0.00028
98-82-8	Isopropylbenzene	ND		0.0010	0.00039
79-20-9	Methyl acetate	ND		0.0050	0.0020
78-93-3	Methyl Ethyl Ketone	ND		0.0050	0.0021
108-10-1	methyl isobutyl ketone	ND		0.0050	0.0022
1634-04-4	Methyl tert-butyl ether	ND		0.0010	0.00039
108-87-2	Methylcyclohexane	ND		0.0010	0.00032
75-09-2	Methylene Chloride	ND		0.0050	0.0016
91-20-3	Naphthalene	ND		0.0010	0.00034
104-51-8	n-Butylbenzene	ND		0.0010	0.00039
103-65-1	N-Propylbenzene	ND		0.0010	0.00041
99-87-6	p-Isopropyltoluene	ND		0.0010	0.00036
135-98-8	sec-Butylbenzene	ND		0.0010	0.00040
100-42-5	Styrene	ND		0.0010	0.00039
994-05-8	Tert-amyl methyl ether	ND		0.0010	0.00040
75-65-0	tert-Butyl alcohol	ND		0.050	0.012
637-92-3	Tert-butyl ethyl ether	ND		0.0010	0.00026
98-06-6	tert-Butylbenzene	ND		0.0010	0.00040
127-18-4	Tetrachloroethene	ND		0.0010	0.00037
108-88-3	Toluene	ND		0.00050	0.00015
156-60-5	trans-1,2-Dichloroethene	ND		0.0010	0.00035

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago
Job No.: 500-136523-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 500-408477/6
Matrix: Water
Lab File ID: 22M1105.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/05/2017 13:27
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB624 ID: 0.2(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 408477
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.0010	0.00036
110-57-6	trans-1,4-Dichloro-2-butene	ND		0.0050	0.0012
79-01-6	Trichloroethene	ND		0.00050	0.00016
75-69-4	Trichlorofluoromethane	ND		0.0010	0.00043
108-05-4	Vinyl acetate	ND		0.0020	0.00091
75-01-4	Vinyl chloride	ND		0.00050	0.00020
1330-20-7	Xylenes, Total	ND		0.0010	0.00022

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		75-126
460-00-4	4-Bromofluorobenzene (Surr)	92		72-124
1868-53-7	Dibromofluoromethane	90		75-120
2037-26-5	Toluene-d8 (Surr)	93		75-120

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22M1105.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Nov-2017 13:27:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 500-0048838-006
Operator ID: JH Instrument ID: CMS22
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 05-Nov-2017 13:53:17 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: huntjj Date: 05-Nov-2017 13:53:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 22 TBA-d9 (IS)	65	4.277	4.277	0.000	0	133355	1000.0	1000.0	
$ 42 Dibromofluoromethane	113	6.242	6.243	0.000	59	160432	50.0	45.0	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.613	6.618	-0.005	0	141364	50.0	44.1	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	99	666392	50.0	50.0	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	14306	1000.0	1000.0	
$ 70 Toluene-d8 (Surr)	98	8.763	8.763	0.000	93	649002	50.0	46.3	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	83	512107	50.0	50.0	
$ 93 4-Bromofluorobenzene (Surr	95	12.219	12.220	-0.001	95	226363	50.0	45.8	
* 108 1,4-Dichlorobenzene-d4	152	13.896	13.902	-0.006	94	250282	50.0	50.0	

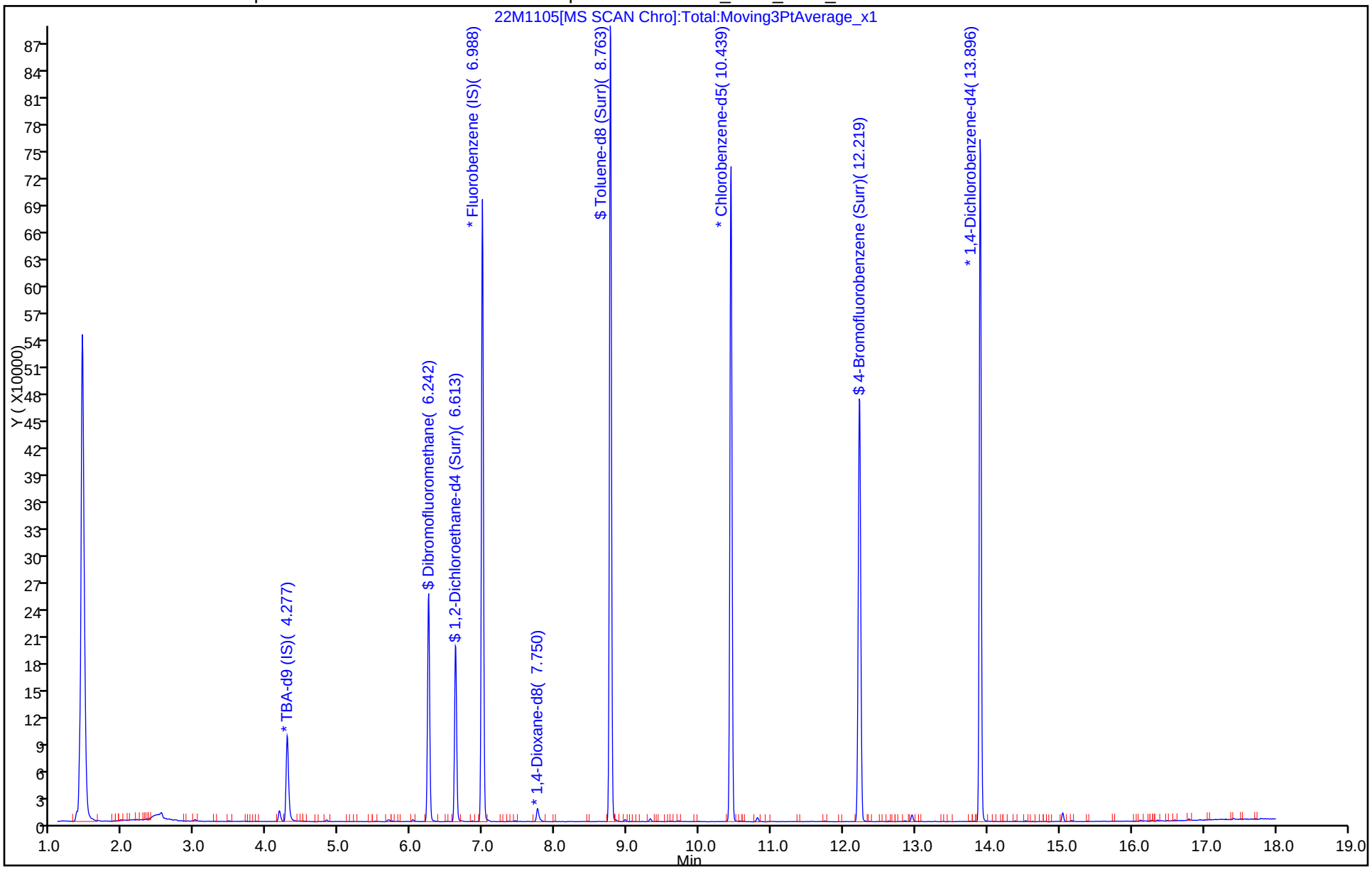
Reagents:

8260LOW IS/SS_00155 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Nov-2017 13:53:17 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22M1105.D				
Injection Date:	05-Nov-2017 13:27:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Recovery Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22M1105.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Nov-2017 13:27:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 500-0048838-006
Operator ID: JH Instrument ID: CMS22
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 05-Nov-2017 13:53:17 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: huntjj Date: 05-Nov-2017 13:53:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 42 Dibromofluoromethane	50.0	45.0	90.01
$ 47 1,2-Dichloroethane-d4 (Surr)	50.0	44.1	88.22
$ 70 Toluene-d8 (Surr)	50.0	46.3	92.62
$ 93 4-Bromofluorobenzene (Surr)	50.0	45.8	91.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 500-408477/4
Matrix: Water | Lab File ID: 22S1105.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 12:30
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.0469		0.0010	0.00046
71-55-6	1,1,1-Trichloroethane	0.0463		0.0010	0.00038
79-34-5	1,1,2,2-Tetrachloroethane	0.0433		0.0010	0.00040
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0459		0.0010	0.00046
79-00-5	1,1,2-Trichloroethane	0.0469		0.0010	0.00035
75-34-3	1,1-Dichloroethane	0.0476		0.0010	0.00041
75-35-4	1,1-Dichloroethene	0.0466		0.0010	0.00039
563-58-6	1,1-Dichloropropene	0.0476		0.0010	0.00030
87-61-6	1,2,3-Trichlorobenzene	0.0512		0.0010	0.00046
96-18-4	1,2,3-Trichloropropane	0.0429		0.0010	0.00041
120-82-1	1,2,4-Trichlorobenzene	0.0505		0.0010	0.00034
95-63-6	1,2,4-Trimethylbenzene	0.0447		0.0010	0.00036
96-12-8	1,2-Dibromo-3-Chloropropane	0.0447		0.0050	0.0020
106-93-4	1,2-Dibromoethane	0.0450		0.0010	0.00039
95-50-1	1,2-Dichlorobenzene	0.0469		0.0010	0.00033
107-06-2	1,2-Dichloroethane	0.0451		0.0010	0.00039
78-87-5	1,2-Dichloropropane	0.0473		0.0010	0.00043
108-67-8	1,3,5-Trimethylbenzene	0.0448		0.0010	0.00025
541-73-1	1,3-Dichlorobenzene	0.0460		0.0010	0.00040
142-28-9	1,3-Dichloropropane	0.0463		0.0010	0.00036
106-46-7	1,4-Dichlorobenzene	0.0464		0.0010	0.00036
123-91-1	1,4-Dioxane	0.962		0.10	0.041
594-20-7	2,2-Dichloropropane	0.0458		0.0010	0.00044
110-75-8	2-Chloroethyl vinyl ether	0.0374		0.0020	0.00077
95-49-8	2-Chlorotoluene	0.0434		0.0010	0.00031
591-78-6	2-Hexanone	0.0405		0.0050	0.0016
106-43-4	4-Chlorotoluene	0.0437		0.0010	0.00035
67-64-1	Acetone	0.0381		0.0050	0.0017
107-02-8	Acrolein	1.69		0.10	0.023
107-13-1	Acrylonitrile	0.517		0.020	0.0045
71-43-2	Benzene	0.0473		0.00050	0.00015
108-86-1	Bromobenzene	0.0449		0.0010	0.00036
74-97-5	Bromochloromethane	0.0463		0.0010	0.00043
75-27-4	Bromodichloromethane	0.0455		0.0010	0.00037
75-25-2	Bromoform	0.0524		0.0010	0.00048

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago | Job No.: 500-136523-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 500-408477/4
Matrix: Water | Lab File ID: 22S1105.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 5(mL) | Date Analyzed: 11/05/2017 12:30
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB624 ID: 0.2(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 408477 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-83-9	Bromomethane	0.0325		0.0020	0.00080
75-15-0	Carbon disulfide	0.0491		0.0020	0.00045
56-23-5	Carbon tetrachloride	0.0466		0.0010	0.00038
108-90-7	Chlorobenzene	0.0479		0.0010	0.00039
75-00-3	Chloroethane	0.0379		0.0010	0.00051
67-66-3	Chloroform	0.0447		0.0020	0.00037
74-87-3	Chloromethane	0.0340		0.0010	0.00032
156-59-2	cis-1,2-Dichloroethene	0.0465		0.0010	0.00041
10061-01-5	cis-1,3-Dichloropropene	0.0463		0.0010	0.00042
110-82-7	Cyclohexane	0.0502		0.0010	0.00049
124-48-1	Dibromochloromethane	0.0484		0.0010	0.00049
74-95-3	Dibromomethane	0.0456		0.0010	0.00027
75-71-8	Dichlorodifluoromethane	0.0312		0.0020	0.00067
100-41-4	Ethylbenzene	0.0478		0.00050	0.00018
74-88-4	Iodomethane	0.0459		0.0025	0.00066
98-82-8	Isopropylbenzene	0.0430		0.0010	0.00039
79-20-9	Methyl acetate	0.0888		0.0050	0.0020
78-93-3	Methyl Ethyl Ketone	0.0419		0.0050	0.0021
108-10-1	methyl isobutyl ketone	0.0408		0.0050	0.0022
1634-04-4	Methyl tert-butyl ether	0.0482		0.0010	0.00039
108-87-2	Methylcyclohexane	0.0482		0.0010	0.00032
75-09-2	Methylene Chloride	0.0479		0.0050	0.0016
91-20-3	Naphthalene	0.0474		0.0010	0.00034
104-51-8	n-Butylbenzene	0.0464		0.0010	0.00039
103-65-1	N-Propylbenzene	0.0428		0.0010	0.00041
99-87-6	p-Isopropyltoluene	0.0462		0.0010	0.00036
135-98-8	sec-Butylbenzene	0.0443		0.0010	0.00040
100-42-5	Styrene	0.0488		0.0010	0.00039
75-65-0	tert-Butyl alcohol	0.478		0.050	0.012
98-06-6	tert-Butylbenzene	0.0446		0.0010	0.00040
127-18-4	Tetrachloroethene	0.0503		0.0010	0.00037
108-88-3	Toluene	0.0497		0.00050	0.00015
156-60-5	trans-1,2-Dichloroethene	0.0459		0.0010	0.00035
10061-02-6	trans-1,3-Dichloropropene	0.0457		0.0010	0.00036
110-57-6	trans-1,4-Dichloro-2-butene	0.0452		0.0050	0.0012
79-01-6	Trichloroethene	0.0455		0.00050	0.00016

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Chicago
Job No.: 500-136523-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 500-408477/4
Matrix: Water
Lab File ID: 22S1105.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/05/2017 12:30
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB624 ID: 0.2(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 408477
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	0.0391		0.0010	0.00043
108-05-4	Vinyl acetate	0.0462		0.0020	0.00091
75-01-4	Vinyl chloride	0.0403		0.00050	0.00020
1330-20-7	Xylenes, Total	0.0955		0.0010	0.00022

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		75-126
460-00-4	4-Bromofluorobenzene (Surr)	84		72-124
1868-53-7	Dibromofluoromethane	92		75-120
2037-26-5	Toluene-d8 (Surr)	94		75-120

TestAmerica Chicago
Target Compound Quantitation Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22S1105.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Nov-2017 12:30:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 500-0048838-004
Operator ID: JH Instrument ID: CMS22
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 05-Nov-2017 13:50:11 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: huntjj Date: 05-Nov-2017 12:58:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85	1.637	1.632	0.005	87	122529	50.0	31.2	
2 Chloromethane	50	1.888	1.882	0.006	88	193095	50.0	34.0	
3 Vinyl chloride	62	2.029	2.024	0.005	83	183205	50.0	40.3	
4 Butadiene	39	2.062	2.062	0.000	81	130170	50.0	34.9	
5 Bromomethane	94	2.448	2.443	0.005	91	94913	50.0	32.5	
6 Chloroethane	64	2.579	2.574	0.005	99	109525	50.0	37.9	
7 Dichlorofluoromethane	67	2.889	2.884	0.005	82	276963	50.0	41.1	
8 Trichlorofluoromethane	101	2.889	2.889	0.000	50	258405	50.0	39.1	
10 Ethyl ether	59	3.308	3.303	0.005	91	106471	50.0	52.2	
11 Acrolein	56	3.461	3.461	0.000	96	436209	2000.0	1693.3	
12 1,1-Dichloroethene	96	3.559	3.553	0.006	88	166079	50.0	46.6	
13 1,1,2-Trichloro-1,2,2-trif	101	3.608	3.608	0.000	90	179952	50.0	45.9	
14 Acetone	43	3.678	3.673	0.005	94	16331	50.0	38.1	
15 Iodomethane	142	3.727	3.728	-0.001	98	300500	50.0	45.9	
16 Carbon disulfide	76	3.787	3.787	0.000	99	575679	50.0	49.1	
19 3-Chloro-1-propene	76	4.021	4.016	0.005	86	96992	50.0	49.1	
20 Methyl acetate	43	4.076	4.076	0.000	97	99740	100.0	88.8	
21 Methylene Chloride	84	4.174	4.174	0.000	92	160147	50.0	47.9	
* 22 TBA-d9 (IS)	65	4.283	4.277	0.006	0	133395	1000.0	1000.0	
23 2-Methyl-2-propanol	59	4.381	4.375	0.006	99	73226	500.0	478.3	
24 Acrylonitrile	53	4.490	4.490	0.000	100	320338	500.0	516.9	
25 trans-1,2-Dichloroethene	96	4.495	4.495	0.000	89	176308	50.0	45.9	
26 Methyl tert-butyl ether	73	4.511	4.511	0.000	89	307979	50.0	48.2	
27 Hexane	57	4.827	4.827	0.000	85	319475	50.0	49.8	
28 1,1-Dichloroethane	63	5.001	5.001	0.000	85	317233	50.0	47.6	
29 Vinyl acetate	43	5.088	5.088	0.000	99	150510	50.0	46.2	
33 2,2-Dichloropropane	77	5.676	5.676	0.000	66	228702	50.0	45.8	
34 cis-1,2-Dichloroethene	96	5.687	5.682	0.005	88	188324	50.0	46.5	
35 2-Butanone (MEK)	43	5.725	5.720	0.005	94	23851	50.0	41.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 Chlorobromomethane	128	5.959	5.954	0.005	94	74428	50.0	46.3	
40 Tetrahydrofuran	42	6.014	6.014	0.000	84	36635	100.0	87.4	
41 Chloroform	83	6.063	6.063	0.000	82	273845	50.0	44.7	
$ 42 Dibromofluoromethane	113	6.242	6.243	0.000	64	160676	50.0	46.1	
43 1,1,1-Trichloroethane	97	6.253	6.248	0.005	91	276616	50.0	46.3	
44 Cyclohexane	56	6.302	6.302	0.000	89	375809	50.0	50.2	
45 Carbon tetrachloride	117	6.433	6.433	0.000	82	256287	50.0	46.6	
46 1,1-Dichloropropene	75	6.438	6.438	0.000	95	237390	50.0	47.6	
$ 47 1,2-Dichloroethane-d4 (Sur	65	6.618	6.618	0.000	0	137311	50.0	43.8	
48 Isobutyl alcohol	43	6.623	6.618	0.005	62	63329	1250.0	1008.0	
49 Benzene	78	6.672	6.673	-0.001	96	661004	50.0	47.3	
50 1,2-Dichloroethane	62	6.705	6.700	0.005	90	168174	50.0	45.1	
54 n-Heptane	43	6.977	6.977	0.000	84	261715	50.0	43.5	
* 53 Fluorobenzene (IS)	96	6.988	6.988	0.000	96	651112	50.0	50.0	
56 Trichloroethene	130	7.396	7.397	-0.001	89	185326	50.0	45.5	
58 Methylcyclohexane	83	7.603	7.603	0.000	92	338705	50.0	48.2	
59 1,2-Dichloropropane	63	7.652	7.652	0.000	96	161282	50.0	47.3	
* 61 1,4-Dioxane-d8	96	7.756	7.756	0.000	0	16141	1000.0	1000.0	
62 Dibromomethane	93	7.783	7.783	0.000	87	69194	50.0	45.6	
63 1,4-Dioxane	88	7.810	7.810	0.000	88	16463	1000.0	962.3	
65 Dichlorobromomethane	83	7.968	7.968	0.000	93	185669	50.0	45.5	
67 2-Chloroethyl vinyl ether	63	8.311	8.311	0.000	87	39587	50.0	37.4	
68 cis-1,3-Dichloropropene	75	8.469	8.469	0.000	94	211652	50.0	46.3	
69 4-Methyl-2-pentanone (MIBK	43	8.648	8.649	-0.001	90	55898	50.0	40.8	
$ 70 Toluene-d8 (Surr)	98	8.768	8.763	0.005	93	624889	50.0	46.8	
71 Toluene	92	8.839	8.839	0.000	93	427561	50.0	49.7	
72 trans-1,3-Dichloropropene	75	9.100	9.100	0.000	87	167976	50.0	45.7	
73 Ethyl methacrylate	69	9.204	9.204	0.000	95	113100	50.0	47.7	
74 1,1,2-Trichloroethane	97	9.313	9.313	0.000	84	94150	50.0	46.9	
75 Tetrachloroethene	166	9.460	9.460	0.000	96	218332	50.0	50.3	
76 1,3-Dichloropropane	76	9.503	9.503	0.000	88	159774	50.0	46.3	
77 2-Hexanone	43	9.601	9.601	0.000	89	36640	50.0	40.5	
78 Chlorodibromomethane	129	9.759	9.759	0.000	90	129122	50.0	48.4	
80 Ethylene Dibromide	107	9.890	9.890	0.000	99	89587	50.0	45.0	
* 81 Chlorobenzene-d5	117	10.439	10.440	-0.001	83	487764	50.0	50.0	
82 Chlorobenzene	112	10.478	10.472	0.006	93	468604	50.0	47.9	
84 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	89	162613	50.0	46.9	
85 Ethylbenzene	106	10.619	10.614	0.005	98	260735	50.0	47.8	
86 m-Xylene & p-Xylene	91	10.771	10.772	-0.001	0	643871	50.0	47.7	
87 o-Xylene	91	11.348	11.349	-0.001	93	653801	50.0	47.8	
88 Styrene	104	11.370	11.370	0.000	94	502021	50.0	48.8	
89 Bromoform	173	11.664	11.664	0.000	98	78799	50.0	52.4	
90 Isopropylbenzene	105	11.958	11.958	0.000	98	869575	50.0	43.0	
$ 93 4-Bromofluorobenzene (Surr	95	12.225	12.220	0.005	95	221731	50.0	42.2	
94 Bromobenzene	156	12.459	12.459	0.000	89	198950	50.0	44.9	
95 1,1,2,2-Tetrachloroethane	83	12.486	12.481	0.005	91	102878	50.0	43.3	
96 1,2,3-Trichloropropane	75	12.546	12.546	0.000	84	110076	50.0	42.9	
97 trans-1,4-Dichloro-2-buten	53	12.579	12.579	0.000	89	29646	50.0	45.2	
98 N-Propylbenzene	91	12.650	12.644	0.006	98	1014893	50.0	42.8	
99 2-Chlorotoluene	91	12.769	12.769	0.000	96	571491	50.0	43.4	
101 1,3,5-Trimethylbenzene	105	12.922	12.922	0.000	90	727880	50.0	44.8	
100 4-Chlorotoluene	91	12.933	12.933	0.000	92	655420	50.0	43.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
104 tert-Butylbenzene	119	13.384	13.384	0.000	92	672183	50.0	44.6	
105 1,2,4-Trimethylbenzene	105	13.455	13.450	0.005	94	729072	50.0	44.7	
106 sec-Butylbenzene	105	13.684	13.684	0.000	94	977465	50.0	44.3	
107 1,3-Dichlorobenzene	146	13.814	13.815	-0.001	97	404508	50.0	46.0	
109 4-Isopropyltoluene	119	13.880	13.880	0.000	94	869611	50.0	46.2	
* 108 1,4-Dichlorobenzene-d4	152	13.902	13.902	0.000	94	266198	50.0	50.0	
110 1,4-Dichlorobenzene	146	13.929	13.929	0.000	95	397248	50.0	46.4	
114 n-Butylbenzene	91	14.386	14.386	0.000	94	758989	50.0	46.4	
113 1,2-Dichlorobenzene	146	14.386	14.386	0.000	67	350924	50.0	46.9	
115 1,2-Dibromo-3-Chloropropan	75	15.279	15.279	0.000	61	15234	50.0	44.7	
117 1,2,4-Trichlorobenzene	180	16.128	16.128	0.000	94	220930	50.0	50.5	
118 Hexachlorobutadiene	225	16.297	16.297	0.000	93	200650	50.0	52.7	
119 Naphthalene	128	16.367	16.368	-0.001	100	291791	50.0	47.4	
120 1,2,3-Trichlorobenzene	180	16.596	16.596	0.000	97	174727	50.0	51.2	
S 123 1,2-Dichloroethene, Total	96				0		100.0	92.4	
S 124 Xylenes, Total	91				0		100.0	95.5	

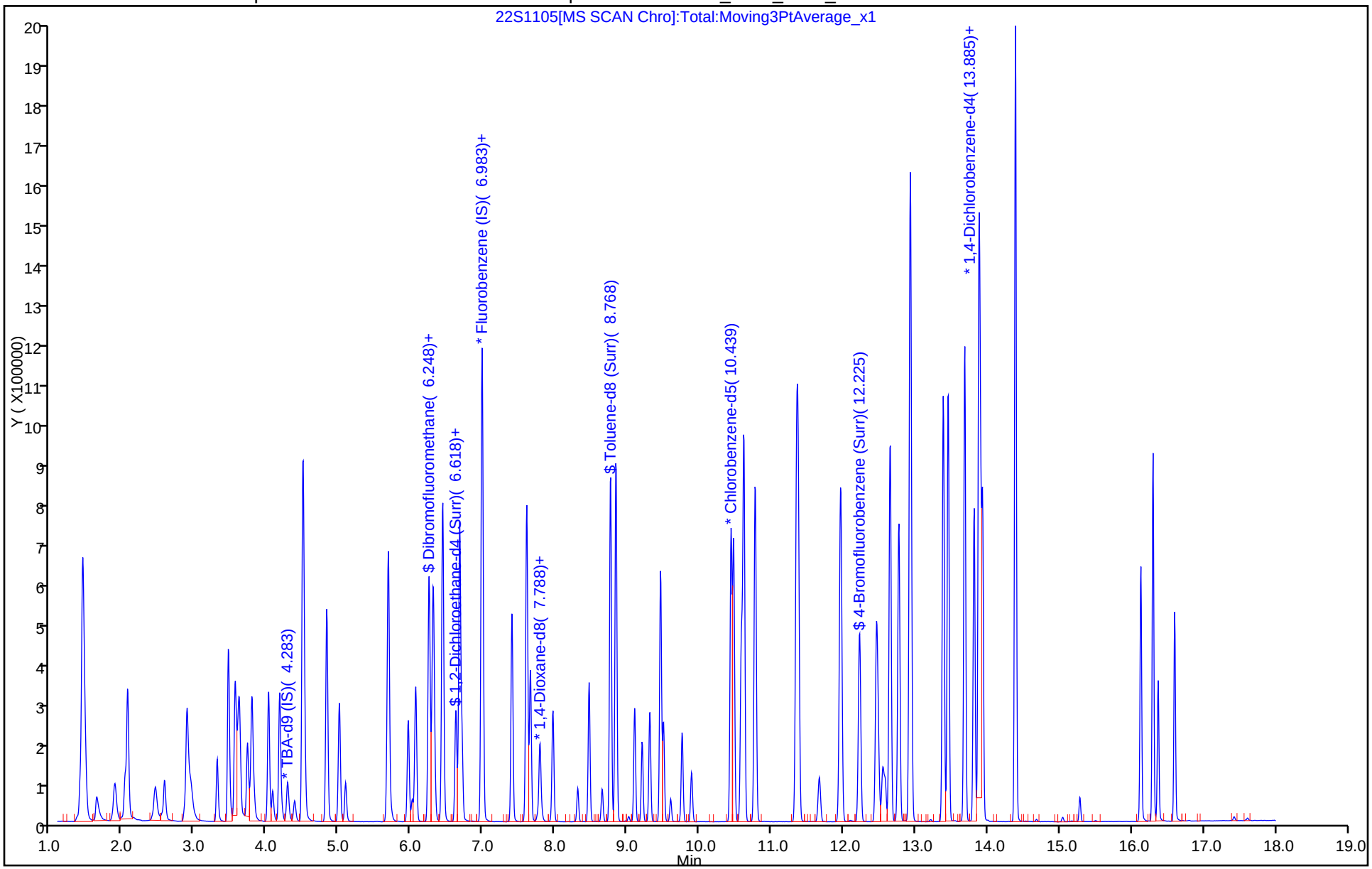
Reagents:

8260VA/2CEVE_00298	Amount Added:	2.50	Units: uL	
8260/624KETWK_00284	Amount Added:	2.50	Units: uL	
8260/624MEGWK_00417	Amount Added:	2.50	Units: uL	
8260/624GASWK_00478	Amount Added:	2.50	Units: uL	
8260/624ACRWK_00360	Amount Added:	2.50	Units: uL	
8260LOW IS/SS_00155	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 05-Nov-2017 13:50:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Chicago

Data File:	\\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22S1105.D				
Injection Date:	05-Nov-2017 12:30:30	Instrument ID:	CMS22	Operator ID:	JH
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260w22cps	Limit Group:	MSVOA_8260_ICAL_WATER		



TestAmerica Chicago
Recovery Report

Data File: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\22S1105.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Nov-2017 12:30:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 500-0048838-004
Operator ID: JH Instrument ID: CMS22
Raw Data: Smoothed

Method: \\ChromNA\Chicago\ChromData\CMS22\20171105-48838.b\8260w22cps.m
Limit Group: MSVOA_8260_ICAL_WATER
Method Label: TESTAMERICA CHICAGO GC/MS VOA REPORT
Last Update: 05-Nov-2017 13:50:11 Calib Date: 09-Oct-2017 21:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Chicago\ChromData\CMS22\20171009-48264.b\22J1009J.D

Column 1 : Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: huntjj Date: 05-Nov-2017 12:58:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 42 Dibromofluoromethane	50.0	46.1	92.27
$ 47 1,2-Dichloroethane-d4 (Surr)	50.0	43.8	87.70
$ 70 Toluene-d8 (Surr)	50.0	46.8	93.63
$ 93 4-Bromofluorobenzene (Surr)	50.0	42.2	84.42

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Instrument ID: CMS22 Start Date: 10/09/2017 13:27

Analysis Batch Number: 404536 End Date: 10/09/2017 23:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 500-404536/3		10/09/2017 13:27	1	22B1009.D	DB624 0.2(mm)
STD01 500-404536/4 IC		10/09/2017 14:05	1	22I1009A.D	DB624 0.2(mm)
STD02 500-404536/5 IC		10/09/2017 14:30	1	22I1009B.D	DB624 0.2(mm)
STD03 500-404536/6 IC		10/09/2017 14:58	1	22I1009C.D	DB624 0.2(mm)
STD04 500-404536/7 IC		10/09/2017 15:24	1	22I1009D.D	DB624 0.2(mm)
STD05 500-404536/8 IC		10/09/2017 15:50	1	22I1009E.D	DB624 0.2(mm)
STD06 500-404536/9 IC		10/09/2017 16:17	1	22I1009F.D	DB624 0.2(mm)
STD07 500-404536/10 ICIS		10/09/2017 16:43	1	22I1009G.D	DB624 0.2(mm)
STD08 500-404536/11 IC		10/09/2017 17:09	1	22I1009H.D	DB624 0.2(mm)
STD09 500-404536/12 IC		10/09/2017 17:36	1	22I1009I.D	DB624 0.2(mm)
STD10 500-404536/13 IC		10/09/2017 18:02	1	22I1009J.D	DB624 0.2(mm)
STD03AP 500-404536/15 IC		10/09/2017 18:55	1	22J1009C.D	DB624 0.2(mm)
STD04AP 500-404536/16 IC		10/09/2017 19:21	1	22J1009D.D	DB624 0.2(mm)
STD05AP 500-404536/17 IC		10/09/2017 19:47	1	22J1009E.D	DB624 0.2(mm)
STD06AP 500-404536/18 IC		10/09/2017 20:13	1	22J1009F.D	DB624 0.2(mm)
STD07AP 500-404536/19 IC		10/09/2017 20:40	1	22J1009G.D	DB624 0.2(mm)
STD08AP 500-404536/20 IC		10/09/2017 21:06	1	22J1009H.D	DB624 0.2(mm)
STD09AP 500-404536/21 IC		10/09/2017 21:32	1	22J1009I.D	DB624 0.2(mm)
STD10AP 500-404536/22 IC		10/09/2017 21:58	1	22J1009J.D	DB624 0.2(mm)
ICV 500-404536/24		10/09/2017 22:50	1	22S1009ICV1.D	DB624 0.2(mm)
ICV 500-404536/25		10/09/2017 23:16	1	22S1009ICV2.D	DB624 0.2(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Instrument ID: CMS22 Start Date: 11/05/2017 11:05

Analysis Batch Number: 408477 End Date: 11/05/2017 22:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 500-408477/1		11/05/2017 11:05	1	22B1105.D	DB624 0.2(mm)
CCVIS 500-408477/2		11/05/2017 11:33	1	22C1105.D	DB624 0.2(mm)
CCV 500-408477/3		11/05/2017 12:02	1	22D1105.D	DB624 0.2(mm)
LCS 500-408477/4		11/05/2017 12:30	1	22S1105.D	DB624 0.2(mm)
MB 500-408477/6		11/05/2017 13:27	1	22M1105.D	DB624 0.2(mm)
500-136523-1		11/05/2017 13:55	1	500-136523-a-1.D	DB624 0.2(mm)
500-136523-2		11/05/2017 14:23	1	500-136523-g-2.D	DB624 0.2(mm)
500-136523-4		11/05/2017 14:52	1	500-136523-g-4.D	DB624 0.2(mm)
500-136523-3		11/05/2017 15:21	1	500-136523-a-3.D	DB624 0.2(mm)
ZZZZZ		11/05/2017 15:50	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 16:47	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 17:16	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 17:45	10		DB624 0.2(mm)
ZZZZZ		11/05/2017 18:13	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 18:42	10		DB624 0.2(mm)
ZZZZZ		11/05/2017 19:10	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 19:38	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 20:06	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 20:33	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 21:01	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 21:29	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 21:56	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 22:23	1		DB624 0.2(mm)
ZZZZZ		11/05/2017 22:50	1		DB624 0.2(mm)

8260B

TestAmerica Chicago

GC/MS Volatiles: Sample Tracking Sheet

Screener: 27 11/1

2xD

Job # 500-136573

Sample File Name	Dilution	pH	Action	Inst./Date	Chrom Batch	MeOH Lot #	Container Lot#	Analytical Batch	misc info
1	1	2	00	22 11/5/17	48838			408477	Autoner 6.425
2	1	2	00	22 11/5/17	48838			408477	DL
4	1	2	00	22 11/5/17	48838			408477	DL
3	1	2	00	22 11/5/17	48838			408477	DL.

Reviewed by: _____ Date: 11-6-17

CHI-22-20-075/E-09/17

TestAmerica Chicago

GC/MS Volatiles: Internal Chain of Custody Form

ICOC Job Number: 500-136523

Date	Time Out	Time In	ICOC Initials	misc info
11/5/17	1200	1300	AH	Waters

CHI-22-20-074/A-01/08

Method 8260B SIM

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	DCA #
OMW3D-GW-103017	500-136523-2	100
OMW4D-GW-103017	500-136523-4	100
	MB 240-301775/5	99
	LCS 240-301775/4	98
OMW4D-GW-103017 MS	500-136523-4 MS	100
OMW4D-GW-103017 MSD	500-136523-4 MSD	101

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	63-125

Column to be used to flag recovery values

FORM II 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low Lab File ID: X21350.D

Lab ID: LCS 240-301775/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	10.7	107	59-131	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low Lab File ID: X21355.D

Lab ID: 500-136523-4 MS Client ID: OMW4D-GW-103017 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	ND	10.9	109	52-129	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low Lab File ID: X21356.D

Lab ID: 500-136523-4 MSD Client ID: OMW4D-GW-103017 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	11.1	111	1	13	52-129	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab File ID: X21351.D Lab Sample ID: MB 240-301775/5

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

Instrument ID: A3UX2 Date Analyzed: 11/02/2017 12:23

GC Column: ZB-624 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-301775/4	X21350.D	11/02/2017 11:58
OMW3D-GW-103017	500-136523-2	X21353.D	11/02/2017 13:12
OMW4D-GW-103017	500-136523-4	X21354.D	11/02/2017 13:37
OMW4D-GW-103017 MS	500-136523-4 MS	X21355.D	11/02/2017 14:02
OMW4D-GW-103017 MSD	500-136523-4 MSD	X21356.D	11/02/2017 14:26

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

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab File ID: BFBX2077.D BFB Injection Date: 10/06/2017

Instrument ID: A3UX2 BFB Injection Time: 14:32

Analysis Batch No.: 297993

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.5	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	91.9	
175	5.0 - 9.0 % of mass 174	6.6	(7.2) 1
176	95.0 - 101.0 % of mass 174	89.7	(97.6) 1
177	5.0 - 9.0 % of mass 176	5.7	(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
	IC 240-297993/3	X21217.D	10/06/2017	15:17
	IC 240-297993/4	X21218.D	10/06/2017	15:42
	IC 240-297993/5	X21219.D	10/06/2017	16:07
	ICIS 240-297993/6	X21220.D	10/06/2017	16:31
	IC 240-297993/7	X21221.D	10/06/2017	16:56
	IC 240-297993/8	X21222.D	10/06/2017	17:20
	IC 240-297993/9	X21223.D	10/06/2017	17:45
	IC 240-297993/10	X21224.D	10/06/2017	18:10
	ICV 240-297993/11	X21225.D	10/06/2017	18:35

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

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab File ID: BFBX2085.D BFB Injection Date: 11/02/2017

Instrument ID: A3UX2 BFB Injection Time: 10:48

Analysis Batch No.: 301775

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.8	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	54.2	
175	5.0 - 9.0 % of mass 174	4.4	(8.1) 1
176	95.0 - 101.0 % of mass 174	51.8	(95.6) 1
177	5.0 - 9.0 % of mass 176	3.4	(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 240-301775/3	X21349.D	11/02/2017	11:33
	LCS 240-301775/4	X21350.D	11/02/2017	11:58
	MB 240-301775/5	X21351.D	11/02/2017	12:23
OMW3D-GW-103017	500-136523-2	X21353.D	11/02/2017	13:12
OMW4D-GW-103017	500-136523-4	X21354.D	11/02/2017	13:37
OMW4D-GW-103017 MS	500-136523-4 MS	X21355.D	11/02/2017	14:02
OMW4D-GW-103017 MSD	500-136523-4 MSD	X21356.D	11/02/2017	14:26

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

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Sample No.: ICIS 240-297993/6 Date Analyzed: 10/06/2017 16:31

Instrument ID: A3UX2 GC Column: ZB-624 ID: 0.53(mm)

Lab File ID (Standard): X21220.D Heated Purge: (Y/N) Y

Calibration ID: 41784

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		6133182	4.76	122569	6.00		
UPPER LIMIT		12266364	5.26	245138	6.50		
LOWER LIMIT		3066591	4.26	61285	5.50		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297993/11		5237674	4.76	111619	6.00		
CCVIS 240-301775/3		4061445	4.75	81949	6.00		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

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 SIM

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

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Sample No.: CCVIS 240-301775/3 Date Analyzed: 11/02/2017 11:33

Instrument ID: A3UX2 GC Column: ZB-624 ID: 0.53(mm)

Lab File ID (Standard): X21349.D Heated Purge: (Y/N) Y

Calibration ID: 41784

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		4061445	4.75	81949	6.00		
UPPER LIMIT		8122890	5.25	163898	6.50		
LOWER LIMIT		2030723	4.25	40975	5.50		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-301775/4		4092174	4.76	81061	6.00		
MB 240-301775/5		4006491	4.76	78308	6.00		
500-136523-2	OMW3D-GW-103017	3992079	4.76	83253	6.00		
500-136523-4	OMW4D-GW-103017	4022531	4.76	82936	6.00		
500-136523-4 MS	OMW4D-GW-103017 MS	4020000	4.76	80052	6.00		
500-136523-4 MSD	OMW4D-GW-103017 MSD	3989524	4.76	83881	6.00		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

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 SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW3D-GW-103017 | Lab Sample ID: 500-136523-2

Matrix: Water | Lab File ID: X21353.D

Analysis Method: 8260B SIM | Date Collected: 10/30/2017 09:45

Sample wt/vol: 15(mL) | Date Analyzed: 11/02/2017 13:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301775 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-125

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21353.D				
Lims ID:	500-136523-F-2				
Client ID:	OMW3D-GW-103017				
Sample Type:	Client				
Inject. Date:	02-Nov-2017 13:12:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-2				
Misc. Info.:	240-0070302-007				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

First Level Reviewer: macenczaks Date: 02-Nov-2017 13:51:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.166	4.165	0.001	100	1354112	8.92	
* 7 Fluorobenzene	96	4.759	4.748	0.011	100	3992079	8.88	
* 9 Dioxane-d8 (IS)	96	5.998	6.000	-0.002	87	83253	177.7	

Reagents:

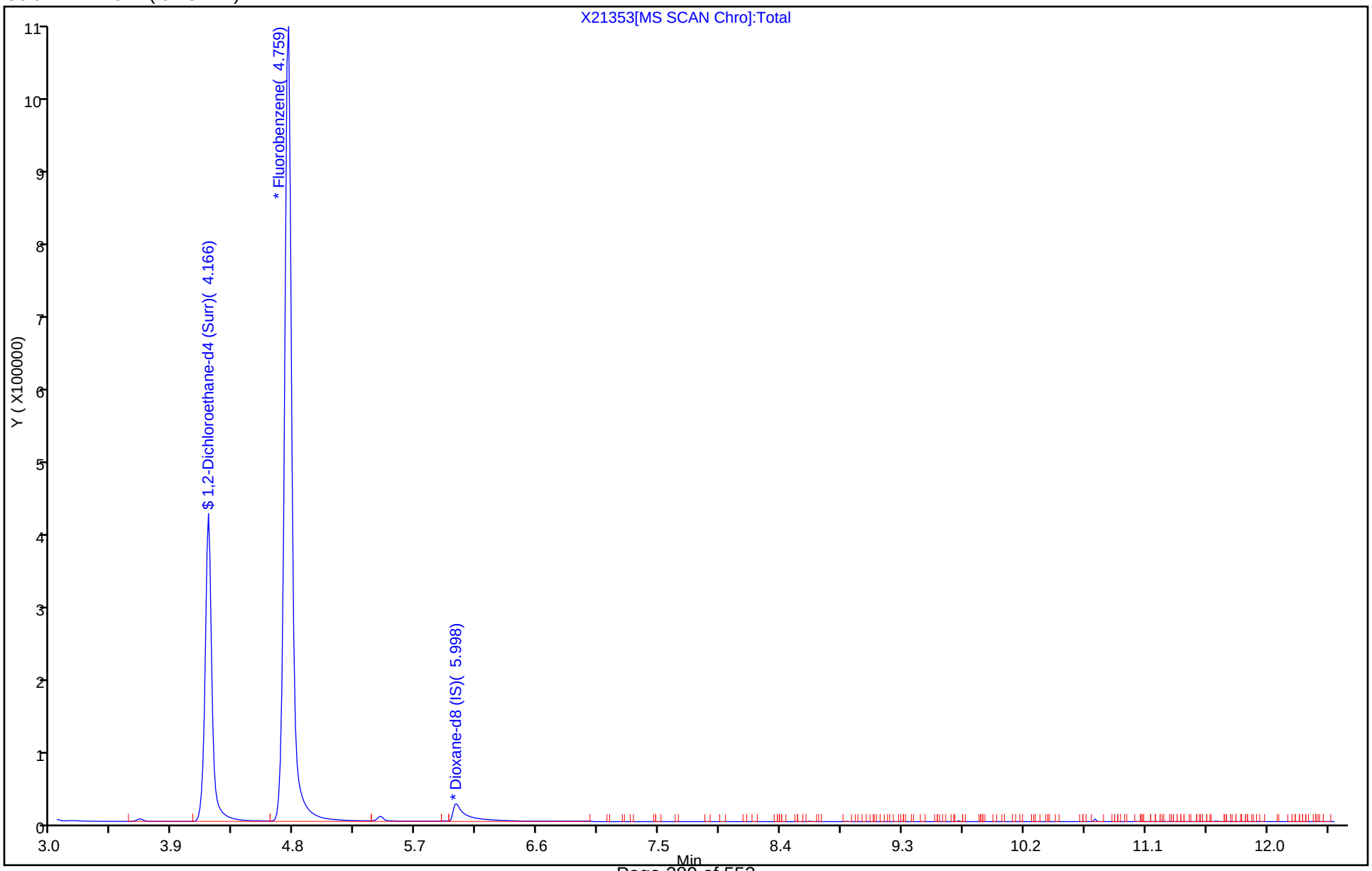
vm150ss_00007	Amount Added:	0.89	Units: uL	Run Reagent
vm150is_00066	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00104	Amount Added:	0.00	Units:	Run Reagent

Report Date: 02-Nov-2017 15:43:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21353.D				
Injection Date:	02-Nov-2017 13:12:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	500-136523-F-2	Lab Sample ID:	240-136523-2	Worklist Smp#:	7
Client ID:	OMW3D-GW-103017				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21353.D				
Lims ID:	500-136523-F-2				
Client ID:	OMW3D-GW-103017				
Sample Type:	Client				
Inject. Date:	02-Nov-2017 13:12:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-2				
Misc. Info.:	240-0070302-007				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

First Level Reviewer: macenczaks Date: 02-Nov-2017 13:51:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	8.88	8.92	100.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW4D-GW-103017 | Lab Sample ID: 500-136523-4

Matrix: Water | Lab File ID: X21354.D

Analysis Method: 8260B SIM | Date Collected: 10/30/2017 12:20

Sample wt/vol: 15(mL) | Date Analyzed: 11/02/2017 13:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301775 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-125

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21354.D				
Lims ID:	500-136523-F-4				
Client ID:	OMW4D-GW-103017				
Sample Type:	Client				
Inject. Date:	02-Nov-2017 13:37:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-4				
Misc. Info.:	240-0070302-008				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				
First Level Reviewer: macenczaks		Date:	02-Nov-2017 14:12:56		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.166	4.165	0.001	100	1361884	8.91	
* 7 Fluorobenzene	96	4.760	4.748	0.012	100	4022531	8.88	
* 9 Dioxane-d8 (IS)	96	5.998	6.000	-0.002	88	82936	177.7	

Reagents:

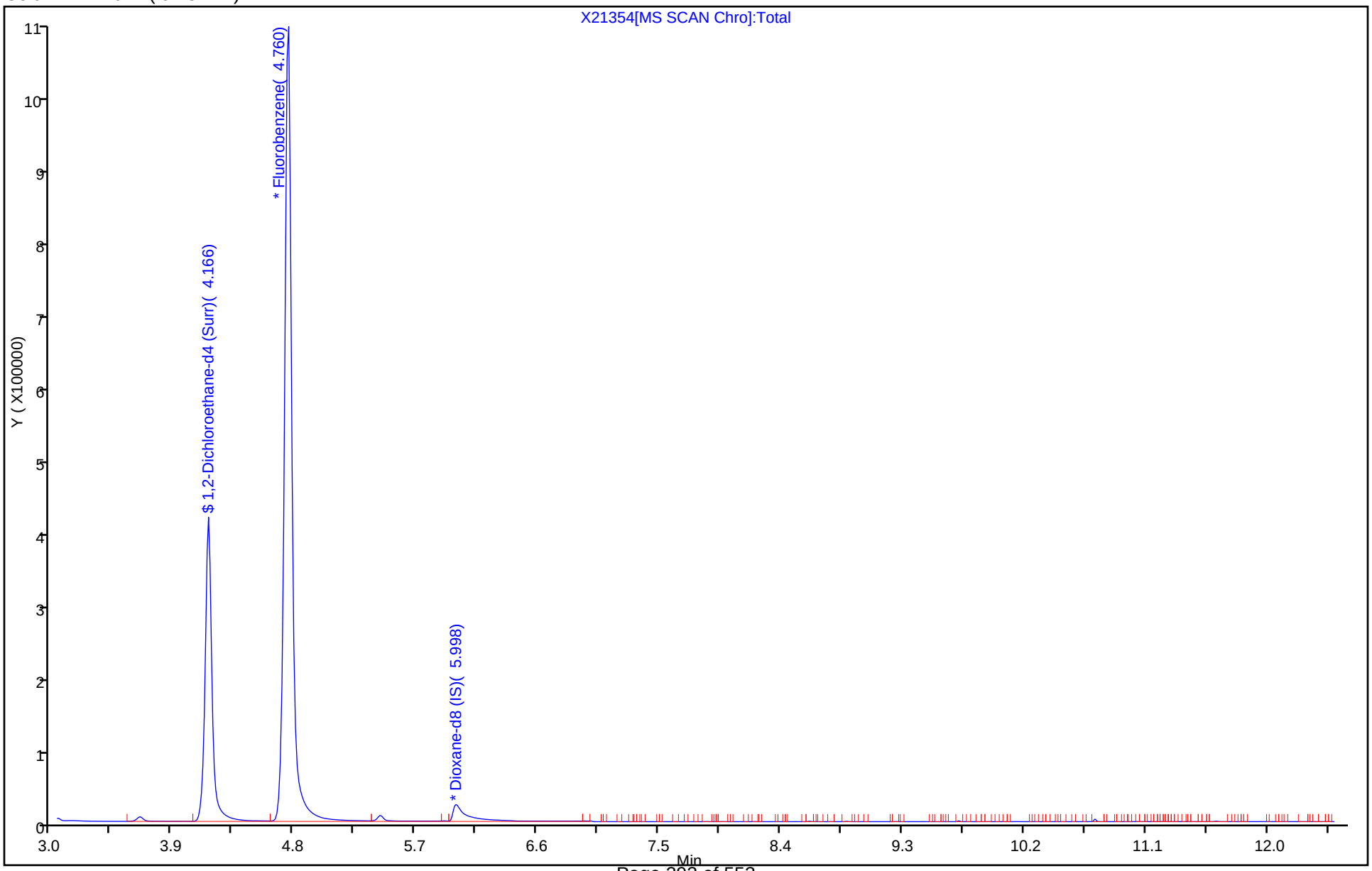
vm150ss_00007	Amount Added:	0.89	Units: uL	Run Reagent
vm150is_00066	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00104	Amount Added:	0.00	Units:	Run Reagent

Report Date: 02-Nov-2017 15:43:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21354.D				
Injection Date:	02-Nov-2017 13:37:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	500-136523-F-4	Lab Sample ID:	240-136523-4	Worklist Smp#:	8
Client ID:	OMW4D-GW-103017				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21354.D				
Lims ID:	500-136523-F-4				
Client ID:	OMW4D-GW-103017				
Sample Type:	Client				
Inject. Date:	02-Nov-2017 13:37:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-4				
Misc. Info.:	240-0070302-008				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

First Level Reviewer: macenczaks Date: 02-Nov-2017 14:12:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	8.88	8.91	100.24

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 500-136523-1 Analy Batch No.: 297993

SDG No.:

Instrument ID: A3UX2 GC Column: ZB-624 ID: 0.53(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/06/2017 15:17 Calibration End Date: 10/06/2017 18:10 Calibration ID: 41784

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-297993/10	X21224.D
Level 2	IC 240-297993/9	X21223.D
Level 3	IC 240-297993/8	X21222.D
Level 4	IC 240-297993/7	X21221.D
Level 5	IC 240-297993/3	X21217.D
Level 6	IC 240-297993/4	X21218.D
Level 7	IC 240-297993/5	X21219.D
Level 8	ICIS 240-297993/6	X21220.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 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.8140 1.2110	0.8346 1.1935	1.0075 1.1519	1.1261	1.2930	Ave		1.0790				16.4		35.0			
1,2-Dichloroethane-d4 (Surr)	0.3803 0.3444	0.3191 0.3356	0.3503 0.2716	0.3526	0.3481	Ave		0.3377				9.4		35.0			

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.: 500-136523-1 Analy Batch No.: 297993

SDG No.:

Instrument ID: A3UX2 GC Column: ZB-624 ID: 0.53(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/06/2017 15:17 Calibration End Date: 10/06/2017 18:10 Calibration ID: 41784

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-297993/10	X21224.D
Level 2	IC 240-297993/9	X21223.D
Level 3	IC 240-297993/8	X21222.D
Level 4	IC 240-297993/7	X21221.D
Level 5	IC 240-297993/3	X21217.D
Level 6	IC 240-297993/4	X21218.D
Level 7	IC 240-297993/5	X21219.D
Level 8	ICIS 240-297993/6	X21220.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD 8	Ave	477 86189	1098 41024	3344 15892	7979	172268	1.00 100	2.00 50.0	5.00 20.0	10.0	200
1,2-Dichloroethane-d4 (Surr)	FB	Ave	114136 11580916	200314 5469977	568263 1665770	1145657	24225429	0.500 48.9	1.00 23.9	2.50 8.88	5.00	98.9

Curve Type Legend:

Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21217.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	06-Oct-2017 15:17:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	240-0069413-003				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:27	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: macenczaks Date: 06-Oct-2017 16:06:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.165	4.164	0.001	100	24225429	98.9	101.9	
* 7 Fluorobenzene	96	4.759	4.760	-0.001	100	6252892	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	6.006	5.999	0.008	95	118362	177.7	177.7	
8 1,4-Dioxane	88	6.068	6.068	0.000	95	172268	200.0	239.7	

Reagents:

vmdioxanew_00108	Amount Added: 30.00	Units: uL
vm150is_00060	Amount Added: 0.89	Units: uL
vm150ss_00006	Amount Added: 0.89	Units: uL
vm50ss_00299	Amount Added: 27.00	Units: uL

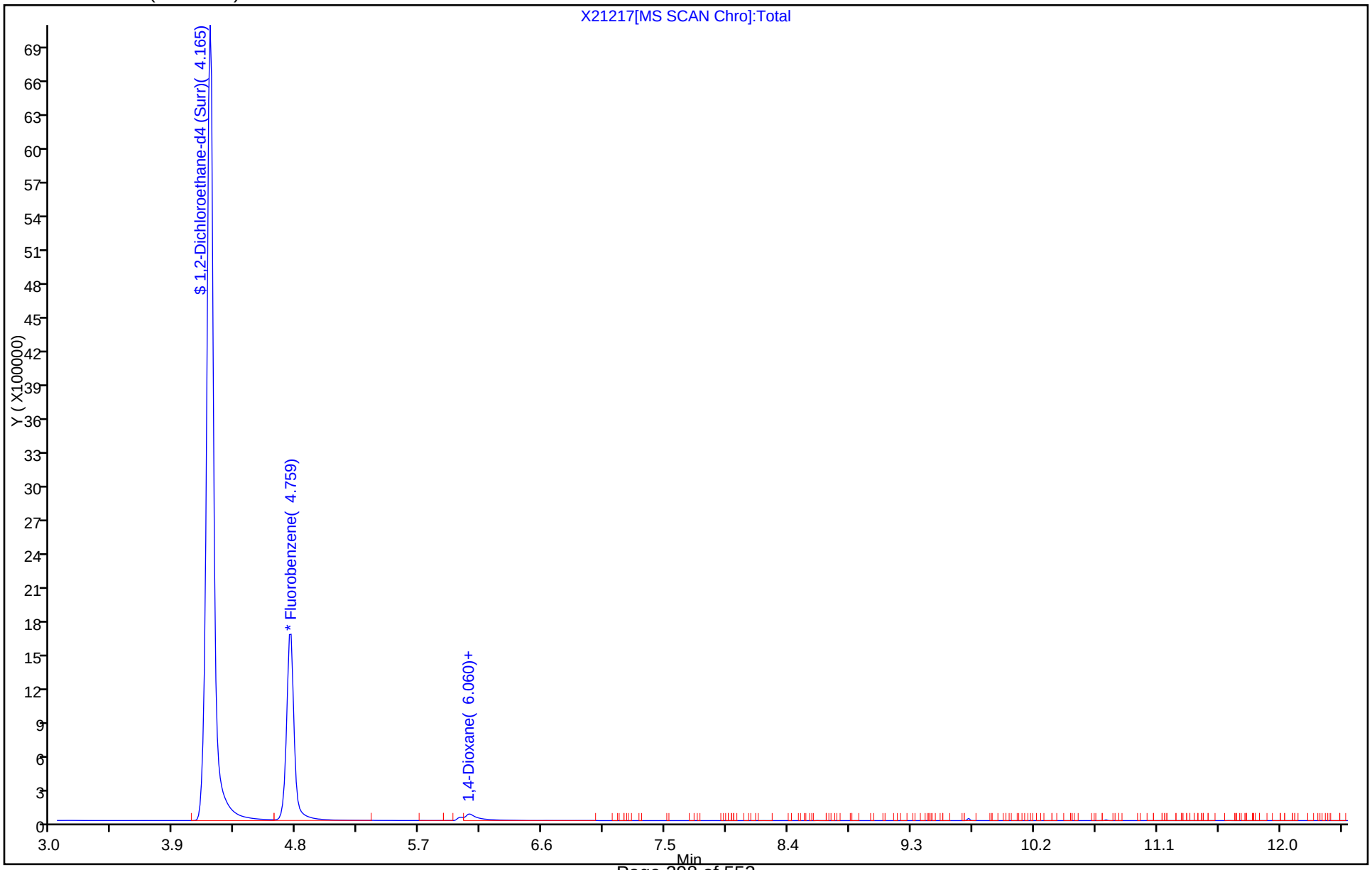
Report Date: 09-Oct-2017 11:06:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21217.D

Injection Date:	06-Oct-2017 15:17:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21218.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	06-Oct-2017 15:42:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	240-0069413-004				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:28	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: macenczaks Date: 06-Oct-2017 16:06:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.164	4.164	0.000	100	11580916	48.9	49.8	
* 7 Fluorobenzene	96	4.760	4.760	0.000	100	6111136	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.999	5.999	0.001	95	126453	177.7	177.7	
8 1,4-Dioxane	88	6.068	6.068	0.000	96	86189	100.0	112.2	

Reagents:

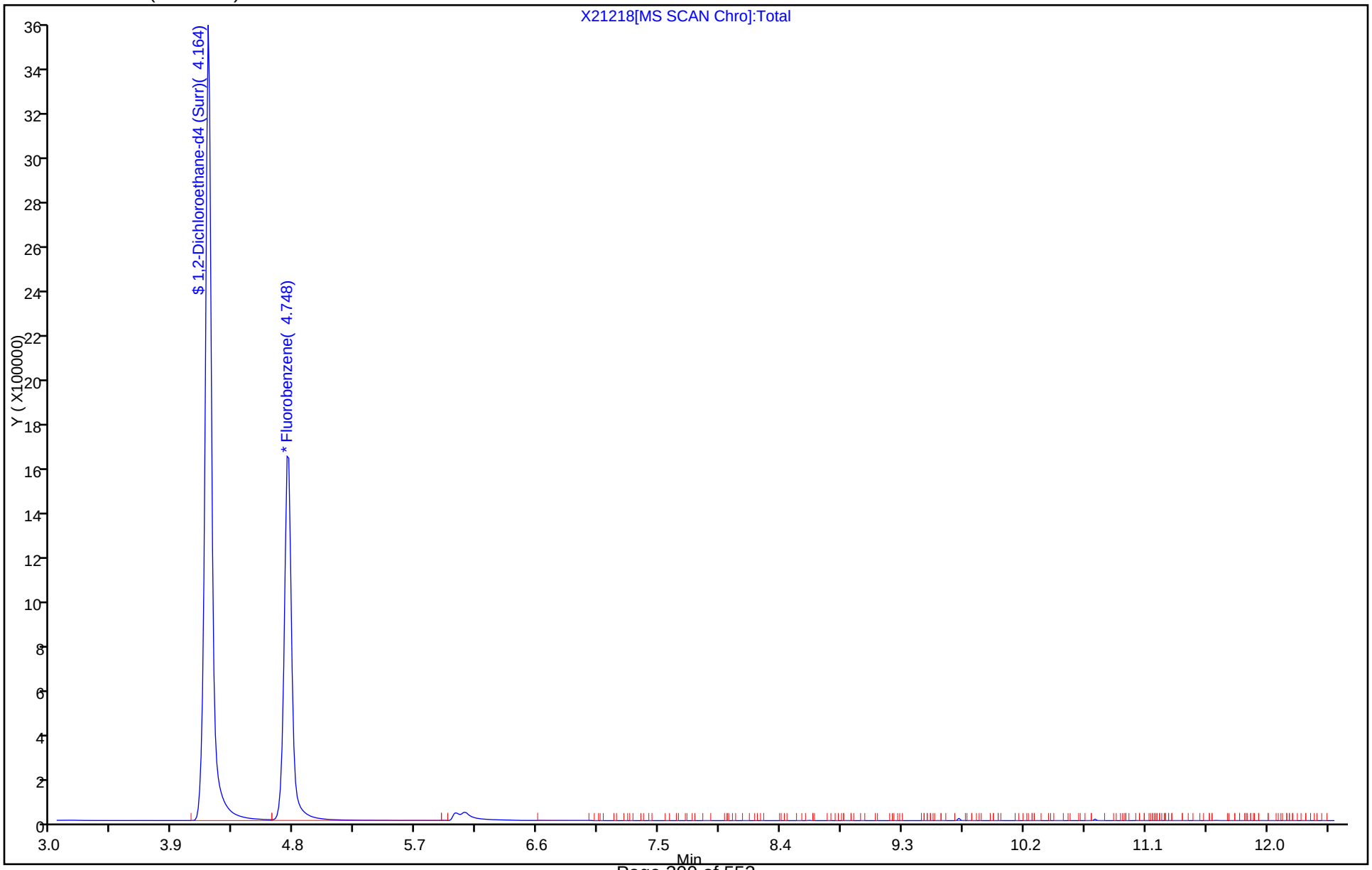
vm150is_00060	Amount Added: 0.89	Units: uL
vm150ss_00006	Amount Added: 0.89	Units: uL
vmdioxanew_00108	Amount Added: 15.00	Units: uL
vm50ss_00299	Amount Added: 12.00	Units: uL

Report Date: 09-Oct-2017 11:06:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21218.D				
Injection Date:	06-Oct-2017 15:42:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21219.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	06-Oct-2017 16:07:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	240-0069413-005				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:29	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: macenczaks Date: 09-Oct-2017 08:48:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.167	4.164	0.003	100	5469977	23.9	23.7	
* 7 Fluorobenzene	96	4.760	4.760	0.000	100	6063208	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	6.006	5.999	0.008	94	122144	177.7	177.7	
8 1,4-Dioxane	88	6.068	6.068	0.000	95	41024	50.0	55.3	

Reagents:

vm150is_00060	Amount Added:	0.89	Units: uL
vm150ss_00006	Amount Added:	0.89	Units: uL
vmdioxanew_00108	Amount Added:	7.50	Units: uL
vm50ss_00299	Amount Added:	4.50	Units: uL

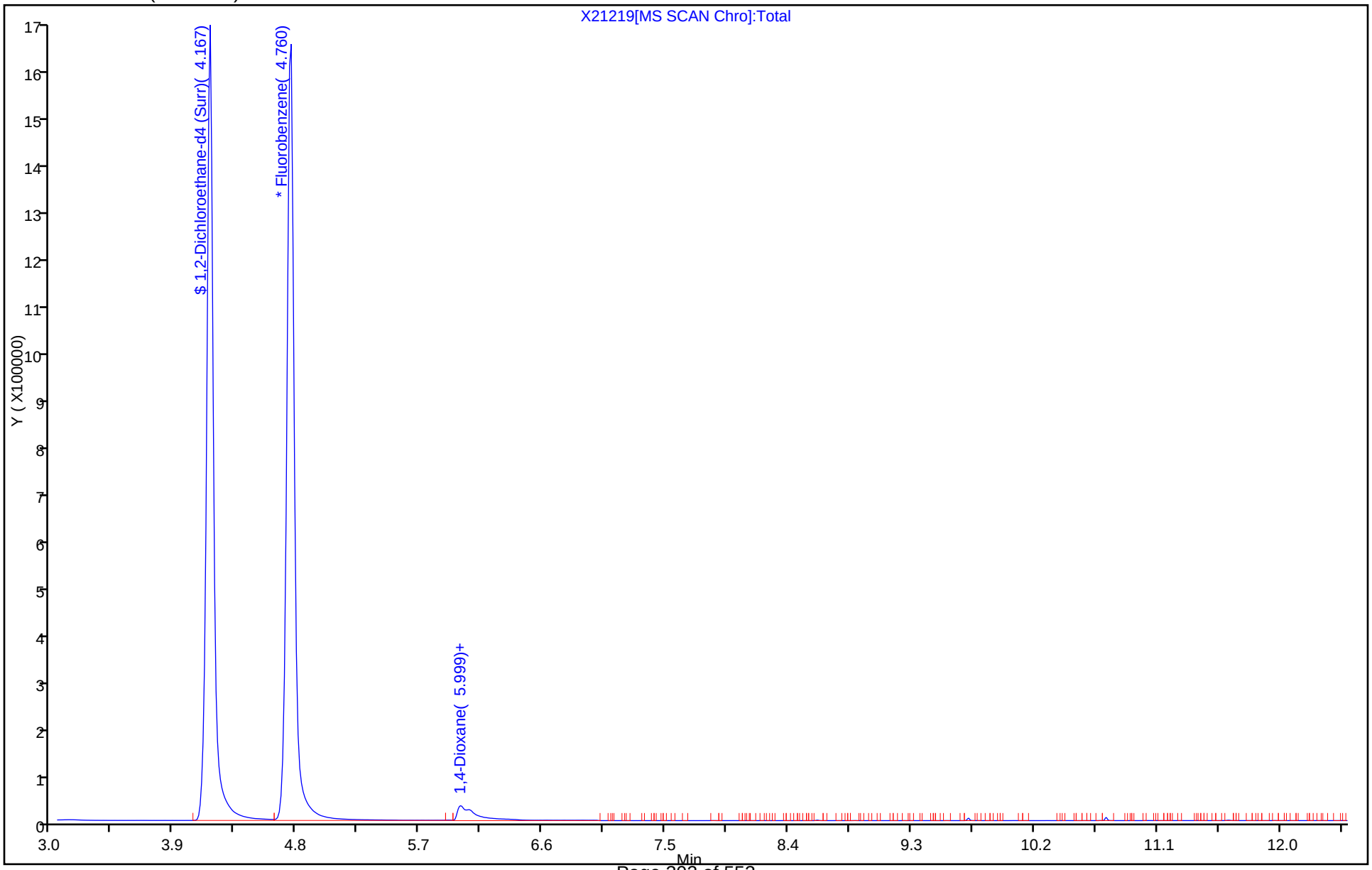
Report Date: 09-Oct-2017 11:06:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21219.D

Injection Date:	06-Oct-2017 16:07:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21220.D				
Lims ID:	icis				
Client ID:					
Sample Type:	ICIS	Calib Level:	5		
Inject. Date:	06-Oct-2017 16:31:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	icis				
Misc. Info.:	240-0069413-006				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:30	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				
First Level Reviewer: macenczaks		Date:	09-Oct-2017 08:48:59		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.164	4.164	0.000	100	1665770	8.88	7.14	
* 7 Fluorobenzene	96	4.760	4.760	0.000	100	6133182	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.999	5.999	0.000	95	122569	177.7	177.7	
8 1,4-Dioxane	88	6.068	6.068	0.000	93	15892	20.0	21.4	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

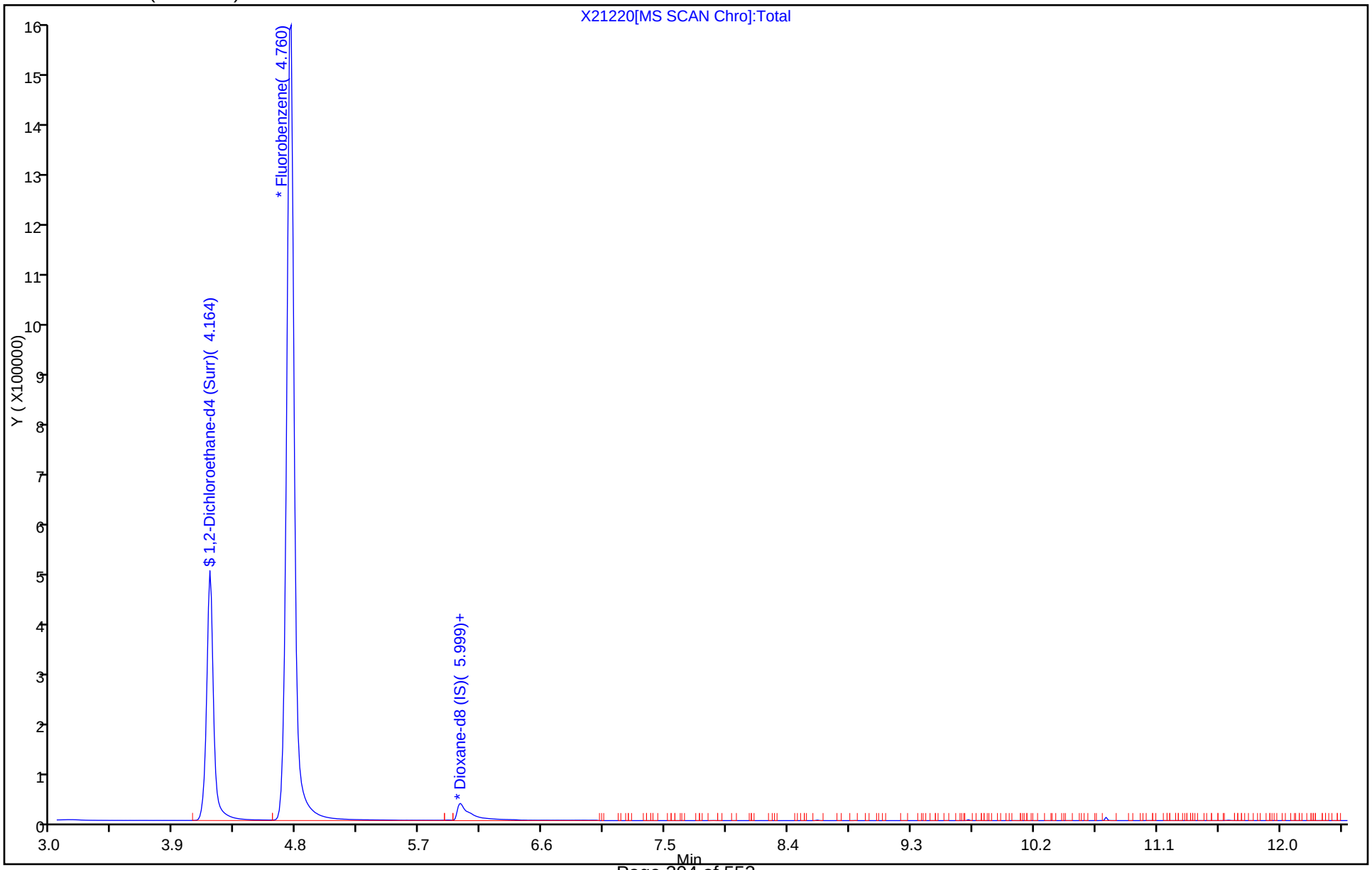
vm150is_00060	Amount Added:	0.89	Units: uL
vm150ss_00006	Amount Added:	0.89	Units: uL
vmdioxanew_00108	Amount Added:	3.00	Units: uL

Report Date: 09-Oct-2017 11:06:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21220.D				
Injection Date:	06-Oct-2017 16:31:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	icis			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton

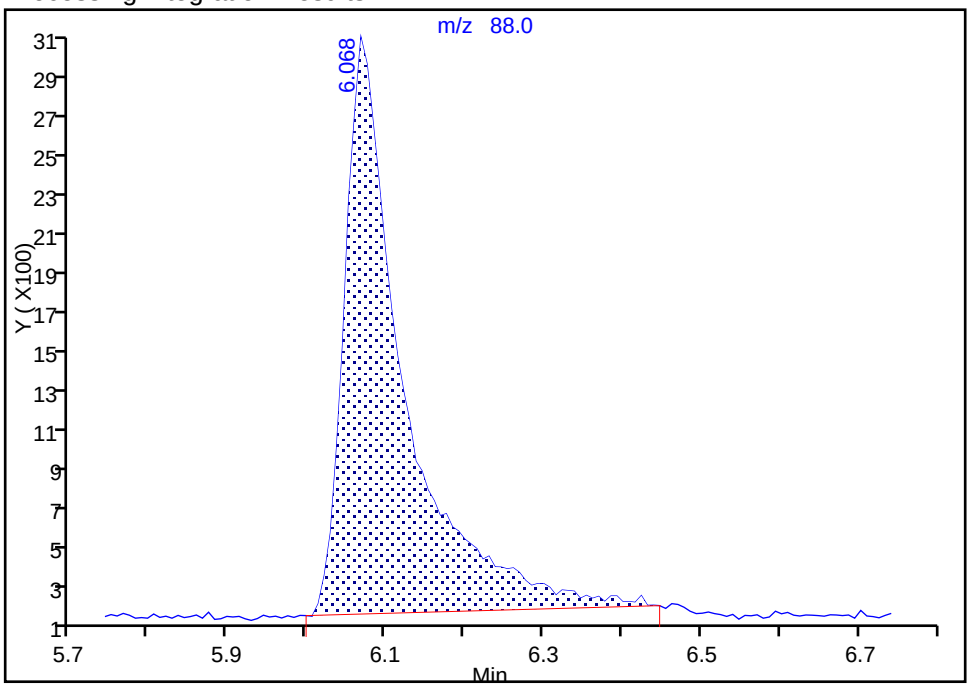
Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21220.D				
Injection Date:	06-Oct-2017 16:31:30	Instrument ID:	A3UX2		
Lims ID:	icis				
Client ID:					
Operator ID:	002808	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

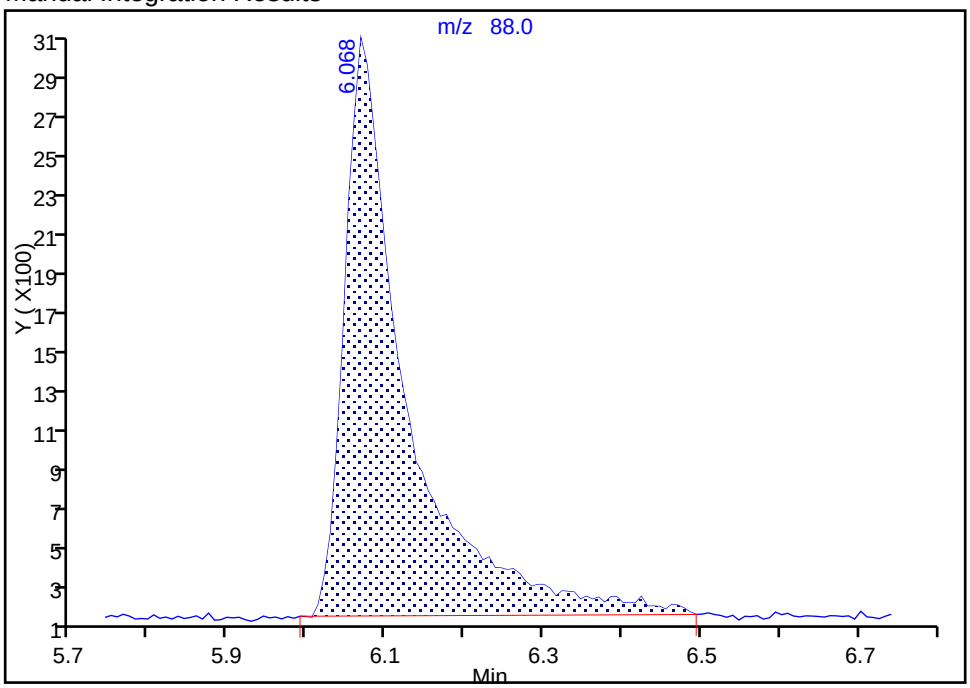
Processing Integration Results

RT: 6.07
Area: 15270
Amount: 20.623677
Amount Units: ug/l



Manual Integration Results

RT: 6.07
Area: 15892
Amount: 21.351645
Amount Units: ug/l



Reviewer: macenczaks, 09-Oct-2017 08:48:54
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21221.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	06-Oct-2017 16:56:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	240-0069413-007				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:31	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: macenczaks Date: 09-Oct-2017 08:49:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.164	4.164	0.000	100	1145657	5.00	5.22	
* 7 Fluorobenzene	96	4.760	4.760	0.000	100	5773238	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.999	5.999	0.001	100	125891	177.7	177.7	
8 1,4-Dioxane	88	6.069	6.068	0.001	99	7979	10.0	10.4	

Reagents:

vm150is_00060	Amount Added:	0.89	Units: uL
vmdioxanew_00108	Amount Added:	1.50	Units: uL
vm50ss_00299	Amount Added:	1.50	Units: uL

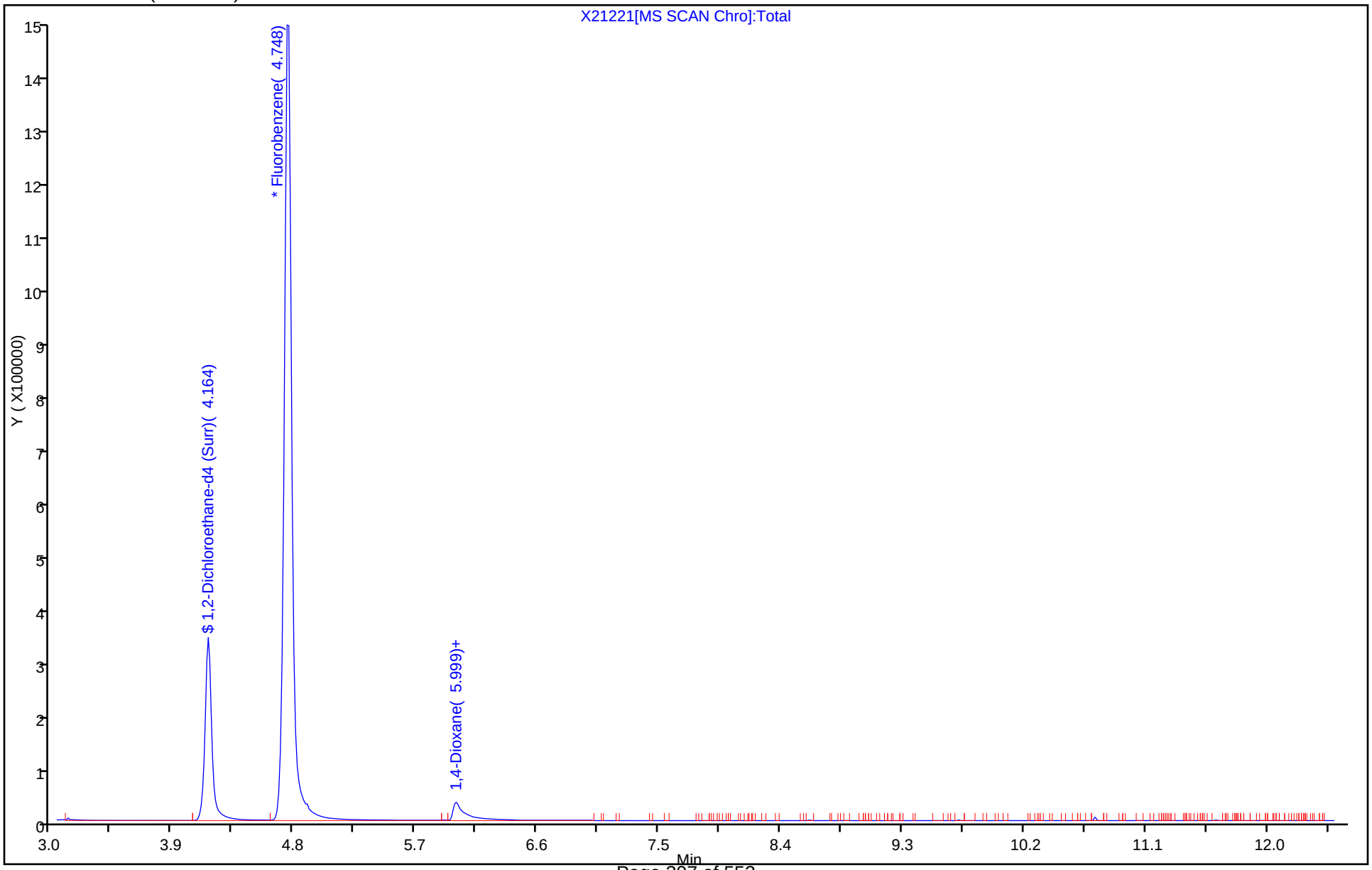
Report Date: 09-Oct-2017 11:06:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21221.D

Injection Date:	06-Oct-2017 16:56:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21222.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	06-Oct-2017 17:20:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	240-0069413-008				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:32	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: macenczaks Date: 09-Oct-2017 08:49:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.166	4.164	0.002	100	568263	2.50	2.59	
* 7 Fluorobenzene	96	4.759	4.760	-0.001	100	5765126	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.998	5.999	0.000	100	117951	177.7	177.7	
8 1,4-Dioxane	88	6.068	6.068	0.000	99	3344	5.00	4.67	

Reagents:

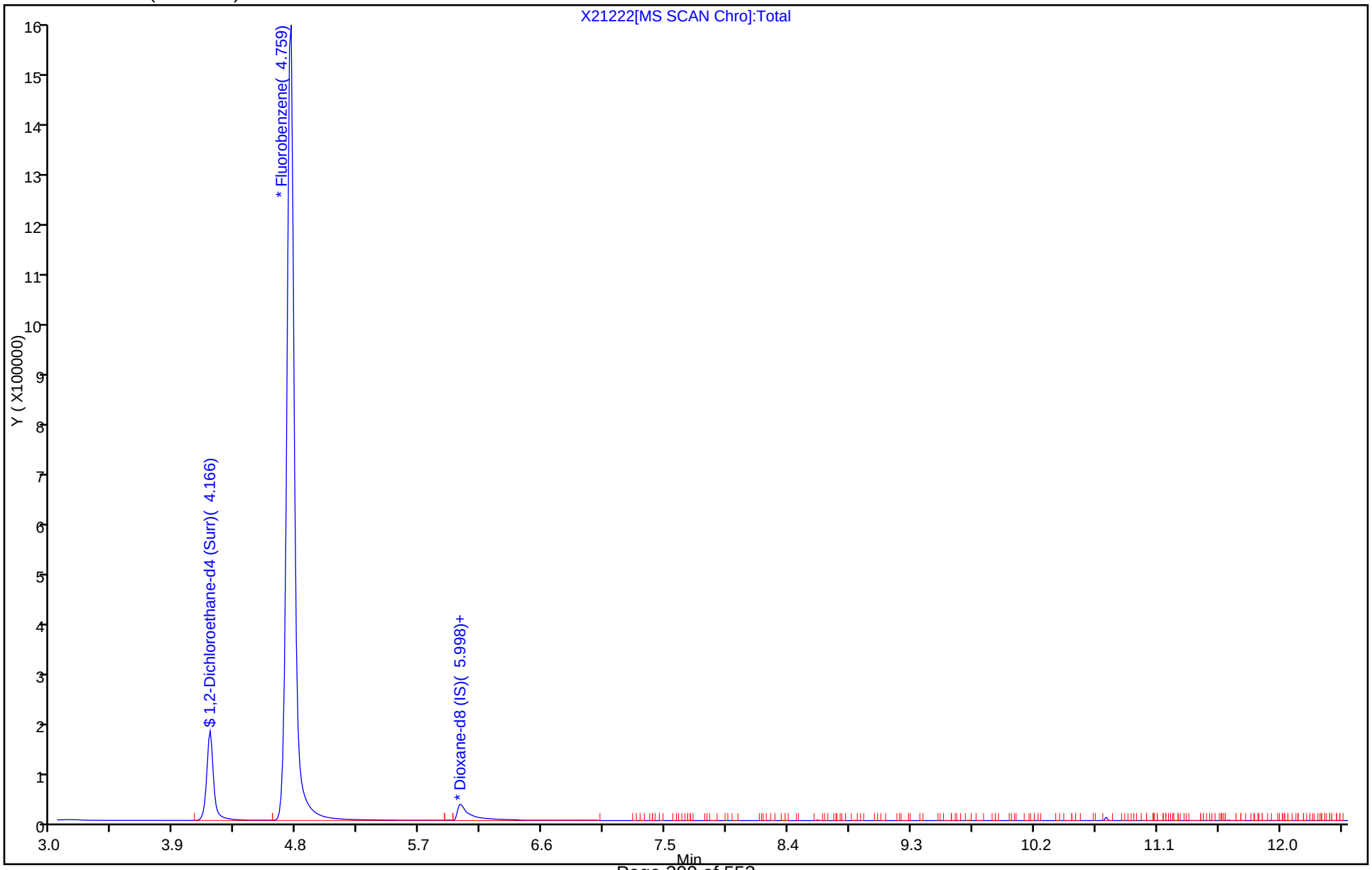
vm150is_00060	Amount Added:	0.89	Units: uL
vmdioxanew_00108	Amount Added:	0.75	Units: uL
vm50ss_00299	Amount Added:	0.75	Units: uL

Report Date: 09-Oct-2017 11:06:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21222.D				
Injection Date:	06-Oct-2017 17:20:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21223.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	06-Oct-2017 17:45:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	240-0069413-009				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:33	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: macenczaks Date: 09-Oct-2017 08:49:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.165	4.164	0.001	100	200314	1.00	0.9447	
* 7 Fluorobenzene	96	4.759	4.760	-0.001	100	5577617	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.998	5.999	0.000	100	116880	177.7	177.7	
8 1,4-Dioxane	88	6.076	6.068	0.008	99	1098	2.00	1.55	

Reagents:

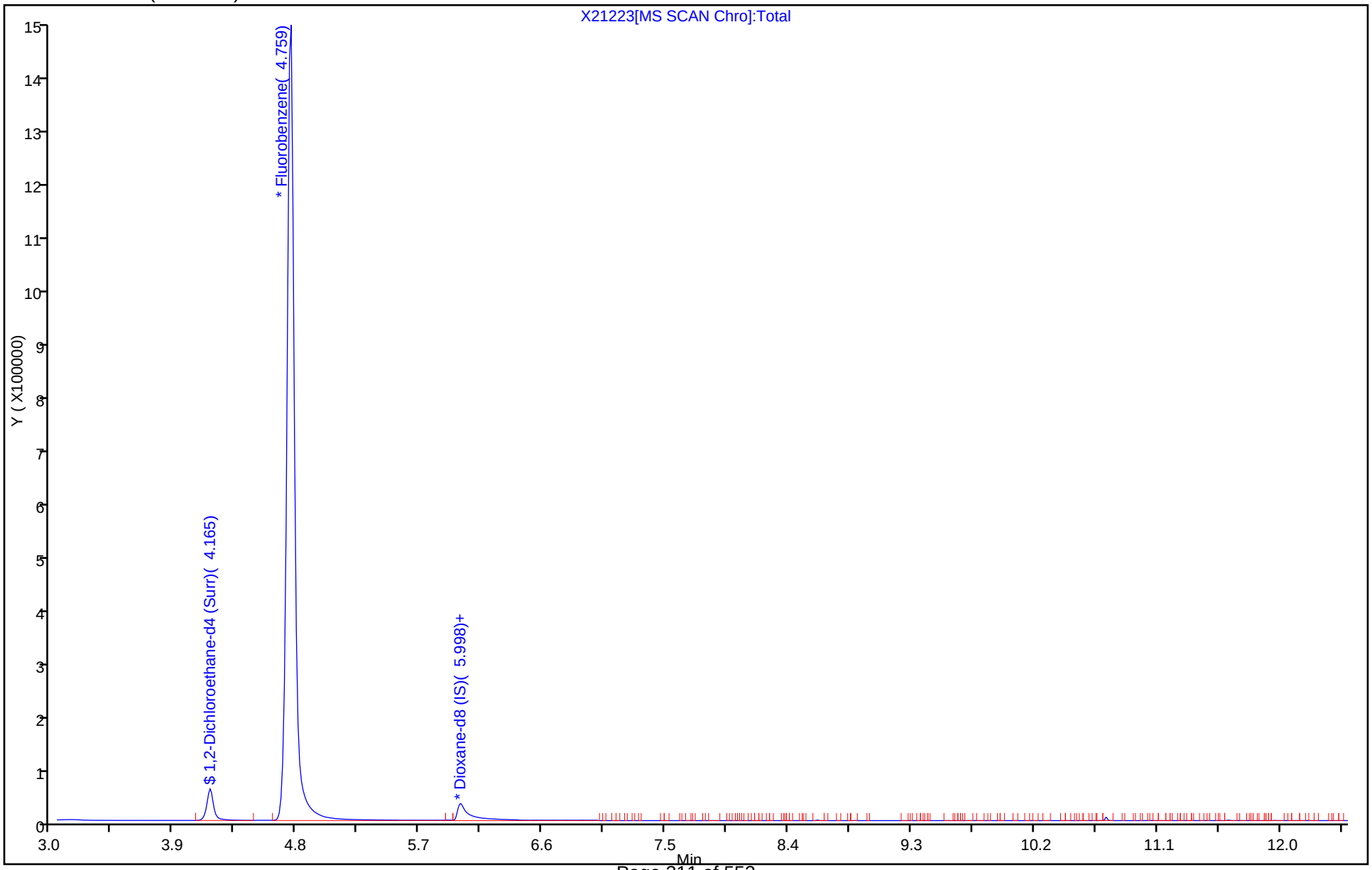
vm150is_00060	Amount Added:	0.89	Units: uL
vmdioxanew_00108	Amount Added:	0.30	Units: uL
vm50ss_00299	Amount Added:	0.30	Units: uL

Report Date: 09-Oct-2017 11:06:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21223.D				
Injection Date:	06-Oct-2017 17:45:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	06-Oct-2017 18:10:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	240-0069413-010				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:34	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: macenczaks Date: 09-Oct-2017 08:51:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.165	4.164	0.001	100	114136	0.5000	0.5631	
* 7 Fluorobenzene	96	4.760	4.760	0.000	100	5331918	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.999	5.999	0.001	100	104118	177.7	177.7	
8 1,4-Dioxane	88	6.084	6.068	0.016	85	477	1.00	0.7544	

Reagents:

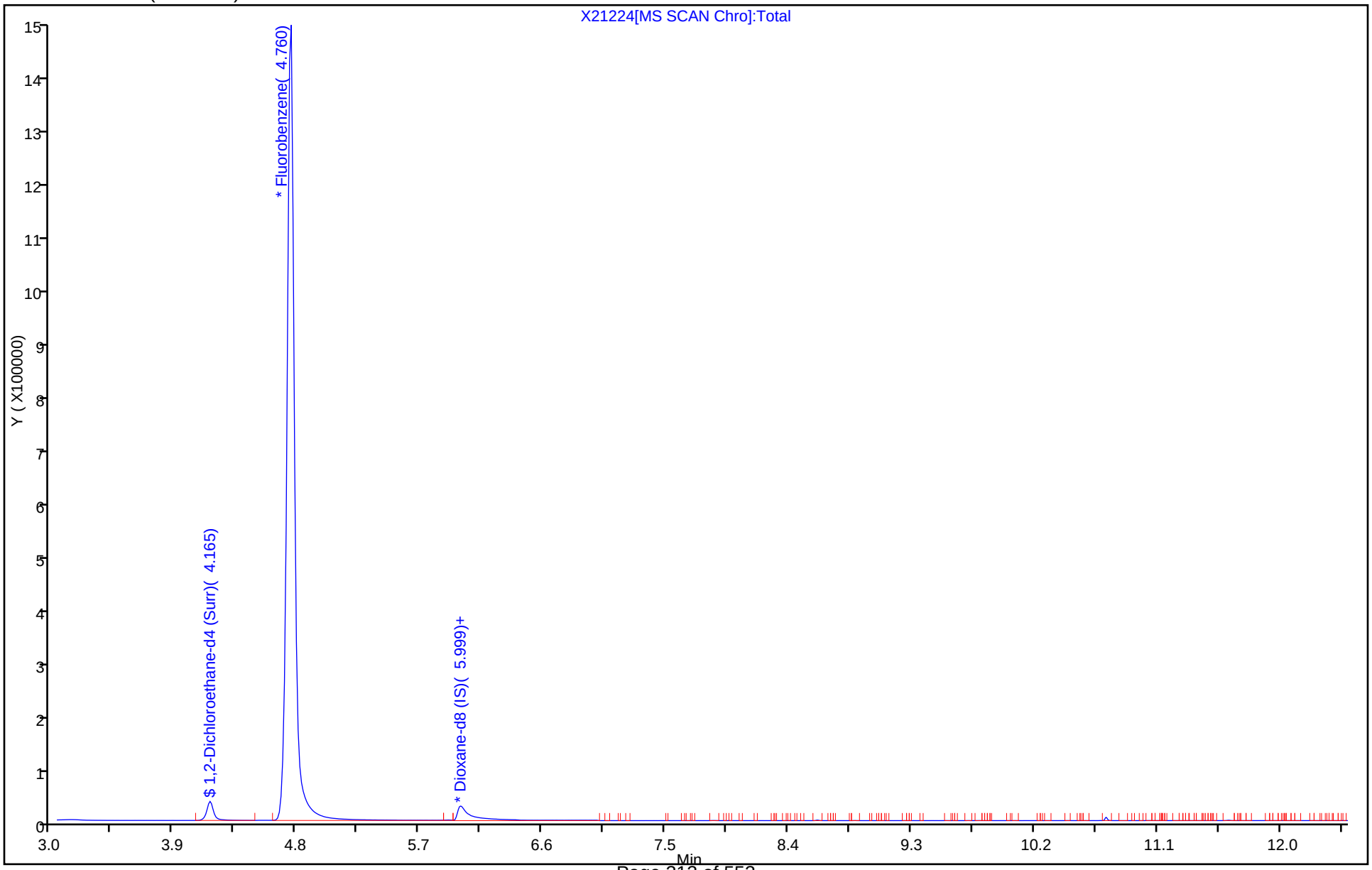
vm150is_00060	Amount Added:	0.89	Units: uL
vmdioxanew_00108	Amount Added:	0.15	Units: uL
vm50ss_00299	Amount Added:	0.15	Units: uL

Report Date: 09-Oct-2017 11:06:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Injection Date:	06-Oct-2017 18:10:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 240-297993/11 Calibration Date: 10/06/2017 18:35

Instrument ID: A3UX2 Calib Start Date: 10/06/2017 15:17

GC Column: ZB-624 ID: 0.53(mm) Calib End Date: 10/06/2017 18:10

Lab File ID: X21225.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.079	1.043		0.00967	0.0100	-3.3	
1,2-Dichloroethane-d4 (Surr)	Ave	0.3377	0.3052		0.00803	0.00888	-9.6	

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21225.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 06-Oct-2017 18:35:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: icv
Misc. Info.: 240-0069413-011
Operator ID: 002808 Instrument ID: A3UX2
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m
Limit Group: MSV SIM ICAL
Last Update: 09-Oct-2017 11:06:34 Calib Date: 06-Oct-2017 18:10:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: macenczaks Date: 09-Oct-2017 08:51:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.166	4.164	0.002	100	1598540	8.88	8.03	
* 7 Fluorobenzene	96	4.759	4.760	-0.001	100	5237674	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.999	5.999	0.000	100	111619	177.7	177.7	
8 1,4-Dioxane	88	6.068	6.068	0.000	100	6551	10.0	9.67	

Reagents:

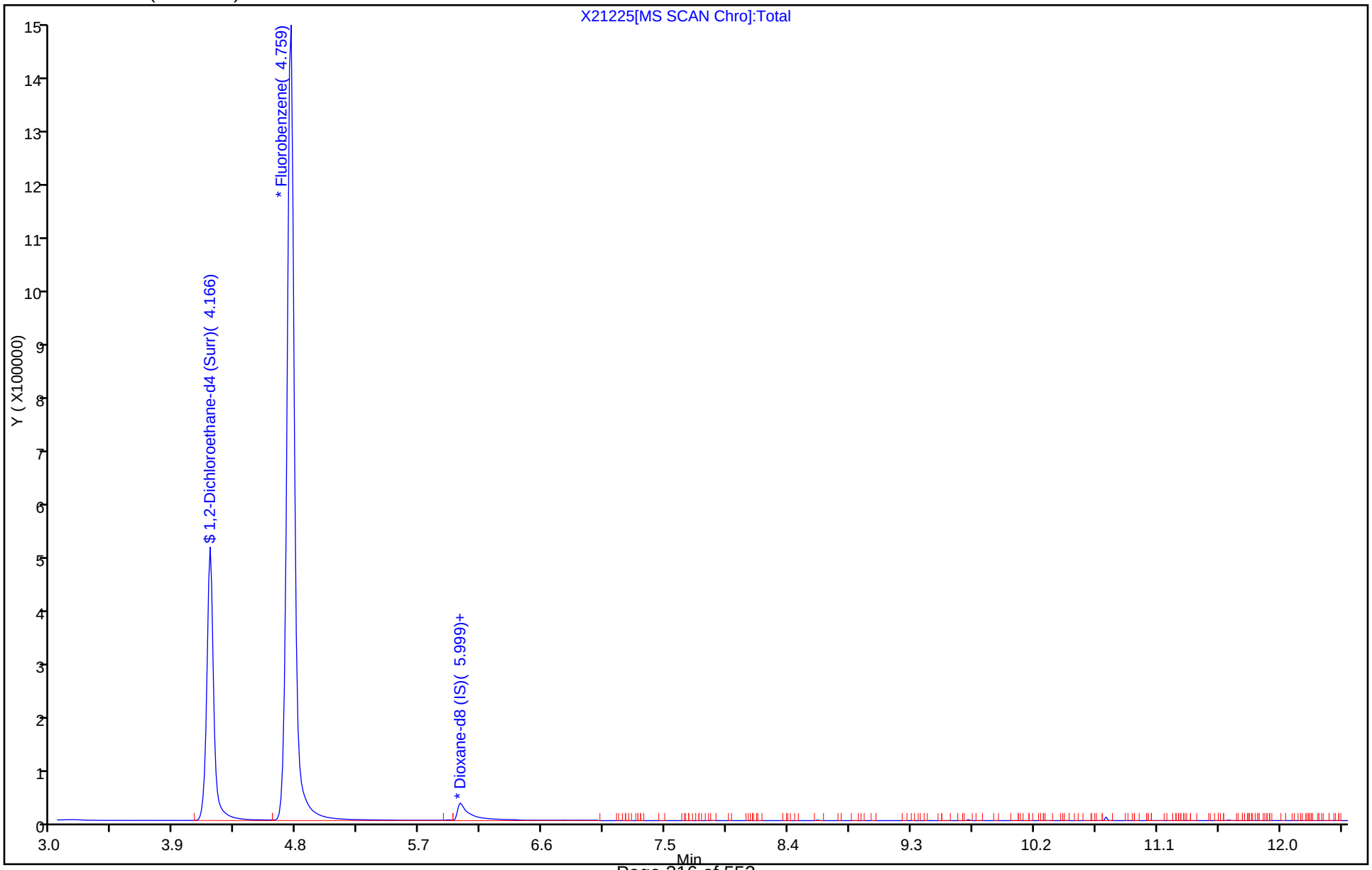
vmdiox_spike_00121	Amount Added:	3.00	Units: uL	
vm150ss_00006	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent
vm150is_00062	Amount Added:	0.89	Units: uL	Run Reagent

Report Date: 09-Oct-2017 11:06:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21225.D				
Injection Date:	06-Oct-2017 18:35:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	icv			Worklist Smp#:	11
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCVIS 240-301775/3 Calibration Date: 11/02/2017 11:33

Instrument ID: A3UX2 Calib Start Date: 10/06/2017 15:17

GC Column: ZB-624 ID: 0.53(mm) Calib End Date: 10/06/2017 18:10

Lab File ID: X21349.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.079	1.303		0.0242	0.0200	20.8	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3377	0.3380		0.00889	0.00888	0.0	35.0

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21349.D				
Lims ID:	ccvis				
Client ID:					
Sample Type:	CCVIS				
Inject. Date:	02-Nov-2017 11:33:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvis				
Misc. Info.:	240-0070302-003				
Operator ID:	002808	Instrument ID:	A3UX2		
Sublist:	chrom-8260SIM_X2*sub2				
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

First Level Reviewer: macenczaks Date: 02-Nov-2017 11:51:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.165	4.165	0.000	100	1372838	8.88	8.89	
* 7 Fluorobenzene	96	4.748	4.748	0.000	100	4061445	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	6.000	6.000	0.000	90	81949	177.7	177.7	
8 1,4-Dioxane	88	6.069	6.069	0.000	89	12018	20.0	24.2	

Reagents:

vmdioxanew_00111	Amount Added:	3.00	Units: uL	
vm150ss_00007	Amount Added:	0.89	Units: uL	Run Reagent
vm150is_00066	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00104	Amount Added:	0.00	Units:	Run Reagent

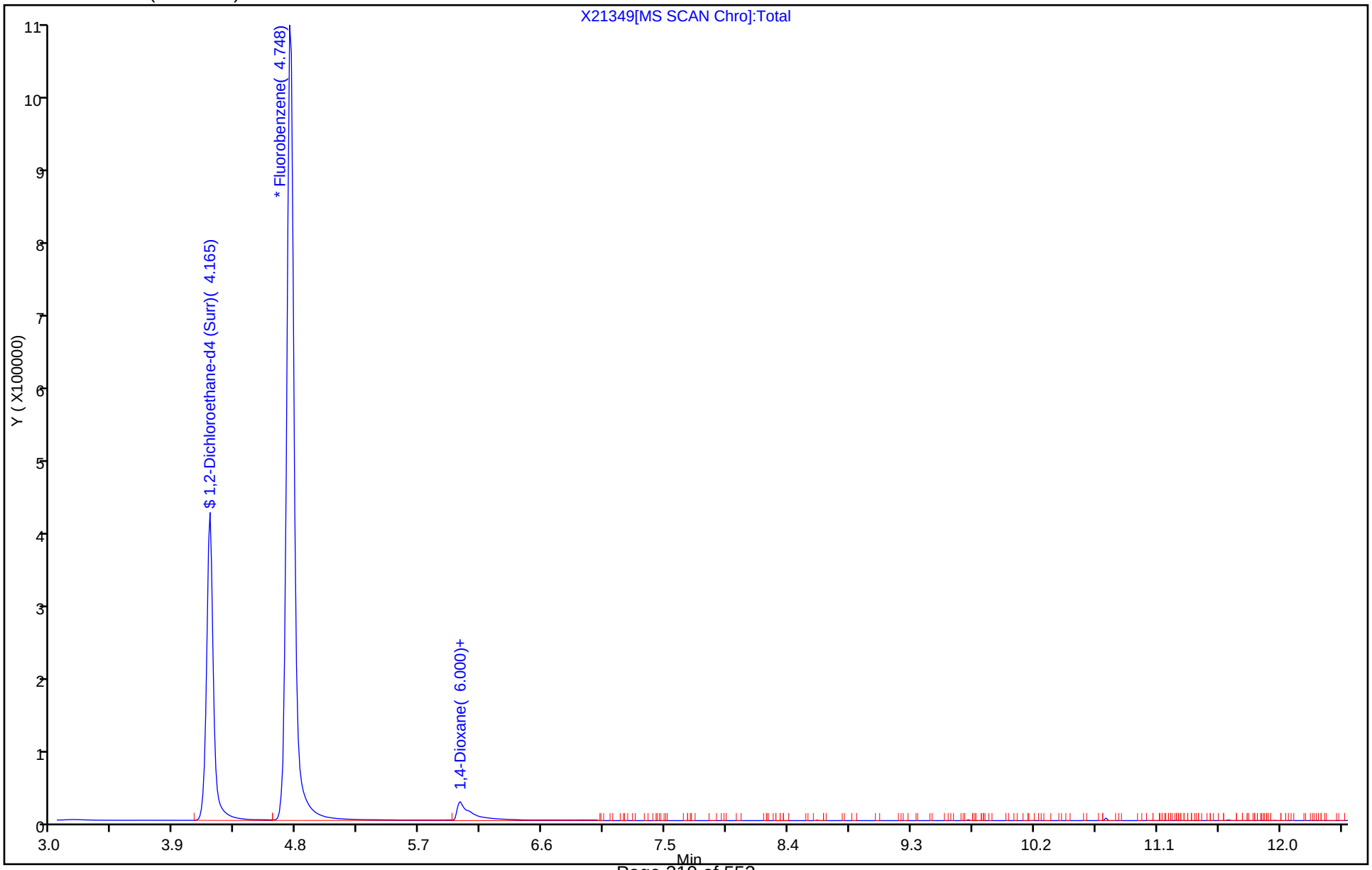
Report Date: 02-Nov-2017 15:43:42 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21349.D

Injection Date:	02-Nov-2017 11:33:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	ccvis			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\BFBX2077.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	06-Oct-2017 14:32:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	240-0069413-001				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Oct-2017 11:06:26	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	2.806	2.806	0.000	0	5463519	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

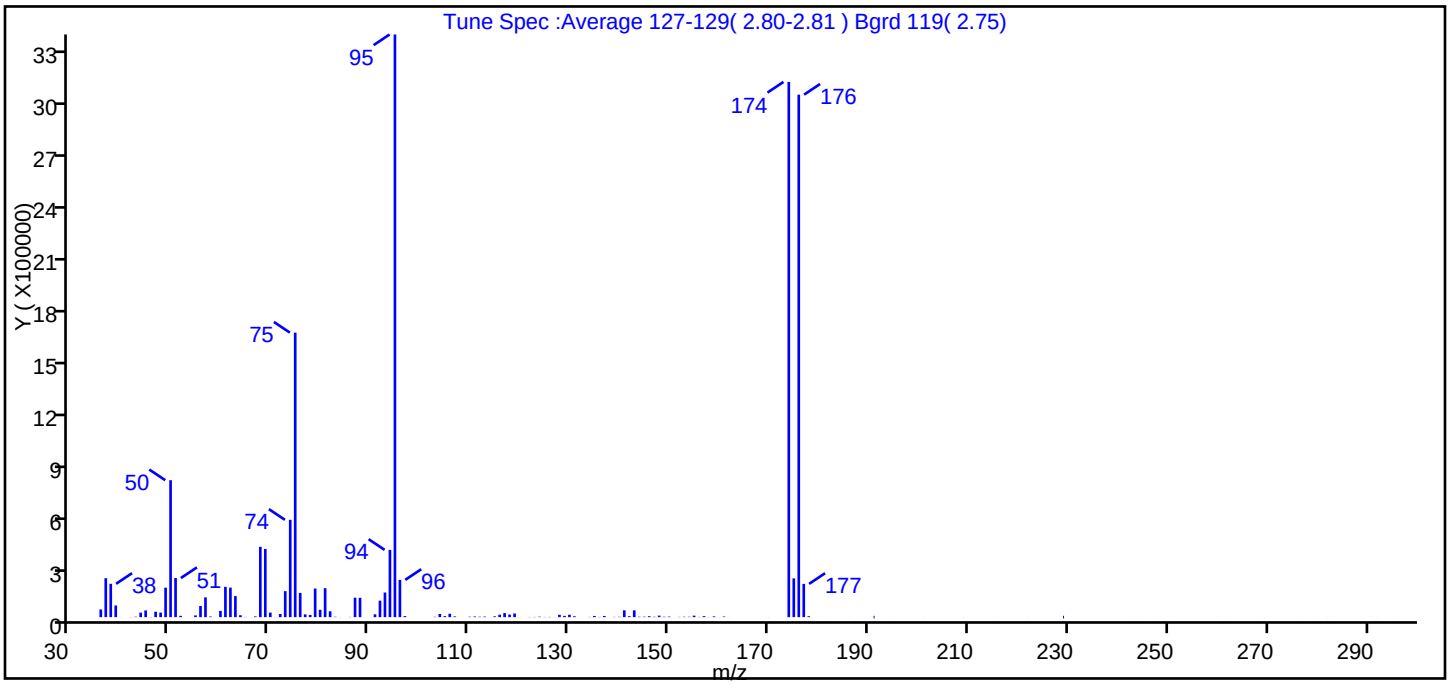
vmbfb_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\BFBX2077.D				
Injection Date:	06-Oct-2017 14:32:30	Instrument ID:	A3UX2		
Lims ID:	bfb				
Client ID:					
Operator ID:	002808	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		
Tune Method:	BFB Method 8260				

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.5
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	91.9
175	5 to 9% of m/z 174	6.6 (7.2)
176	Greater than 95% but less than 101% of m/z 174	89.7 (97.6)
177	5 to 9% of m/z 176	5.7 (6.4)

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\BFBX2077.D\8260SIM_X2.rslt\spectra.d
Injection Date: 06-Oct-2017 14:32:30
Spectrum: Tune Spec :Average 127-129(2.80-2.81) Bgrd 119(2.75)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 190

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	43688	86.00	1148	142.00	5346	216.00	195
37.00	220992	87.00	110392	143.00	38632	220.00	77
38.00	189248	88.00	109848	144.00	2294	222.00	183
39.00	66144	89.00	216	145.00	2526	228.00	27
40.00	275	91.00	15861	146.00	5356	229.00	3
42.00	763	92.00	93584	147.00	2085	231.00	32
43.00	2306	93.00	139776	148.00	8795	234.00	52
44.00	25496	94.00	381888	149.00	2331	235.00	74
45.00	37928	95.00	3307008	150.00	3140	237.00	52
46.00	911	96.00	211584	151.00	230	238.00	104
47.00	30944	97.00	6186	152.00	1360	241.00	72
48.00	25688	99.00	42	153.00	2168	243.00	177
49.00	167360	102.00	93	154.00	2044	244.00	103
50.00	777216	103.00	1936	155.00	8535	245.00	51
51.00	221888	104.00	18024	156.00	1044	246.00	65
52.00	7518	105.00	5713	157.00	5721	247.00	51
54.00	111	106.00	19240	158.00	696	248.00	138
55.00	9885	107.00	4064	159.00	4153	252.00	35
56.00	63304	110.00	2230	160.00	224	253.00	55
57.00	112192	111.00	3591	161.00	3213	257.00	70
58.00	3617	112.00	2356	162.00	195	259.00	130
59.00	155	113.00	3198	165.00	130	260.00	196
60.00	35336	114.00	250	168.00	153	261.00	60
61.00	172160	115.00	4540	170.00	395	262.00	160
62.00	167552	116.00	13873	174.00	3037696	263.00	169
63.00	119584	117.00	23064	175.00	219840	265.00	51
64.00	10839	118.00	14549	176.00	2965504	267.00	91
65.00	1176	119.00	20808	177.00	188800	268.00	156
66.00	183	120.00	472	178.00	5142	270.00	75
67.00	4153	122.00	1033	179.00	19	271.00	37
68.00	399168	123.00	1175	180.00	179	273.00	55
69.00	386880	124.00	2666	181.00	91	274.00	54
70.00	25880	125.00	1036	182.00	120	276.00	79

Report Date: 09-Oct-2017 11:06:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\BFBX2077.D\8260SIM_X2.rslt\spectra.d
Injection Date: 06-Oct-2017 14:32:30
Spectrum: Tune Spec :Average 127-129(2.80-2.81) Bgrd 119(2.75)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 190

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	377	126.00	1331	186.00	189	277.00	131
72.00	17800	127.00	568	188.00	178	279.00	62
73.00	147584	128.00	13492	189.00	12	280.00	133
74.00	552448	129.00	7206	190.00	136	282.00	256
75.00	1614848	130.00	13670	191.00	4	283.00	189
76.00	137344	131.00	4993	195.00	221	284.00	64
77.00	15753	132.00	169	196.00	94	285.00	55
78.00	12303	134.00	1191	197.00	27	288.00	131
79.00	162432	135.00	6766	201.00	201	291.00	107
80.00	41736	136.00	1237	204.00	57	292.00	190
81.00	164480	137.00	6719	205.00	114	294.00	65
82.00	33200	138.00	214	206.00	51	296.00	139
83.00	2090	139.00	1309	209.00	256	298.00	69
84.00	300	140.00	2035	210.00	191		
85.00	152	141.00	38536	215.00	135		

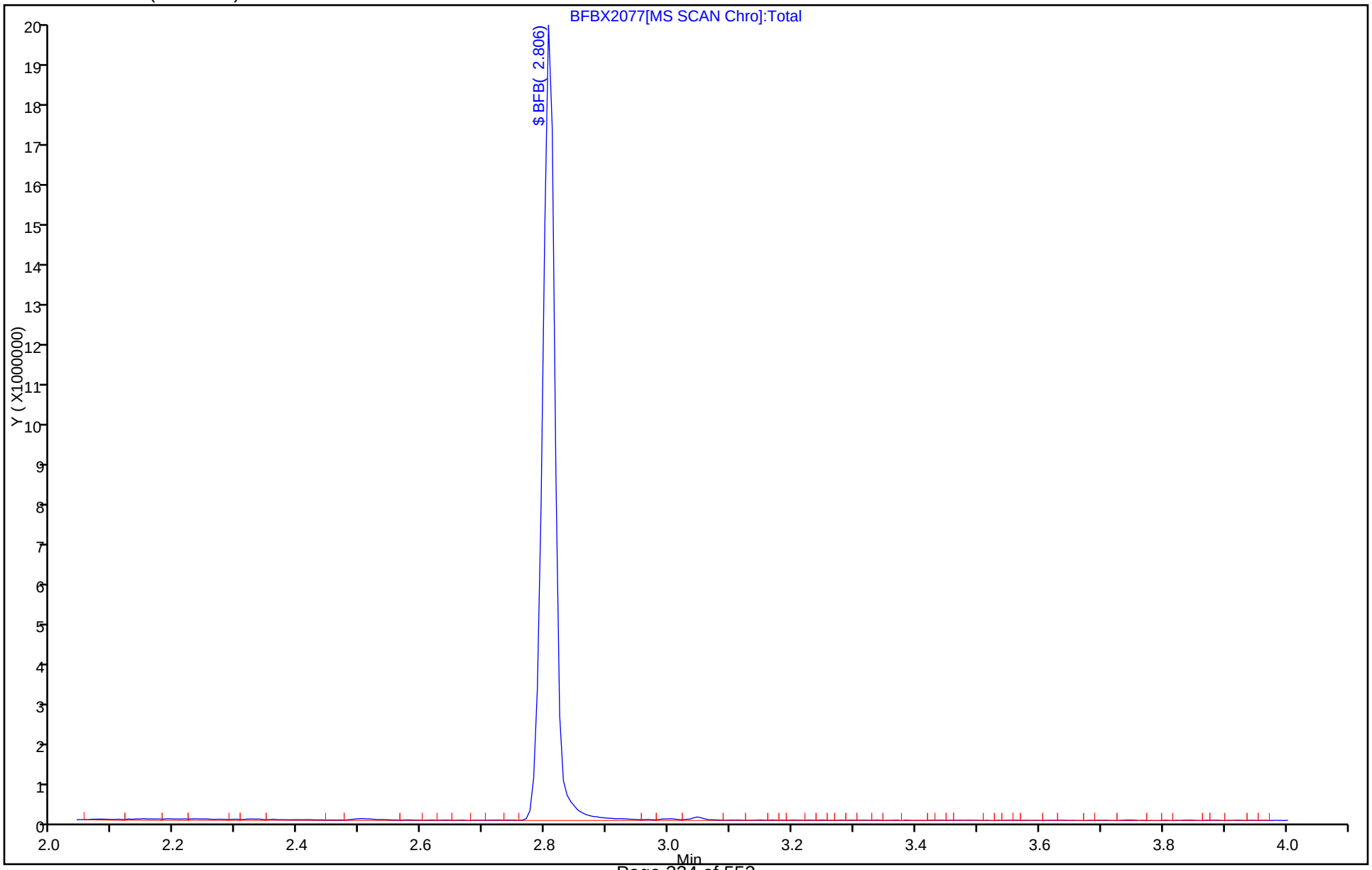
Report Date: 09-Oct-2017 11:06:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\BFBX2077.D

Injection Date:	06-Oct-2017 14:32:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\BFBX2085.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	02-Nov-2017 10:48:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	240-0070302-001				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:38	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	2.804	2.804	0.000	0	2860874	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

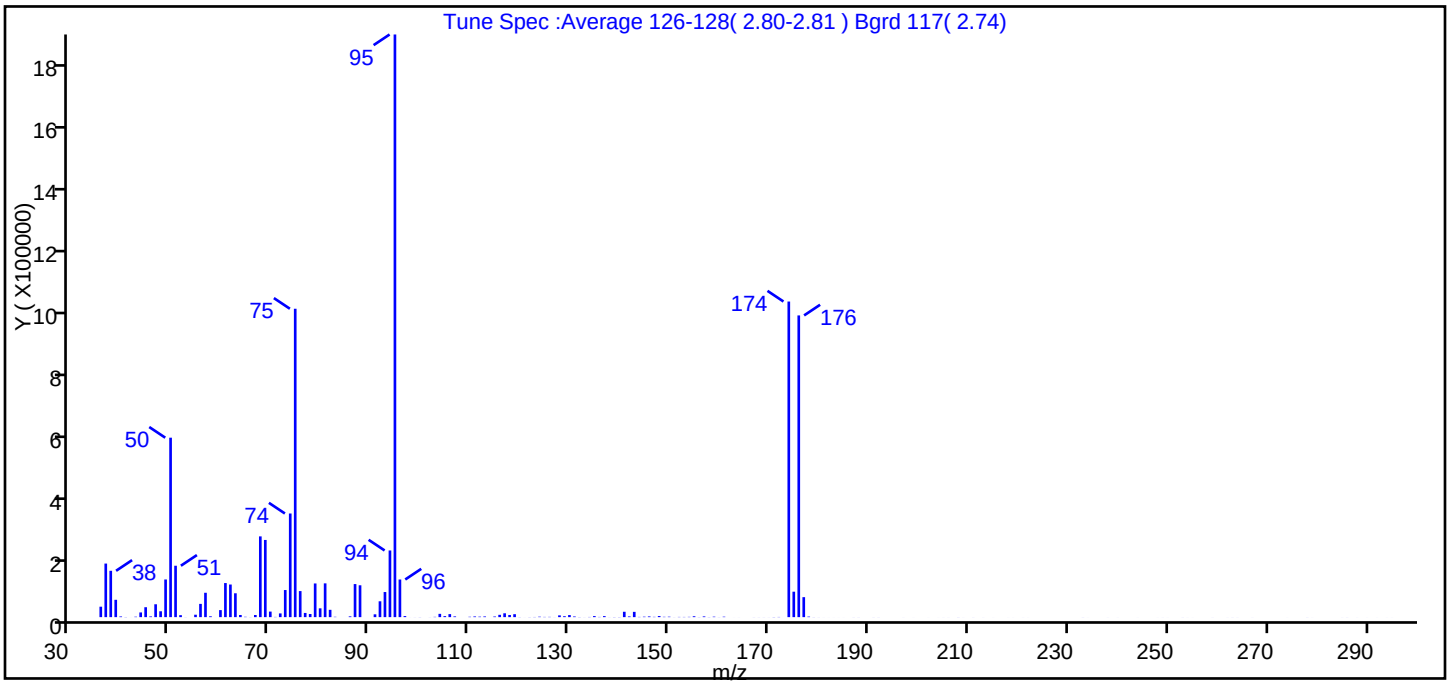
vmbfb_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\BFBX2085.D				
Injection Date:	02-Nov-2017 10:48:30	Instrument ID:	A3UX2		
Lims ID:	bfb				
Client ID:					
Operator ID:	002808	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		
Tune Method:	BFB Method 8260				

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	30.8
75	30 to 60% of m/z 95	52.9
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	54.2
175	5 to 9% of m/z 174	4.4 (8.1)
176	Greater than 95% but less than 101% of m/z 174	51.8 (95.6)
177	5 to 9% of m/z 176	3.4 (6.6)

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\BFBX2085.D\8260SIM_X2.rslt\spectra.d
Injection Date: 02-Nov-2017 10:48:30
Spectrum: Tune Spec :Average 126-128(2.80-2.81) Bgrd 117(2.74)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 183

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	32568	83.00	1060	137.00	3151	187.00	141
37.00	167040	86.00	2385	138.00	176	188.00	141
38.00	144512	87.00	103120	139.00	454	191.00	133
39.00	54072	88.00	99336	140.00	453	192.00	146
40.00	2098	91.00	8840	141.00	16760	197.00	86
41.00	460	92.00	49456	142.00	2166	199.00	53
42.00	60	93.00	78312	143.00	16480	202.00	61
43.00	1323	94.00	207872	144.00	708	204.00	58
44.00	14642	95.00	1816576	145.00	1419	205.00	86
45.00	30944	96.00	117360	146.00	2200	206.00	85
46.00	2225	97.00	3306	147.00	914	208.00	178
47.00	40152	98.00	75	148.00	3469	209.00	71
48.00	18304	99.00	143	149.00	1029	211.00	121
49.00	117424	100.00	278	150.00	1428	213.00	73
50.00	559488	102.00	171	151.00	176	215.00	57
51.00	160256	103.00	864	152.00	684	218.00	50
52.00	6150	104.00	10276	153.00	633	219.00	62
53.00	202	105.00	3181	154.00	864	221.00	68
55.00	7562	106.00	9438	155.00	2724	222.00	51
56.00	41328	107.00	2294	156.00	353	233.00	136
57.00	75992	110.00	1144	157.00	2246	234.00	57
58.00	2593	111.00	2141	158.00	373	238.00	73
59.00	45	112.00	1535	159.00	1456	240.00	65
60.00	21936	113.00	2139	160.00	226	244.00	57
61.00	106280	115.00	1952	161.00	1401	248.00	58
62.00	101720	116.00	7226	162.00	16	249.00	89
63.00	74400	117.00	12021	163.00	55	250.00	52
64.00	6701	118.00	6733	164.00	88	253.00	120
65.00	1061	119.00	9225	167.00	170	254.00	65
66.00	248	120.00	316	168.00	153	255.00	57
67.00	6639	121.00	82	169.00	136	259.00	93
68.00	251776	122.00	317	170.00	112	262.00	73
69.00	240640	123.00	528	171.00	452	263.00	122

Report Date: 02-Nov-2017 15:43:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\BFBX2085.D\8260SIM_X2.rslt\spectra.d
Injection Date: 02-Nov-2017 10:48:30
Spectrum: Tune Spec :Average 126-128(2.80-2.81) Bgrd 117(2.74)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 183

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	17328	124.00	1399	172.00	592	264.00	93
71.00	648	125.00	713	174.00	984000	267.00	76
72.00	11644	126.00	820	175.00	79368	274.00	64
73.00	84496	127.00	136	176.00	940672	278.00	126
74.00	323136	128.00	5551	177.00	62312	279.00	62
75.00	961472	129.00	2857	178.00	1655	285.00	74
76.00	81240	130.00	6479	179.00	243	286.00	117
77.00	13068	131.00	2051	180.00	145	288.00	67
78.00	9761	132.00	416	181.00	68	290.00	56
79.00	105008	133.00	150	182.00	58	292.00	59
80.00	27480	134.00	585	183.00	61	294.00	57
81.00	105328	135.00	3263	184.00	50	295.00	64
82.00	22856	136.00	653	185.00	50		

Report Date: 02-Nov-2017 15:43:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\BFBX2085.D

Injection Date: 02-Nov-2017 10:48:30 Instrument ID: A3UX2 Operator ID: 002808

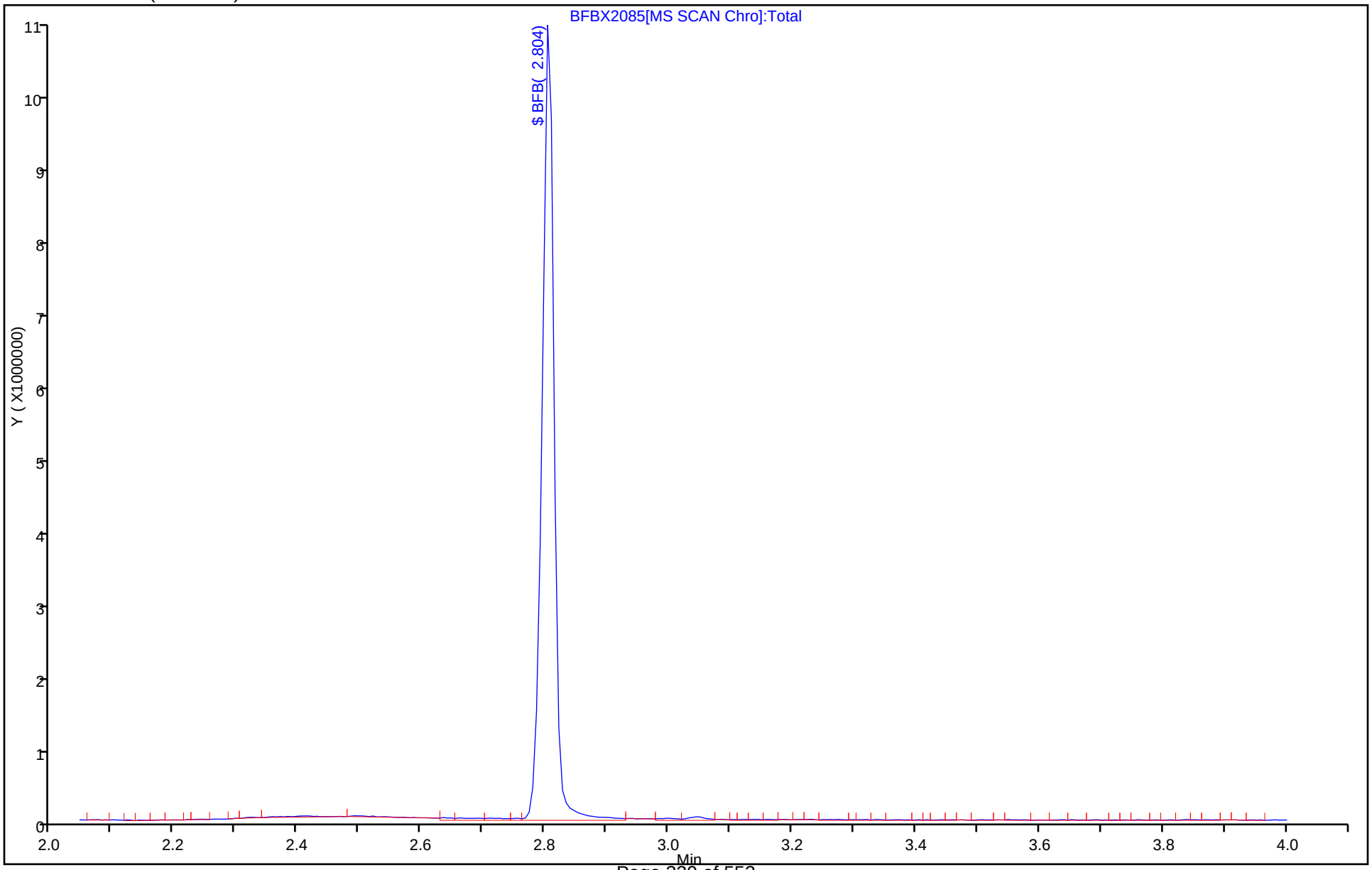
Lims ID: bfb Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260SIM_X2 Limit Group: MSV SIM ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-301775/5

Matrix: Water | Lab File ID: X21351.D

Analysis Method: 8260B SIM | Date Collected:

Sample wt/vol: 15(mL) | Date Analyzed: 11/02/2017 12:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301775 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-125

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21351.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Nov-2017 12:23:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	mb				
Misc. Info.:	240-0070302-005				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				
First Level Reviewer: macenczaks		Date:	02-Nov-2017 12:50:28		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.164	4.165	-0.001	100	1336150	8.88	8.77	
* 7 Fluorobenzene	96	4.760	4.748	0.012	100	4006491	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.999	6.000	-0.001	88	78308	177.7	177.7	
18 Ethylene Dibromide	107	8.131	8.137	-0.006	68	10		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

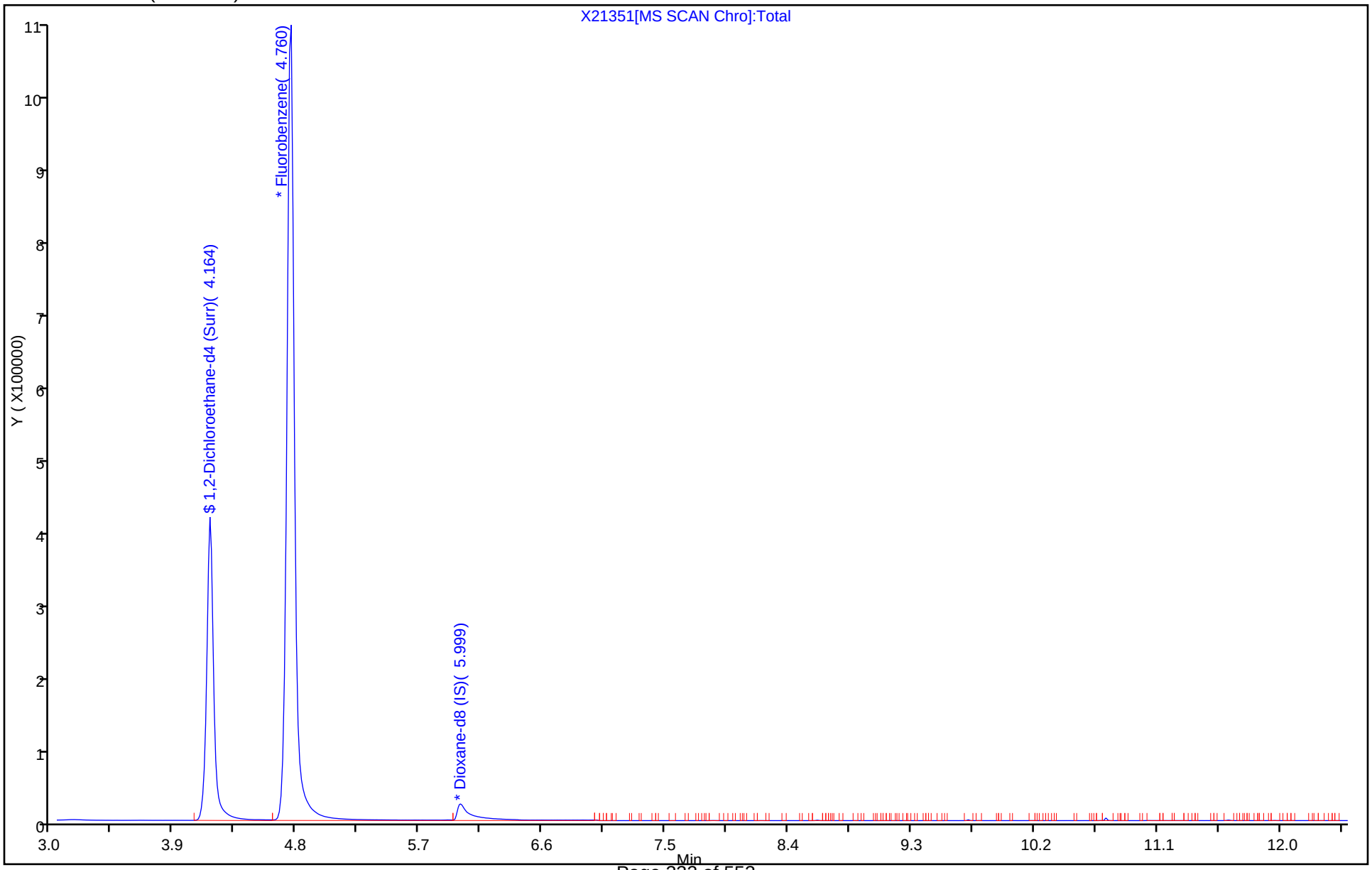
vm150ss_00007	Amount Added:	0.89	Units: uL	Run Reagent
vm150is_00066	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00104	Amount Added:	0.00	Units:	Run Reagent

Report Date: 02-Nov-2017 15:43:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21351.D				
Injection Date:	02-Nov-2017 12:23:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21351.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Nov-2017 12:23:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	mb				
Misc. Info.:	240-0070302-005				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

First Level Reviewer: macenczaks Date: 02-Nov-2017 12:50:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	8.88	8.77	98.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-301775/4

Matrix: Water | Lab File ID: X21350.D

Analysis Method: 8260B SIM | Date Collected:

Sample wt/vol: 15(mL) | Date Analyzed: 11/02/2017 11:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301775 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.7		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-125

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21350.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	02-Nov-2017 11:58:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	lcs				
Misc. Info.:	240-0070302-004				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				
First Level Reviewer: macenczaks		Date:	02-Nov-2017 12:49:44		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.166	4.165	0.001	100	1359906	8.88	8.74	
* 7 Fluorobenzene	96	4.760	4.748	0.012	100	4092174	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.998	6.000	-0.002	88	81061	177.7	177.7	
8 1,4-Dioxane	88	6.068	6.069	-0.001	86	5253	10.0	10.7	

Reagents:

vmdiox_spike_00124	Amount Added:	3.00	Units: uL	
vm150ss_00007	Amount Added:	0.89	Units: uL	Run Reagent
vm150is_00066	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00104	Amount Added:	0.00	Units:	Run Reagent

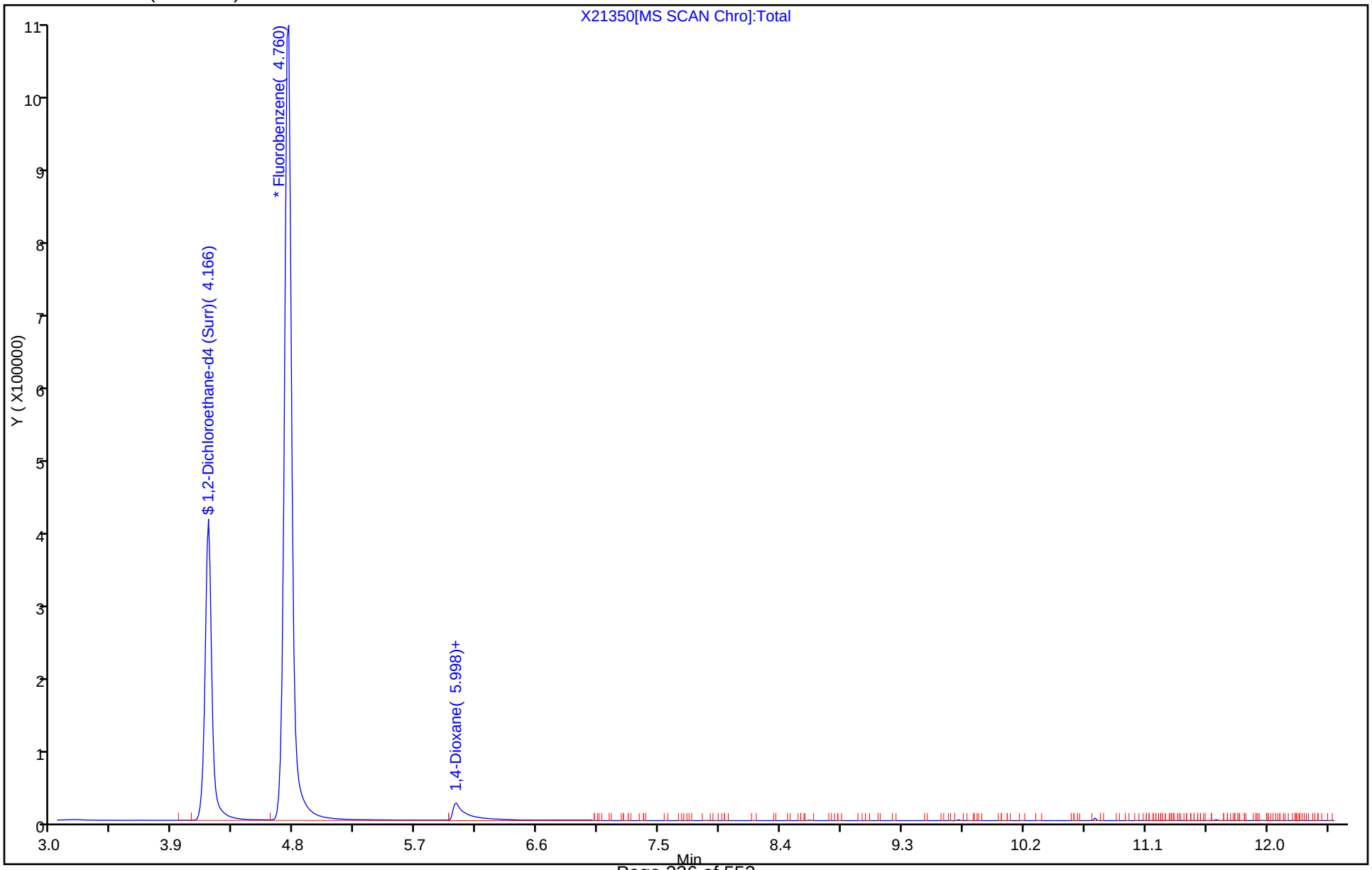
Report Date: 02-Nov-2017 15:43:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21350.D

Injection Date:	02-Nov-2017 11:58:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21350.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	02-Nov-2017 11:58:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	lcs				
Misc. Info.:	240-0070302-004				
Operator ID:	002808	Instrument ID:	A3UX2		
Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m				
Limit Group:	MSV SIM ICAL				
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

First Level Reviewer: macenczaks Date: 02-Nov-2017 12:49:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	8.88	8.74	98.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 500-136523-1
SDG No.:
Client Sample ID: OMW4D-GW-103017 MS
Lab Sample ID: 500-136523-4 MS
Matrix: Water
Lab File ID: X21355.D
Analysis Method: 8260B SIM
Date Collected: 10/30/2017 12:20
Sample wt/vol: 15(mL)
Date Analyzed: 11/02/2017 14:02
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: ZB-624 ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 301775
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.9		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-125

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21355.D				
Lims ID:	500-136523-F-4 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	02-Nov-2017 14:02:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-4 ms				
Misc. Info.:	240-0070302-009				
Operator ID:	002808	Instrument ID:	A3UX2		

Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m		
Limit Group:	MSV SIM ICAL		
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D		

Column 1 :	DB-624 (0.18 mm)	Det: MS SCAN
Process Host:	XAWRK008	

First Level Reviewer: macenczaks Date: 02-Nov-2017 15:04:47

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Sur	65	4.164	4.165	-0.001	100	1359262	8.88	8.89	
*	7 Fluorobenzene	96	4.760	4.748	0.012	100	4020000	8.88	8.88	
*	9 Dioxane-d8 (IS)	96	5.999	6.000	-0.001	88	80052	177.7	177.7	
	8 1,4-Dioxane	88	6.076	6.069	0.007	93	5316	10.0	10.9	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

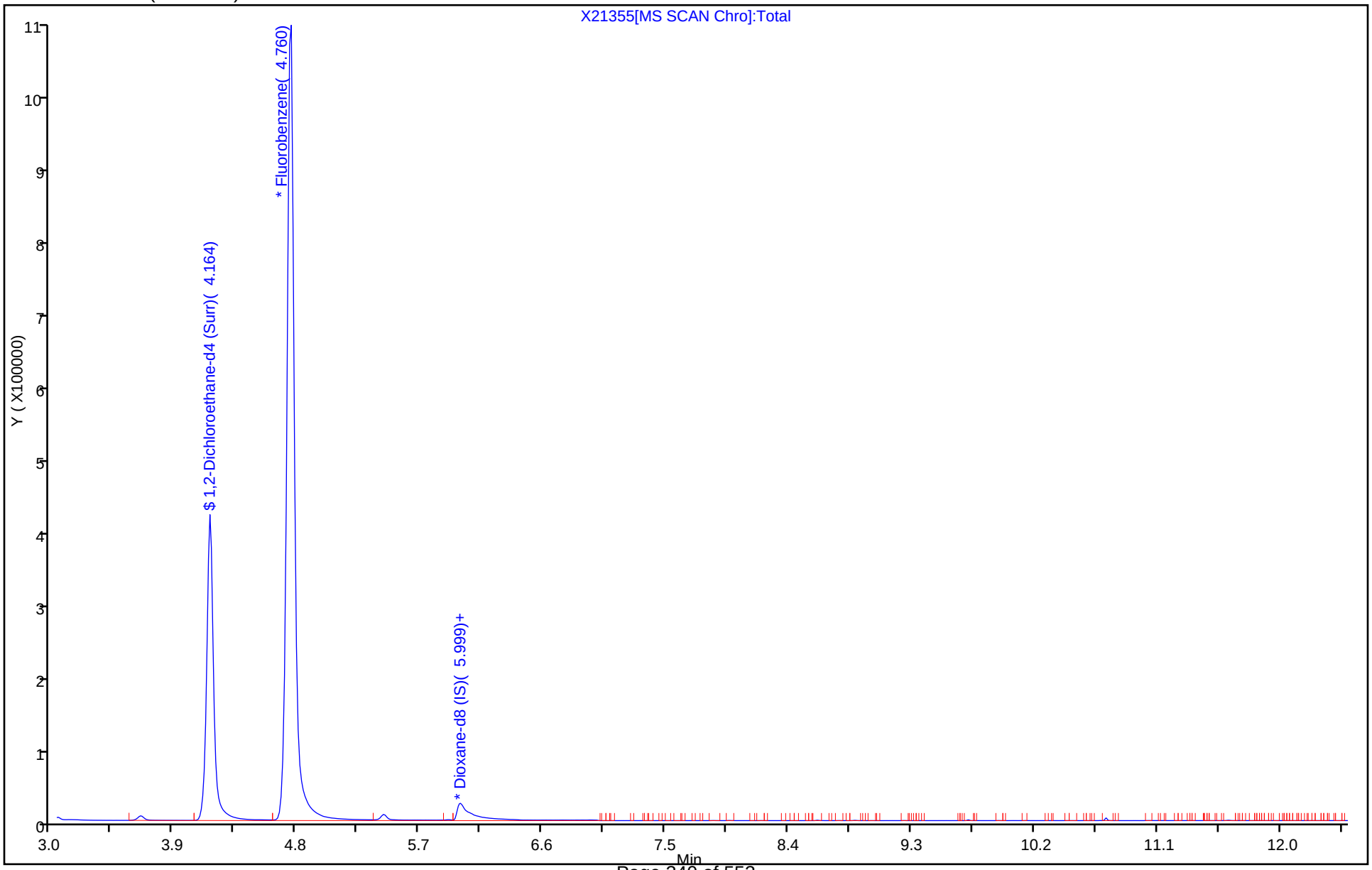
vmdiox_spike_00124	Amount Added:	3.00	Units: uL	
vm150ss_00007	Amount Added:	0.89	Units: uL	Run Reagent
vm150is_00066	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00104	Amount Added:	0.00	Units:	Run Reagent

Report Date: 02-Nov-2017 15:44:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21355.D				
Injection Date:	02-Nov-2017 14:02:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	500-136523-F-4 MS			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21355.D				
Lims ID:	500-136523-F-4 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	02-Nov-2017 14:02:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-4 ms				
Misc. Info.:	240-0070302-009				
Operator ID:	002808	Instrument ID:	A3UX2		

Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m		
Limit Group:	MSV SIM ICAL		
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D		

Column 1 :	DB-624 (0.18 mm)	Det: MS SCAN
Process Host:	XAWRK008	

First Level Reviewer: macenczaks Date: 02-Nov-2017 15:04:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	8.88	8.89	100.11

Manual Integration/User Assign Peak Report

TestAmerica Canton

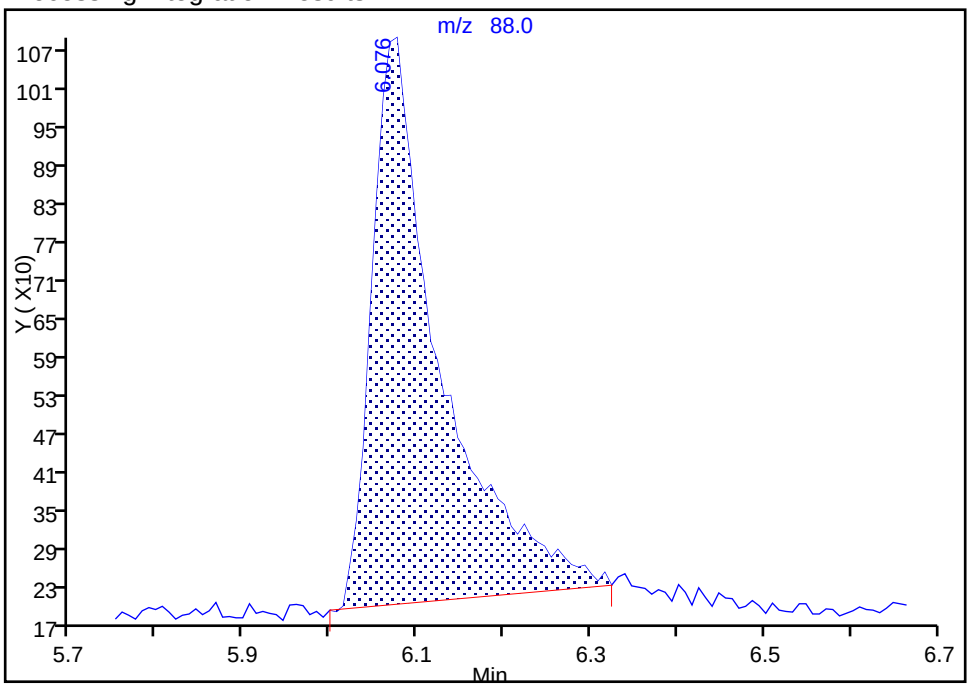
Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21355.D				
Injection Date:	02-Nov-2017 14:02:30	Instrument ID:	A3UX2		
Lims ID:	500-136523-F-4 MS				
Client ID:					
Operator ID:	002808	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

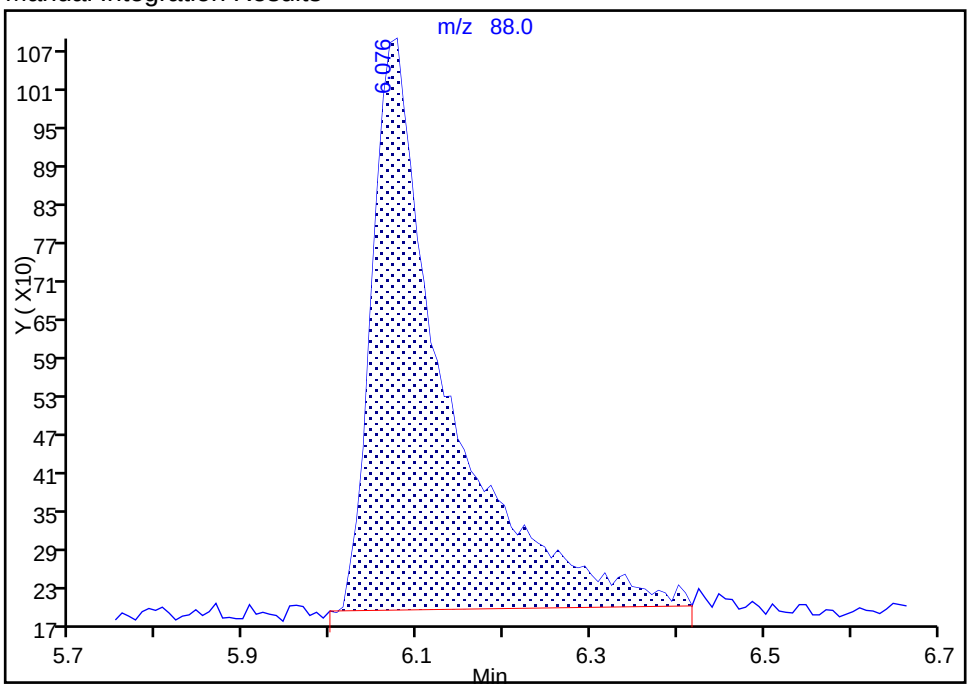
Processing Integration Results

RT: 6.08
Area: 4847
Amount: 9.970898
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 5316
Amount: 10.935690
Amount Units: ug/l



Reviewer: macenczaks, 02-Nov-2017 15:04:31

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW4D-GW-103017 MSD | Lab Sample ID: 500-136523-4 MSD

Matrix: Water | Lab File ID: X21356.D

Analysis Method: 8260B SIM | Date Collected: 10/30/2017 12:20

Sample wt/vol: 15(mL) | Date Analyzed: 11/02/2017 14:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301775 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	11.1		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		63-125

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21356.D				
Lims ID:	500-136523-F-4 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	02-Nov-2017 14:26:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-4 msd				
Misc. Info.:	240-0070302-010				
Operator ID:	002808	Instrument ID:	A3UX2		

Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m		
Limit Group:	MSV SIM ICAL		
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D		

Column 1 :	DB-624 (0.18 mm)	Det: MS SCAN
Process Host:	XAWRK008	

First Level Reviewer: macenczaks Date: 02-Nov-2017 15:05:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.167	4.165	0.002	100	1357298	8.88	8.95	
* 7 Fluorobenzene	96	4.759	4.748	0.011	100	3989524	8.88	8.88	
* 9 Dioxane-d8 (IS)	96	5.998	6.000	-0.002	88	83881	177.7	177.7	
8 1,4-Dioxane	88	6.076	6.069	0.007	93	5629	10.0	11.1	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

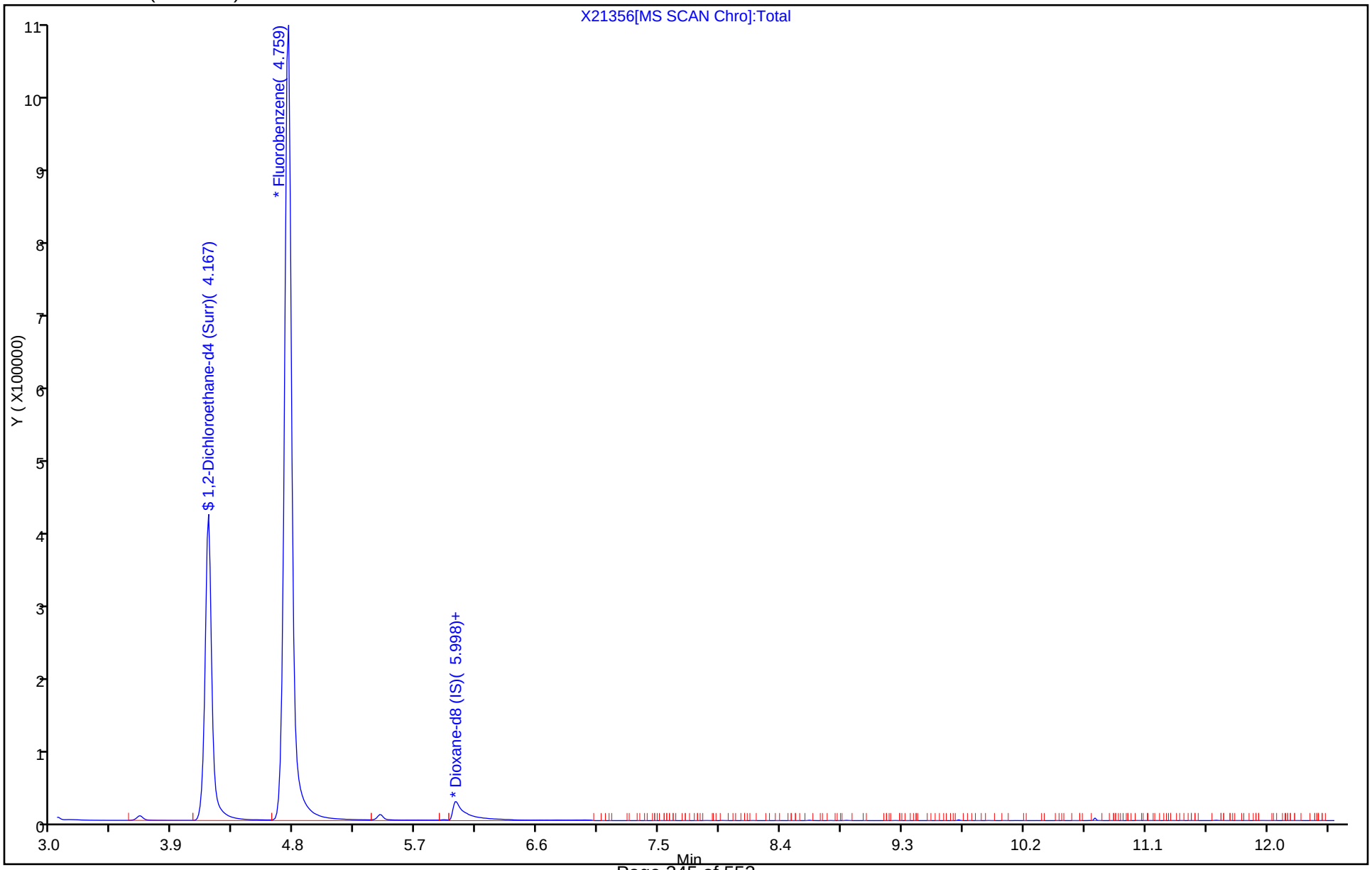
vmdiox_spike_00124	Amount Added:	3.00	Units: uL	
vm150ss_00007	Amount Added:	0.89	Units: uL	Run Reagent
vm150is_00066	Amount Added:	0.89	Units: uL	Run Reagent
vmDist_H2o_00104	Amount Added:	0.00	Units:	Run Reagent

Report Date: 02-Nov-2017 15:44:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21356.D				
Injection Date:	02-Nov-2017 14:26:30	Instrument ID:	A3UX2	Operator ID:	002808
Lims ID:	500-136523-F-4 MSD			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21356.D				
Lims ID:	500-136523-F-4 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	02-Nov-2017 14:26:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	500-136523-f-4 msd				
Misc. Info.:	240-0070302-010				
Operator ID:	002808	Instrument ID:	A3UX2		

Method:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\8260SIM_X2.m		
Limit Group:	MSV SIM ICAL		
Last Update:	02-Nov-2017 15:43:41	Calib Date:	06-Oct-2017 18:10:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX2\20171006-69413.b\X21224.D		

Column 1 :	DB-624 (0.18 mm)	Det: MS SCAN
Process Host:	XAWRK008	

First Level Reviewer: macenczaks Date: 02-Nov-2017 15:05:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	8.88	8.95	100.73

TestAmerica Canton

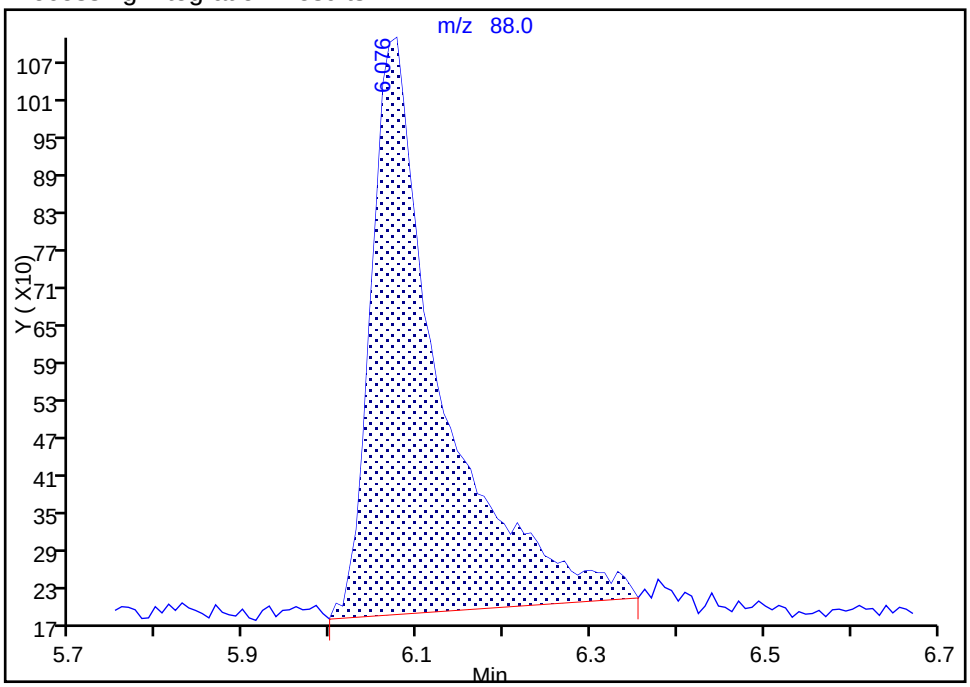
Data File:	\\ChromNA\Canton\ChromData\A3UX2\20171102-70302.b\X21356.D				
Injection Date:	02-Nov-2017 14:26:30	Instrument ID:	A3UX2		
Lims ID:	500-136523-F-4 MSD				
Client ID:					
Operator ID:	002808	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_X2	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

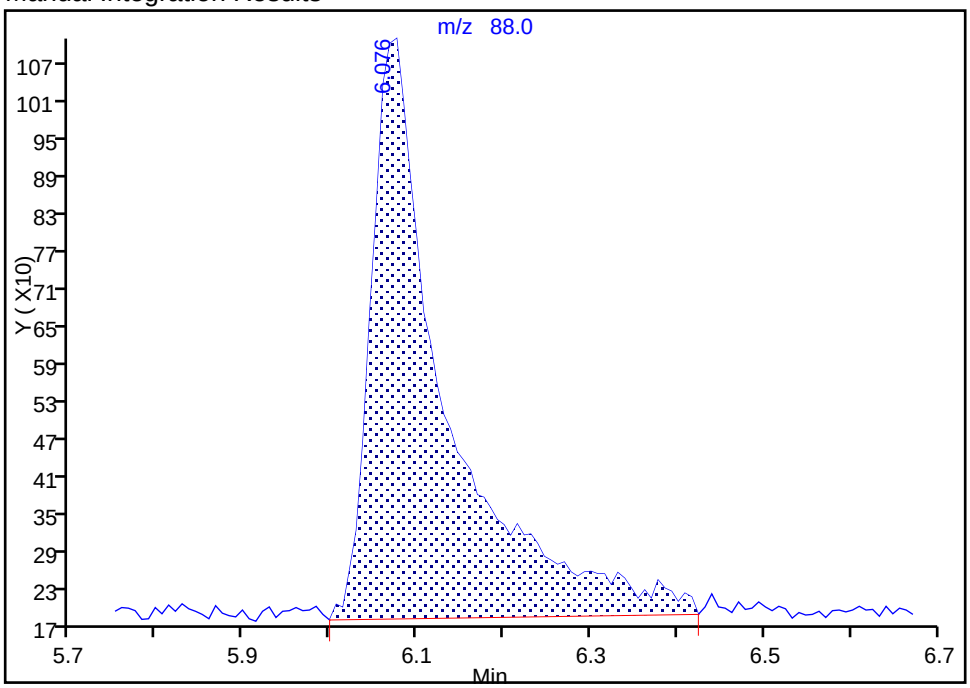
Processing Integration Results

RT: 6.08
Area: 5207
Amount: 10.222507
Amount Units: ug/l



Manual Integration Results

RT: 6.08
Area: 5629
Amount: 11.050987
Amount Units: ug/l



Reviewer: macenczaks, 02-Nov-2017 15:05:08
Audit Action: Manually Integrated Audit Reason: Poor chromatography

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Instrument ID: A3UX2 Start Date: 10/06/2017 14:32

Analysis Batch Number: 297993 End Date: 10/06/2017 21:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-297993/1		10/06/2017 14:32	1	BFBX2077.D	ZB-624 0.53(mm)
IC 240-297993/3		10/06/2017 15:17	1	X21217.D	ZB-624 0.53(mm)
IC 240-297993/4		10/06/2017 15:42	1	X21218.D	ZB-624 0.53(mm)
IC 240-297993/5		10/06/2017 16:07	1	X21219.D	ZB-624 0.53(mm)
ICIS 240-297993/6		10/06/2017 16:31	1	X21220.D	ZB-624 0.53(mm)
IC 240-297993/7		10/06/2017 16:56	1	X21221.D	ZB-624 0.53(mm)
IC 240-297993/8		10/06/2017 17:20	1	X21222.D	ZB-624 0.53(mm)
IC 240-297993/9		10/06/2017 17:45	1	X21223.D	ZB-624 0.53(mm)
IC 240-297993/10		10/06/2017 18:10	1	X21224.D	ZB-624 0.53(mm)
ICV 240-297993/11		10/06/2017 18:35	1	X21225.D	ZB-624 0.53(mm)
ZZZZZ		10/06/2017 19:00	1		ZB-624 0.53(mm)
ZZZZZ		10/06/2017 19:25	1		ZB-624 0.53(mm)
ZZZZZ		10/06/2017 19:49	1		ZB-624 0.53(mm)
ZZZZZ		10/06/2017 20:14	1		ZB-624 0.53(mm)
ZZZZZ		10/06/2017 20:39	1		ZB-624 0.53(mm)
ZZZZZ		10/06/2017 21:04	1		ZB-624 0.53(mm)
ZZZZZ		10/06/2017 21:28	1		ZB-624 0.53(mm)

8260B SIM

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Instrument ID: A3UX2 Start Date: 11/02/2017 10:48

Analysis Batch Number: 301775 End Date: 11/02/2017 14:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-301775/1		11/02/2017 10:48	1	BFBX2085.D	ZB-624 0.53(mm)
CCVIS 240-301775/3		11/02/2017 11:33	1	X21349.D	ZB-624 0.53(mm)
LCS 240-301775/4		11/02/2017 11:58	1	X21350.D	ZB-624 0.53(mm)
MB 240-301775/5		11/02/2017 12:23	1	X21351.D	ZB-624 0.53(mm)
ZZZZZ		11/02/2017 12:48	1		ZB-624 0.53(mm)
500-136523-2		11/02/2017 13:12	1	X21353.D	ZB-624 0.53(mm)
500-136523-4		11/02/2017 13:37	1	X21354.D	ZB-624 0.53(mm)
500-136523-4 MS		11/02/2017 14:02	1	X21355.D	ZB-624 0.53(mm)
500-136523-4 MSD		11/02/2017 14:26	1	X21356.D	ZB-624 0.53(mm)

8260B SIM

Method RSK-175

Dissolved Gases (GC) by Method RSK_175

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): HP-PLOT/Q ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TFE1 #
OMW3D-GW-103017	500-136523-2	85
OMW4D-GW-103017	500-136523-4	85
	MB 240-301727/4	88
	LCS 240-301727/5	88

	QC LIMITS
TFE = 1,1,1-Trifluoroethane	60-140

Column to be used to flag recovery values

FORM II RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Matrix: Water Level: Low Lab File ID: RSK1102005.D

Lab ID: LCS 240-301727/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methane	285	287	101	80-120	
Ethane	536	566	106	80-120	
Ethylene	501	529	106	80-120	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: MB 240-301727/4

Matrix: Water Date Extracted:

Lab File ID:(1) RSK1102004.D Lab File ID:(2)

Date Analyzed:(1) 11/02/2017 12:02 Date Analyzed:(2)

Instrument ID:(1) ZPID Instrument ID:(2)

GC Column:(1) HP-PLOT/Q ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-301727/5	11/02/2017 12:19	
OMW3D-GW-103017	500-136523-2	11/02/2017 12:36	
OMW4D-GW-103017	500-136523-4	11/02/2017 12:54	

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Sample No.: CCVRT 240-301727/3 Date Analyzed: 11/02/2017 11:45

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm)

Lab File ID (Standard): RSK1102003.D Heated Purge: (Y/N) N

Calibration ID: 41867

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFE		
				RT #		
CONTINUING CALIBRATION SURROGATE				3.34		
UPPER LIMIT				3.39		
LOWER LIMIT				3.29		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-301727/3		11/02/2017 11:45	RSK1102003.D	3.34		
MB 240-301727/4		11/02/2017 12:02	RSK1102004.D	3.34		
LCS 240-301727/5		11/02/2017 12:19	RSK1102005.D	3.35		
500-136523-2	OMW3D-GW-103017	11/02/2017 12:36	RSK1102006.D	3.34		
500-136523-4	OMW4D-GW-103017	11/02/2017 12:54	RSK1102007.D	3.34		
CCV 240-301727/19		11/02/2017 16:19	RSK1102019.D	3.34		

TFE = 1,1,1-Trifluoroethane

TFE RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII RSK-175

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW3D-GW-103017 | Lab Sample ID: 500-136523-2

Matrix: Water | Lab File ID: RSK1102006.D

Analysis Method: RSK-175 | Date Collected: 10/30/2017 09:45

Sample wt/vol: 23(mL) | Date Analyzed: 11/02/2017 12:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301727 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-82-8	Methane	ND		1.0	0.17
74-84-0	Ethane	ND		1.0	0.10
74-85-1	Ethylene	ND		1.0	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	85		60-140

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102006.D
Lims ID: 500-136523-C-2
Client ID: OMW3D-GW-103017
Sample Type: Client
Inject. Date: 02-Nov-2017 12:36:56 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-006
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:36:35

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane					
1.181	1.180	0.001	973	0.1397	
2 Ethylene					
	1.880			ND	
4 Ethane					
	2.200			ND	
$ 5 1,1,1-Trifluoroethane					
3.344	3.340	0.004	24296251	8236.0	

Reagents:

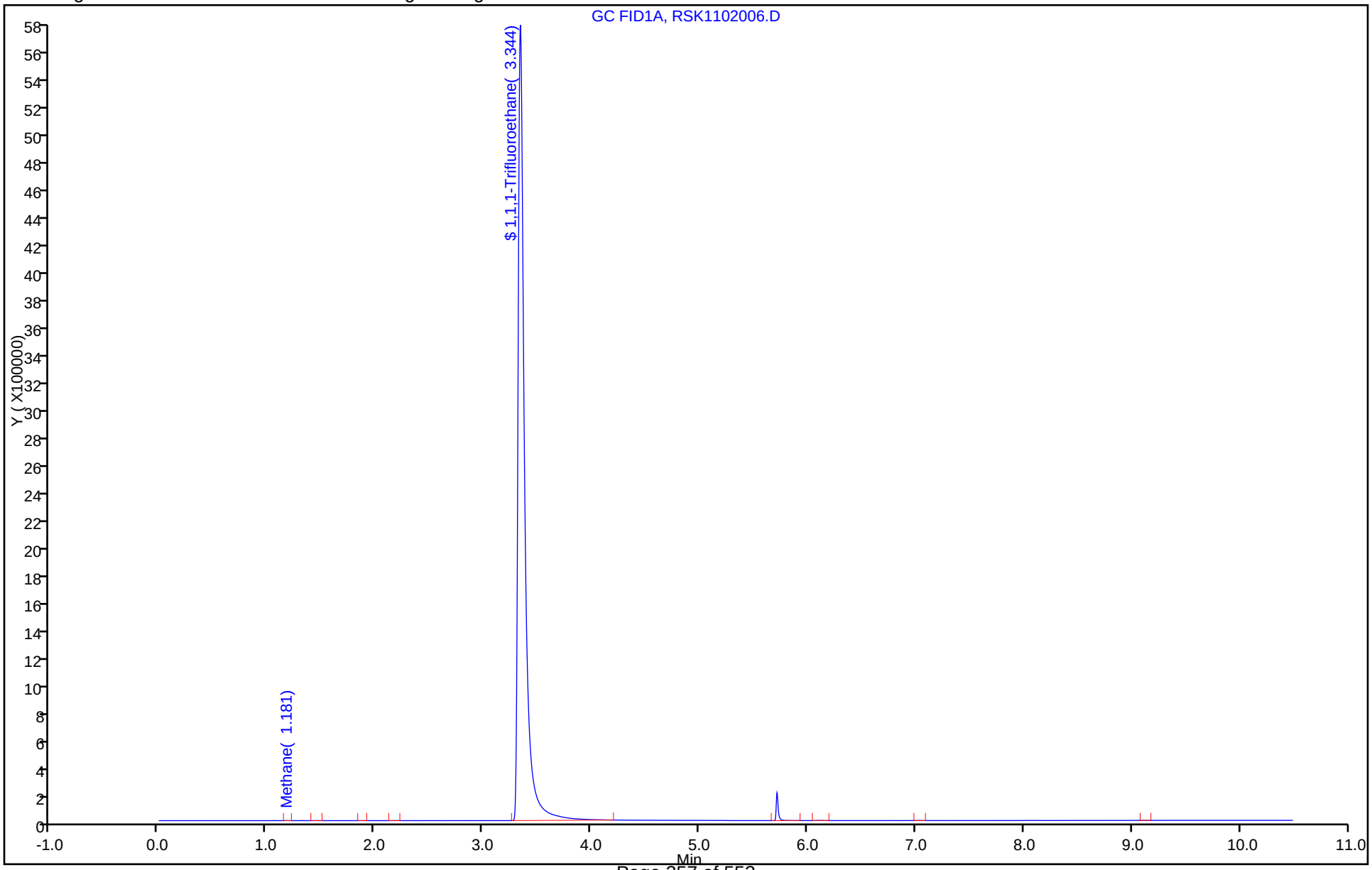
SARSKSURR_00010 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 02-Nov-2017 16:43:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102006.D				
Injection Date:	02-Nov-2017 12:36:56	Instrument ID:	ZPID	Operator ID:	
Lims ID:	500-136523-C-2	Lab Sample ID:	240-136523-2	Worklist Smp#:	6
Client ID:	OMW3D-GW-103017				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK175	Limit Group:	GCV RSK 175 ICAL		

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102006.D
Lims ID: 500-136523-C-2
Client ID: OMW3D-GW-103017
Sample Type: Client
Inject. Date: 02-Nov-2017 12:36:56 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-006
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:36:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,1,1-Trifluoroethane	9730.4	8236.0	84.64

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: OMW4D-GW-103017 | Lab Sample ID: 500-136523-4

Matrix: Water | Lab File ID: RSK1102007.D

Analysis Method: RSK-175 | Date Collected: 10/30/2017 12:20

Sample wt/vol: 23(mL) | Date Analyzed: 11/02/2017 12:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301727 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-82-8	Methane	ND		1.0	0.17
74-84-0	Ethane	ND		1.0	0.10
74-85-1	Ethylene	ND		1.0	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	85		60-140

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102007.D
Lims ID: 500-136523-B-4
Client ID: OMW4D-GW-103017
Sample Type: Client
Inject. Date: 02-Nov-2017 12:54:04 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-007
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:37:32

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane					
1.180				ND	
2 Ethylene					
1.880				ND	
4 Ethane					
2.200				ND	
$ 5 1,1,1-Trifluoroethane					
3.341	3.340	0.001	24414316	8276.0	

Reagents:

SARSKSURR_00010 Amount Added: 20.00 Units: mL Run Reagent

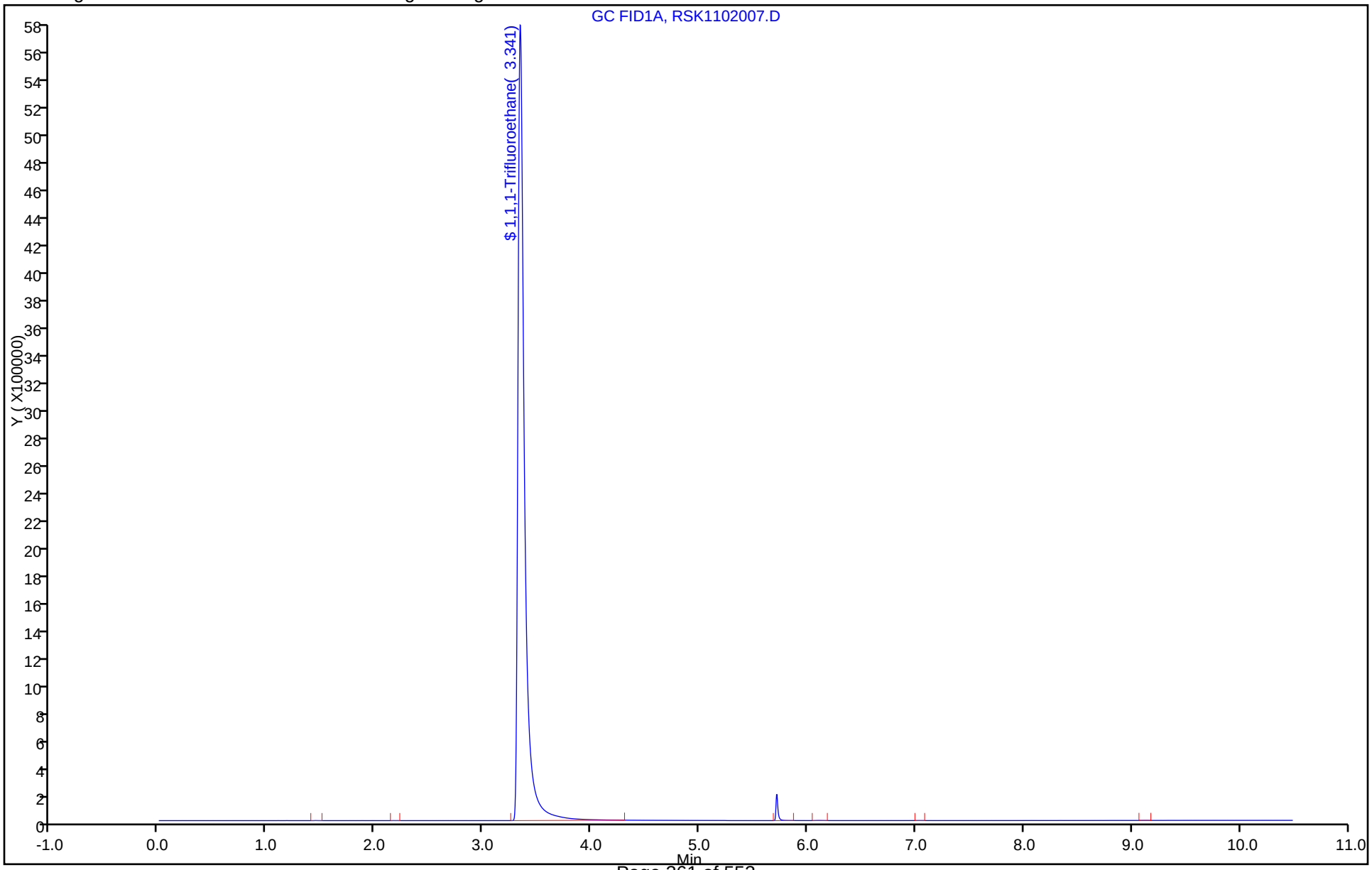
Report Date: 02-Nov-2017 16:43:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102007.D

Injection Date:	02-Nov-2017 12:54:04	Instrument ID:	ZPID	Operator ID:	
Lims ID:	500-136523-B-4	Lab Sample ID:	240-136523-4	Worklist Smp#:	7
Client ID:	OMW4D-GW-103017				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK175	Limit Group:	GCV RSK 175 ICAL		

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102007.D
Lims ID: 500-136523-B-4
Client ID: OMW4D-GW-103017
Sample Type: Client
Inject. Date: 02-Nov-2017 12:54:04 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-007
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:37:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,1,1-Trifluoroethane	9730.4	8276.0	85.05

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1 Analy Batch No.: 299071

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2017 12:40 Calibration End Date: 10/15/2017 14:06 Calibration ID: 41867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-299071/3	RSK1015003.D
Level 2	STD2 240-299071/4	RSK1015004.D
Level 3	STD3 240-299071/5	RSK1015005.D
Level 4	STD4 240-299071/6	RSK1015006.D
Level 5	STD5 240-299071/7	RSK1015007.D
Level 6	STD6 240-299071/8	RSK1015008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Methane	1.186	1.185	1.186	1.184	1.185	1.184					1.134 - 1.234	1.185
Ethylene	1.886	1.885	1.886	1.881	1.885	1.877					1.827 - 1.927	1.883
Acetylene	1.999	1.999	2.000	1.994	1.999	1.991					1.941 - 2.041	1.997
Ethane	2.206	2.205	2.210	2.204	2.205	2.194					1.994 - 2.394	2.204
Propane	4.556	4.555	4.556	4.551	4.552	4.527					4.477 - 4.577	4.550
1,1,1-Trifluoroethane	3.353	3.352	3.353	3.348	3.345						3.253 - 3.453	3.350

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 500-136523-1 Analy Batch No.: 299071

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2017 12:40 Calibration End Date: 10/15/2017 14:06 Calibration ID: 41867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-299071/3	RSK1015003.D
Level 2	STD2 240-299071/4	RSK1015004.D
Level 3	STD3 240-299071/5	RSK1015005.D
Level 4	STD4 240-299071/6	RSK1015006.D
Level 5	STD5 240-299071/7	RSK1015007.D
Level 6	STD6 240-299071/8	RSK1015008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Methane	8358.5 6728.4	6638.0 6649.2	6527.1	6873.9	Ave		6962.52724				10.0		20.0			
Ethylene	6446.8 6537.9	6223.7 6385.2	6289.9	6549.2	Ave		6405.46217				2.1		20.0			
Acetylene	2955.9 4235.1	3209.0 4170.4	3492.2	3951.4	Ave		3668.98974				14.4		30.0			
Ethane	6724.8 6799.6	6335.3 6629.9	6411.6	6769.4	Ave		6611.75812				2.9		20.0			
Propane	6256.3 6976.4	6176.0 6910.7	6465.6	6820.1	Ave		6600.83907				5.3		20.0			
1,1,1-Trifluoroethane	2924.6 2878.1	3082.2	2885.3	2979.7	Ave		2950.01861				2.9		30.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 500-136523-1 Analy Batch No.: 299071

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2017 12:40 Calibration End Date: 10/15/2017 14:06 Calibration ID: 41867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-299071/3	RSK1015003.D
Level 2	STD2 240-299071/4	RSK1015004.D
Level 3	STD3 240-299071/5	RSK1015005.D
Level 4	STD4 240-299071/6	RSK1015006.D
Level 5	STD5 240-299071/7	RSK1015007.D
Level 6	STD6 240-299071/8	RSK1015008.D

ANALYTE	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
Methane	Ave	2384 28438455	13253	65157	686192	2877720	0.285 4277	2.00	9.98	99.8	428
Ethylene	Ave	3229 47964177	21821	110265	1148104	4911089	0.501 7512	3.51	17.5	175	751
Acetylene	Ave	1370 28985079	10411	56649	640992	2943469	0.463 6950	3.24	16.2	162	695
Ethane	Ave	3608 53347403	23793	120399	1271181	5471300	0.537 8047	3.76	18.8	188	805
Propane	Ave	4918 81472393	33984	177889	1876410	8224688	0.786 11789	5.50	27.5	275	1179
1,1,1-Trifluoroethane	Ave	875652	1614969	7558994	15612644	32314773	299	524	2620	5240	11228

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015003.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Oct-2017 12:40:31 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069667-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 16-Oct-2017 07:09:02 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK021

First Level Reviewer: matthewsb Date: 16-Oct-2017 07:07:27

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.186	1.184	0.002	2384	0.2852	0.3424	
2 Ethylene						
1.886	1.877	0.009	3229	0.5009	0.5041	
3 Acetylene						
1.999	1.991	0.008	1370	0.4635	0.3734	
4 Ethane						
2.206	2.194	0.012	3608	0.5365	0.5457	
$ 5 1,1,1-Trifluoroethane						
3.353	3.353	0.000	875652	299.4	296.8	
6 Propane						M
4.556	4.527	0.029	4918	0.7861	0.7451	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SARSKLOWCAL_00009 Amount Added: 10.00 Units: uL
SAICALSURR_00012 Amount Added: 40.00 Units: uL

Report Date: 16-Oct-2017 07:09:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015003.D

Injection Date: 15-Oct-2017 12:40:31 Instrument ID: ZPID Operator ID:

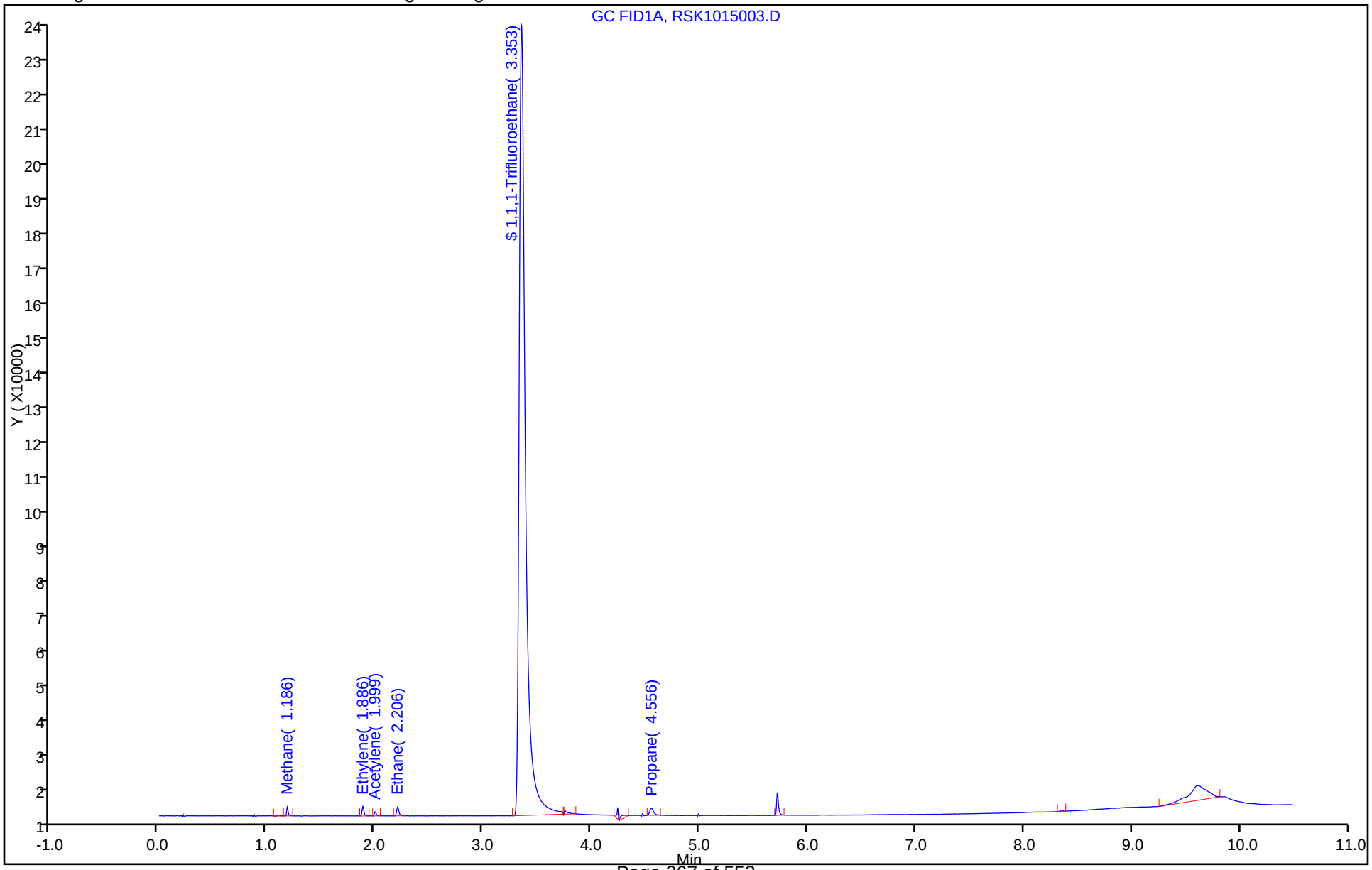
Lims ID: STD1 Worklist Smp#: 3

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

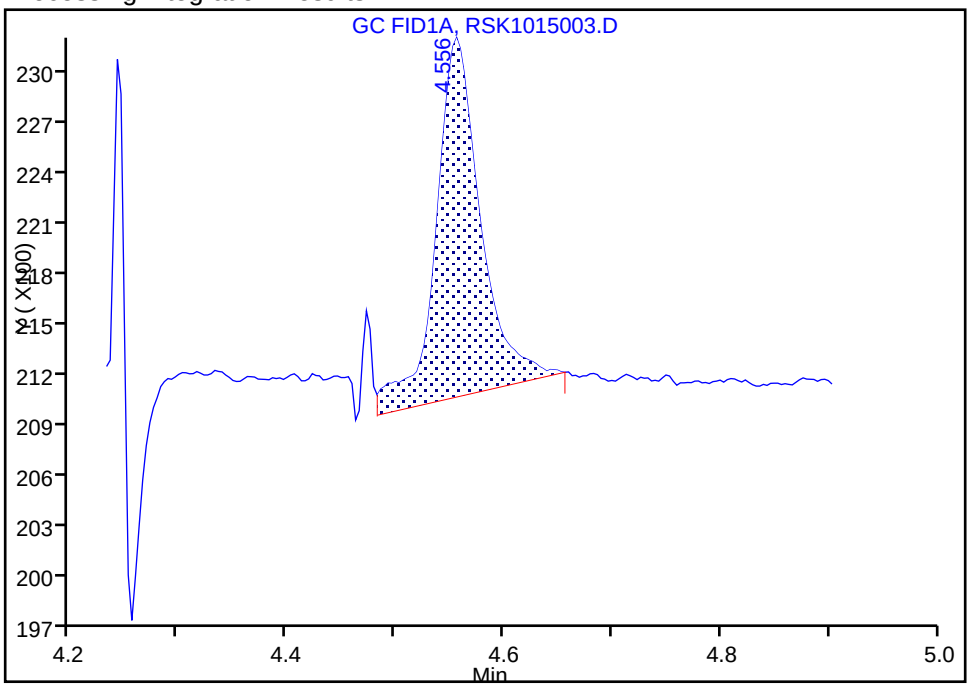
Data File:	\\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015003.D				
Injection Date:	15-Oct-2017 12:40:31	Instrument ID:	ZPID		
Lims ID:	STD1				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK175	Limit Group:	GCV RSK 175 ICAL		
Column:		Detector	GC FID1A		

6 Propane, CAS: 74-98-6

Signal: 1

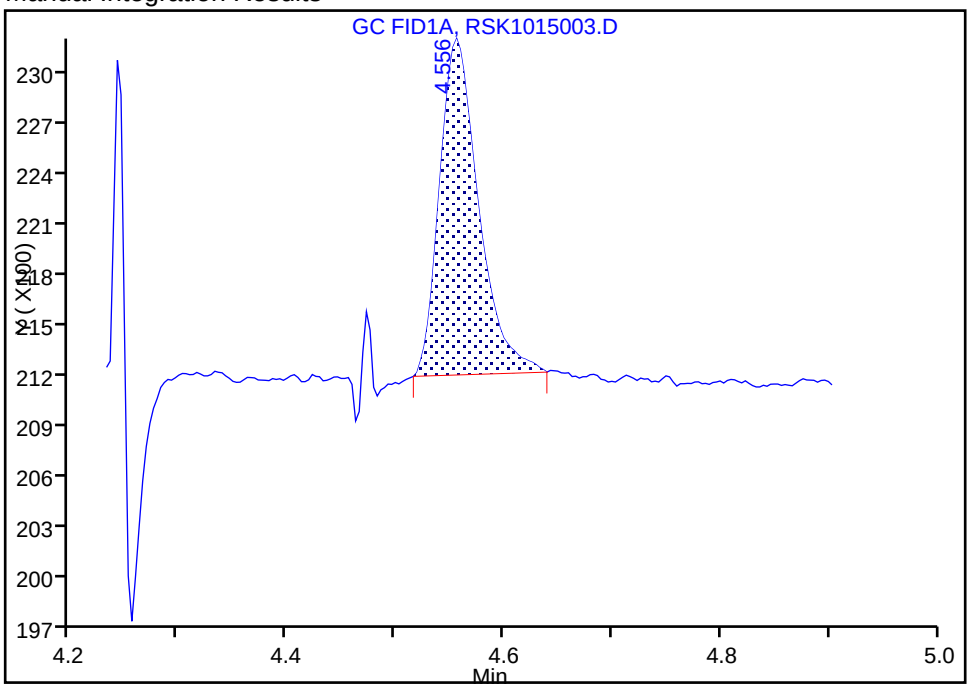
Processing Integration Results

RT: 4.56
Area: 6065
Amount: 0.881602
Amount Units: ug/l



Manual Integration Results

RT: 4.56
Area: 4918
Amount: 0.745057
Amount Units: ug/l



Reviewer: matthewsb, 16-Oct-2017 07:07:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015004.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Oct-2017 12:57:39 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069667-004
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 16-Oct-2017 07:09:03 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK021

First Level Reviewer: matthewsb Date: 16-Oct-2017 07:08:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.185	1.184	0.001	13253	2.00	1.90	
2 Ethylene						
1.885	1.877	0.008	21821	3.51	3.41	
3 Acetylene						
1.999	1.991	0.008	10411	3.24	2.84	
4 Ethane						
2.205	2.194	0.011	23793	3.76	3.60	
$ 5 1,1,1-Trifluoroethane						
3.352	3.353	-0.001	1614969	524.0	547.4	
6 Propane						M
4.555	4.527	0.028	33984	5.50	5.15	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SARSKLOWCAL_00009 Amount Added: 70.00 Units: uL
SAICALSURR_00012 Amount Added: 70.00 Units: uL

Report Date: 16-Oct-2017 07:09:03 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015004.D

Injection Date: 15-Oct-2017 12:57:39 Instrument ID: ZPID Operator ID:

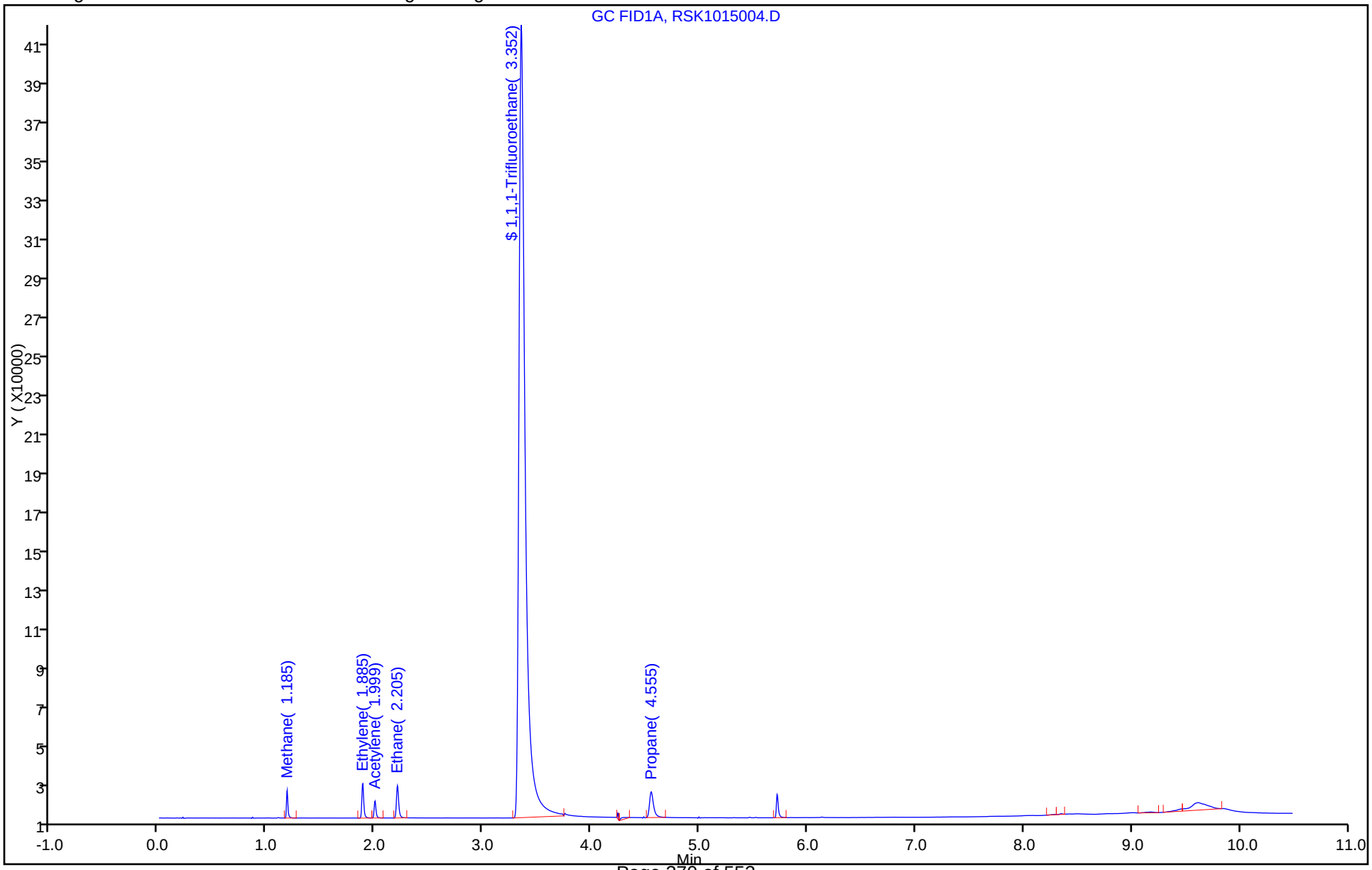
Lims ID: STD2 Worklist Smp#: 4

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

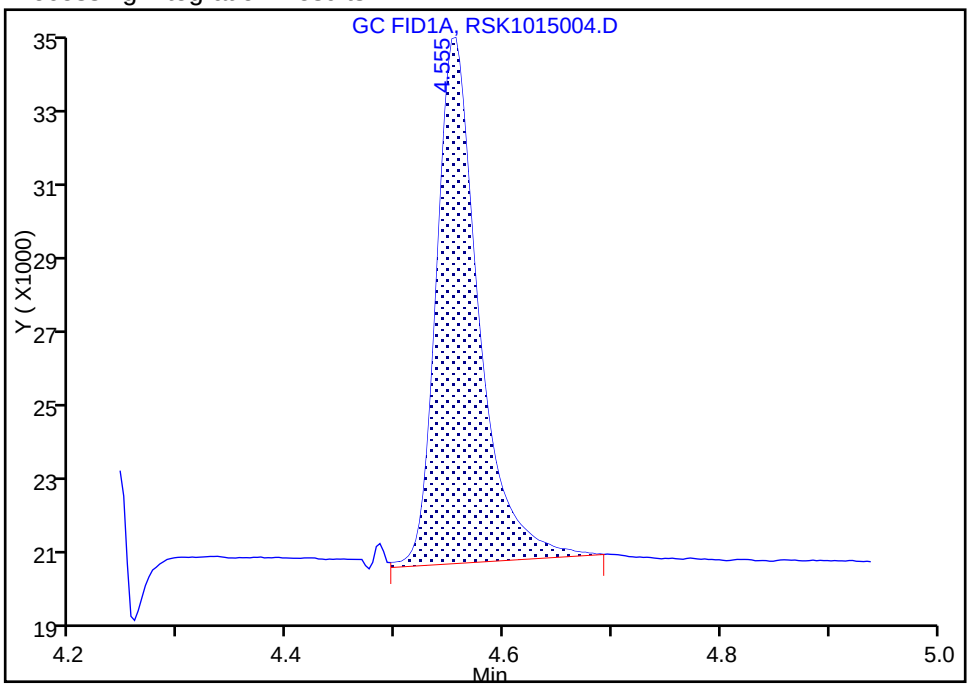
Data File:	\\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015004.D				
Injection Date:	15-Oct-2017 12:57:39	Instrument ID:	ZPID		
Lims ID:	STD2				
Client ID:					
Operator ID:		ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK175	Limit Group:	GCV RSK 175 ICAL		
Column:		Detector	GC FID1A		

6 Propane, CAS: 74-98-6

Signal: 1

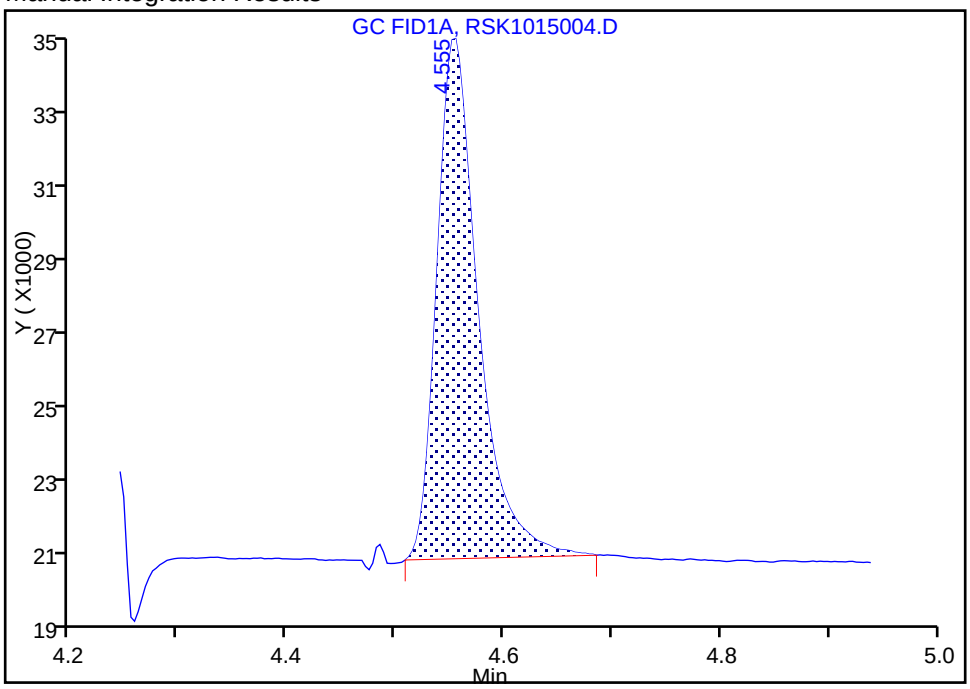
Processing Integration Results

RT: 4.56
Area: 35156
Amount: 5.297500
Amount Units: ug/l



Manual Integration Results

RT: 4.56
Area: 33984
Amount: 5.148436
Amount Units: ug/l



Reviewer: matthewsb, 16-Oct-2017 07:08:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015005.D
Lims ID: STD3
Client ID:
Sample Type: ICRT Calib Level: 3
Inject. Date: 15-Oct-2017 13:14:49 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069667-005
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 16-Oct-2017 07:09:04 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK021

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.186	1.186	0.000	65157	9.98	9.36	
2 Ethylene						
1.886	1.886	0.000	110265	17.5	17.2	
3 Acetylene						
2.000	2.000	0.000	56649	16.2	15.4	
4 Ethane						
2.210	2.210	0.000	120399	18.8	18.2	
$ 5 1,1,1-Trifluoroethane						
3.353	3.353	0.000	7558994	2619.8	2562.4	
6 Propane						
4.556	4.556	0.000	177889	27.5	26.9	

Reagents:

SARSKLOWCAL_00009 Amount Added: 350.00 Units: uL
SAICALSURR_00012 Amount Added: 350.00 Units: uL

Report Date: 16-Oct-2017 07:09:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015005.D

Injection Date: 15-Oct-2017 13:14:49 Instrument ID: ZPID Operator ID:

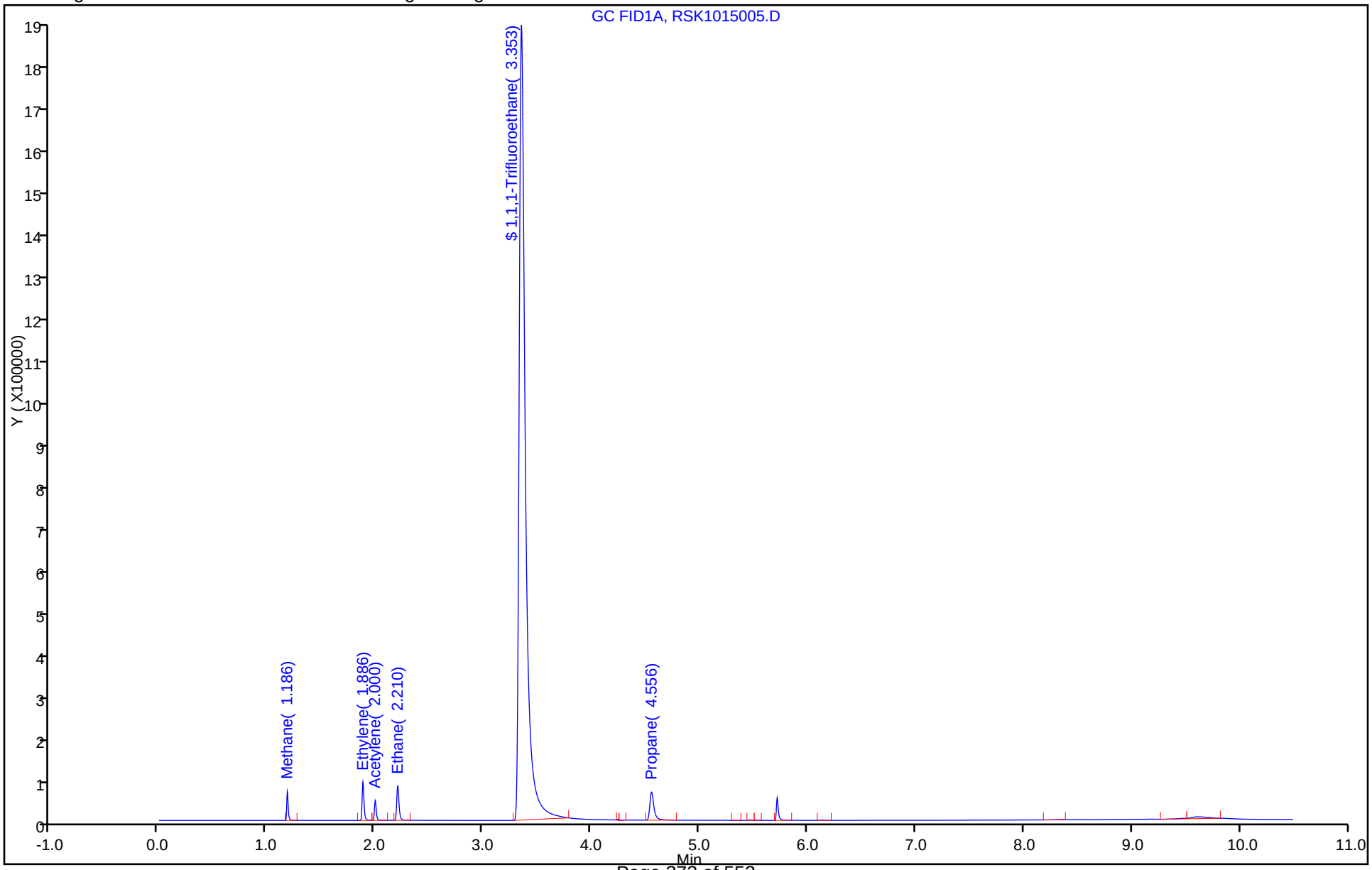
Lims ID: STD3 Worklist Smp#: 5

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015006.D
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Oct-2017 13:32:01 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069667-006
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 16-Oct-2017 07:09:04 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK021

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.184	1.186	-0.002	686192	99.8	98.6	
2 Ethylene						
1.881	1.886	-0.005	1148104	175.3	179.2	
3 Acetylene						
1.994	2.000	-0.006	640992	162.2	174.7	
4 Ethane						
2.204	2.210	-0.006	1271181	187.8	192.3	
$ 5 1,1,1-Trifluoroethane						
3.348	3.353	-0.005	15612644	5239.6	5292.4	
6 Propane						
4.551	4.556	-0.005	1876410	275.1	284.3	

Reagents:

SARSKLOWCAL_00009 Amount Added: 3.50 Units: mL
SAICALSURR_00012 Amount Added: 0.70 Units: mL

Report Date: 16-Oct-2017 07:09:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015006.D

Injection Date: 15-Oct-2017 13:32:01 Instrument ID: ZPID Operator ID:

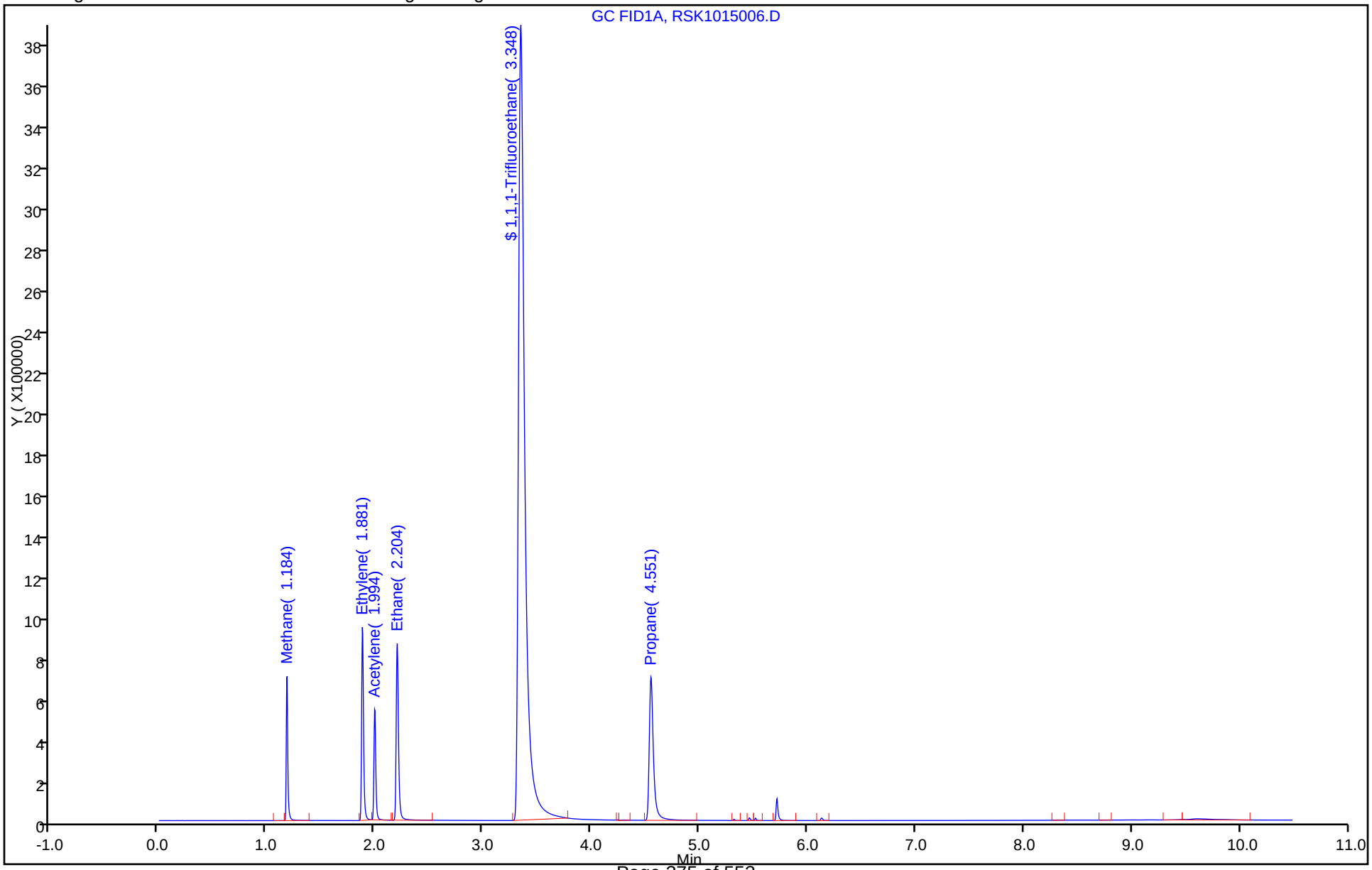
Lims ID: STD4 Worklist Smp#: 6

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015007.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Oct-2017 13:49:13 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069667-007
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 16-Oct-2017 07:09:05 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK021

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.185	1.186	-0.001	2877720	427.7	413.3	
2 Ethylene						
1.885	1.886	-0.001	4911089	751.2	766.7	
3 Acetylene						
1.999	2.000	-0.001	2943469	695.0	802.3	
4 Ethane						
2.205	2.210	-0.005	5471300	804.7	827.5	
$ 5 1,1,1-Trifluoroethane						
3.345	3.353	-0.008	32314773	11228	10954	
6 Propane						
4.552	4.556	-0.004	8224688	1178.9	1246.0	

Reagents:

SAICALSURR_00012 Amount Added: 1.50 Units: mL
SARSKHIGHCALP_00008 Amount Added: 1.50 Units: mL

Report Date: 16-Oct-2017 07:09:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015007.D

Injection Date: 15-Oct-2017 13:49:13 Instrument ID: ZPID Operator ID:

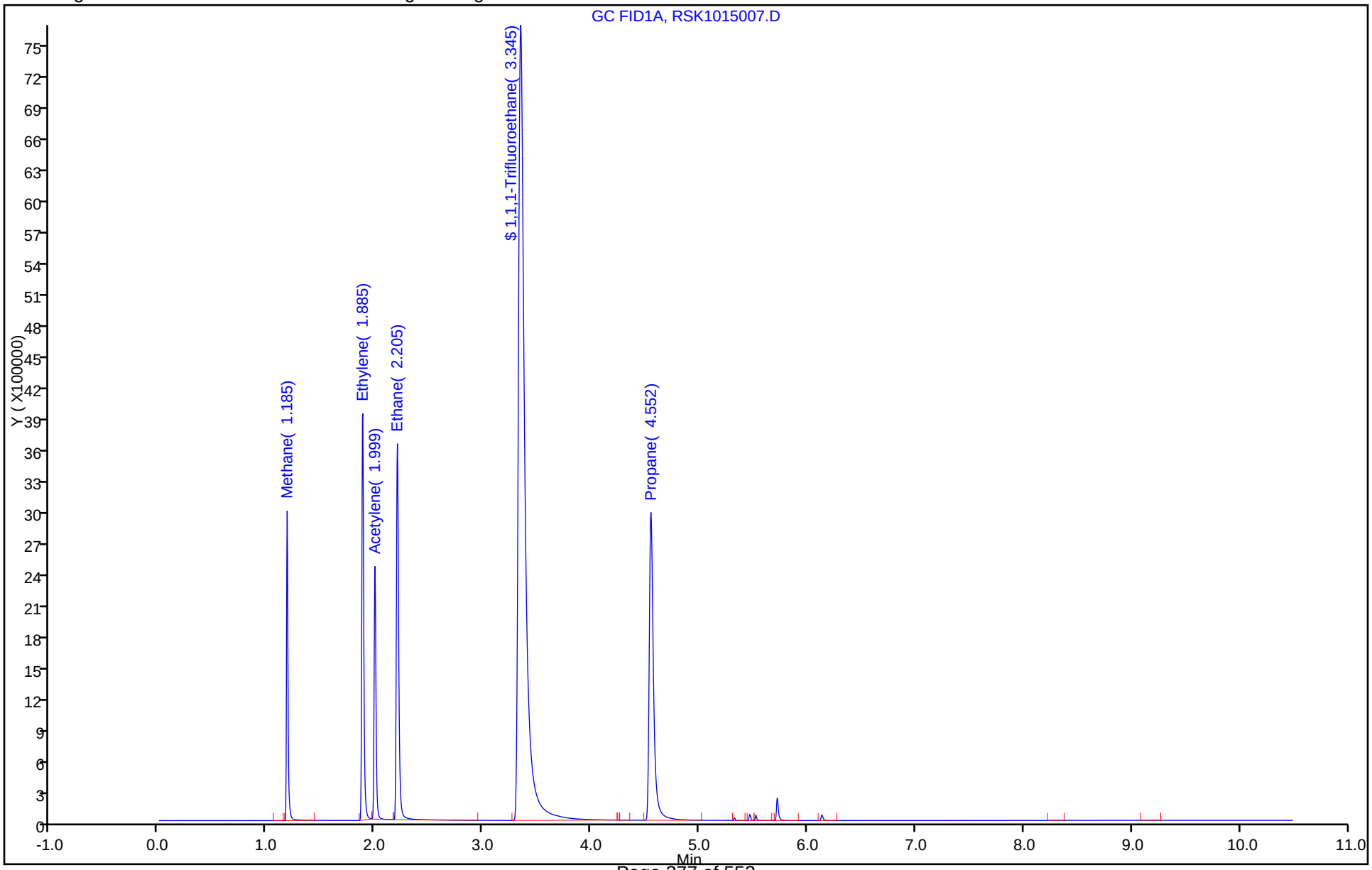
Lims ID: STD5 Worklist Smp#: 7

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Oct-2017 14:06:25 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069667-008
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 16-Oct-2017 07:09:06 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK021

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.184	1.184	0.000	28438455	4277.0	4084.5	
2 Ethylene						
1.877	1.877	0.000	47964177	7511.7	7488.0	
3 Acetylene						
1.991	1.991	0.000	28985079	6950.2	7900.0	
4 Ethane						
2.194	2.194	0.000	53347403	8046.5	8068.6	
6 Propane						
4.527	4.527	0.000	81472393	11789	12343	

Reagents:

SARSKHIGHCALP_00008 Amount Added: 15.00 Units: mL

Report Date: 16-Oct-2017 07:09:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Injection Date: 15-Oct-2017 14:06:25 Instrument ID: ZPID Operator ID:

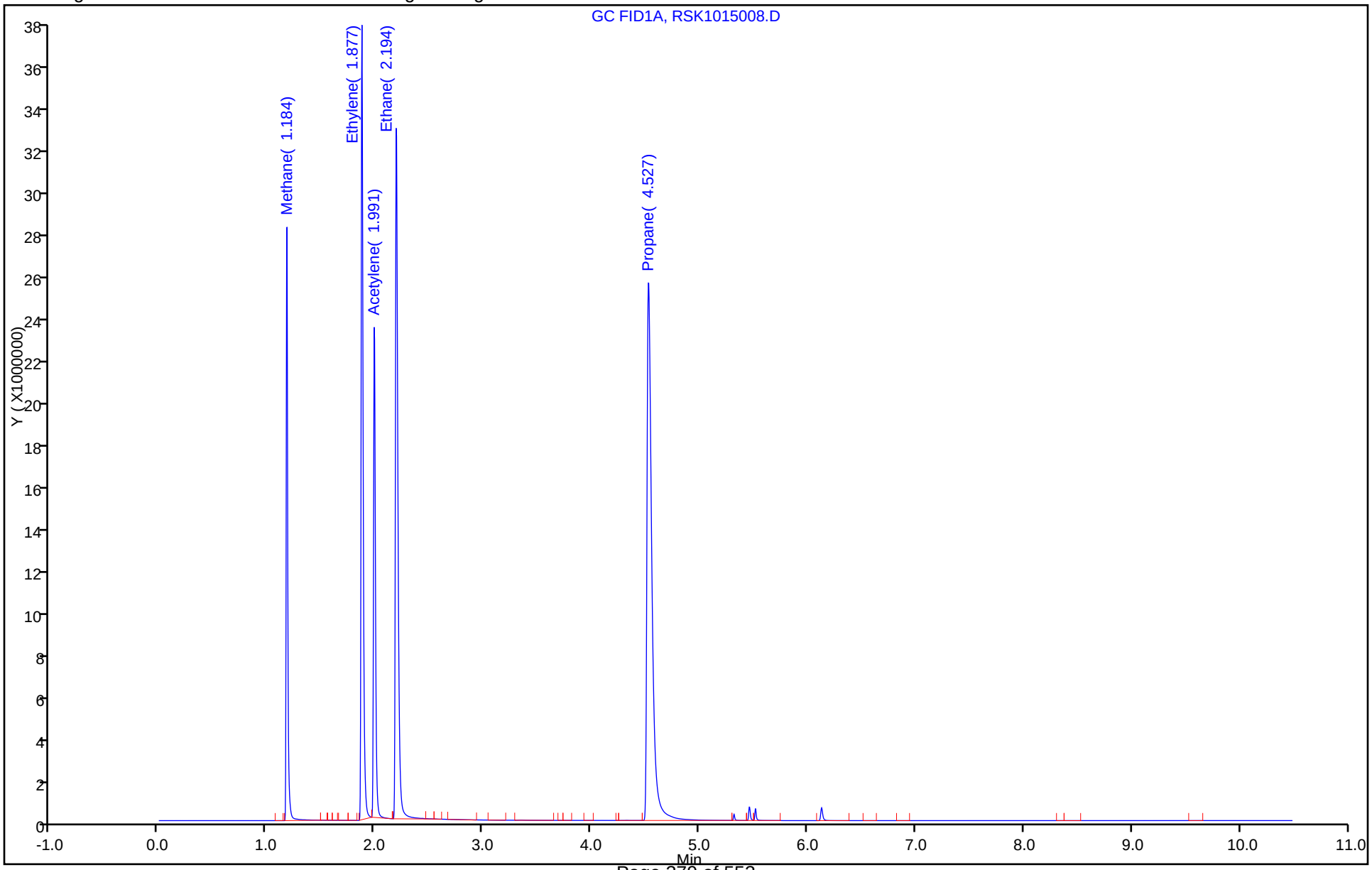
Lims ID: STD6 Worklist Smp#: 8

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 240-299071/9 Calibration Date: 10/15/2017 14:23

Instrument ID: ZPID Calib Start Date: 10/15/2017 12:40

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2017 14:06

Lab File ID: RSK1015009.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Ave	6963	5791		237	285	-16.8	20.0
Ethylene	Ave	6405	5491		429	501	-14.3	20.0
Acetylene	Ave	3669	3820		482	463	4.1	30.0
Ethane	Ave	6612	5531		449	536	-16.4	20.0
Propane	Ave	6601	5285		628	784	-19.9	20.0
1,1,1-Trifluoroethane	Ave	2950	2738		8580	9240	-7.2	30.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: ICV 240-299071/9 Calibration Date: 10/15/2017 14:23

Instrument ID: ZPID Calib Start Date: 10/15/2017 12:40

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2017 14:06

Lab File ID: RSK1015009.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.13	1.23
Ethylene	1.88	1.83	1.93
Acetylene	2.00	1.94	2.04
Ethane	2.20	1.99	2.39
Propane	4.55	4.48	4.58
1,1,1-Trifluoroethane	3.35	3.25	3.45

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015009.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Oct-2017 14:23:37 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069667-009
Operator ID: Instrument ID: ZPID
Sublist:

Method: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 16-Oct-2017 07:12:17 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK021

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.182	1.184	-0.002	1651296	285.1	237.2	
2 Ethylene						
1.882	1.877	0.005	2750044	500.8	429.3	
3 Acetylene						
1.995	1.991	0.004	1770160	463.3	482.5	
4 Ethane						
2.202	2.194	0.008	2966772	536.4	448.7	
$ 5 1,1,1-Trifluoroethane						
3.345	3.353	-0.008	25312930	9243.9	8580.6	
6 Propane						
4.548	4.527	0.021	4142305	783.8	627.5	

Reagents:

SARSKSURR_00010 Amount Added: 19.00 Units: mL
SARSK2NDSRCE_00010 Amount Added: 1.00 Units: mL

Report Date: 16-Oct-2017 07:12:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015009.D

Injection Date: 15-Oct-2017 14:23:37 Instrument ID: ZPID Operator ID:

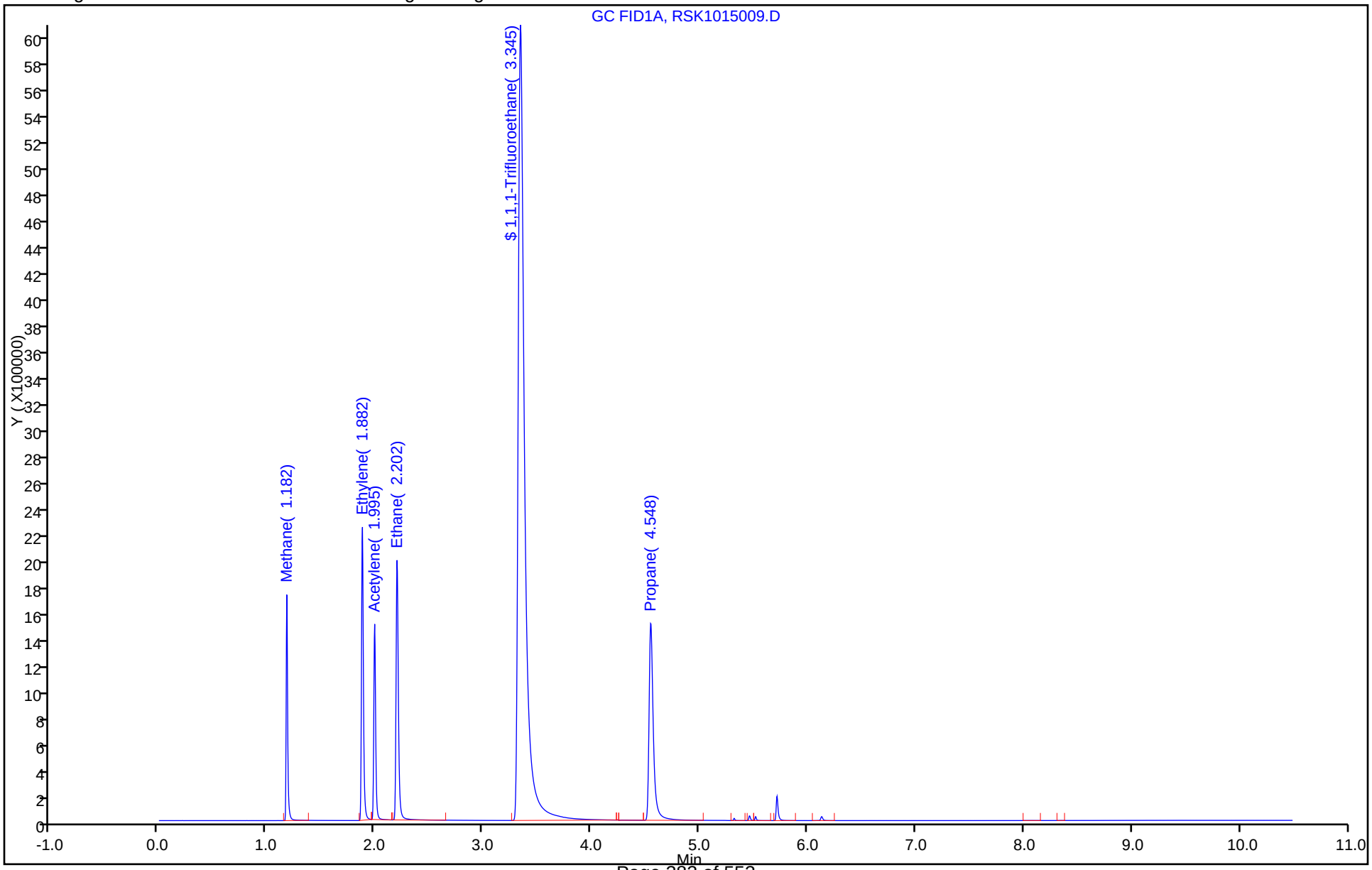
Lims ID: ICV Worklist Smp#: 9

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCVRT 240-301727/3 Calibration Date: 11/02/2017 11:45

Instrument ID: ZPID Calib Start Date: 10/15/2017 12:40

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2017 14:06

Lab File ID: RSK1102003.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Ave	6963	6919		283	285	-0.6	20.0
Ethylene	Ave	6405	6724		526	501	5.0	20.0
Acetylene	Ave	3669	4358		550	463	18.8	30.0
Ethane	Ave	6612	6969		565	536	5.4	20.0
Propane	Ave	6601	7148		851	786	8.3	20.0
1,1,1-Trifluoroethane	Ave	2950	2581		8090	9240	-12.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCVRT 240-301727/3 Calibration Date: 11/02/2017 11:45

Instrument ID: ZPID Calib Start Date: 10/15/2017 12:40

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2017 14:06

Lab File ID: RSK1102003.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.13	1.23
Ethylene	1.88	1.83	1.93
Acetylene	1.99	1.94	2.04
Ethane	2.20	2.00	2.40
Propane	4.55	4.50	4.60
1,1,1-Trifluoroethane	3.34	3.24	3.44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 02-Nov-2017 11:45:39 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:35:56

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.180	1.180	0.000	1972837	285.1	283.4	
2 Ethylene						
1.880	1.880	0.000	3367083	500.8	525.7	
3 Acetylene						
1.994	1.994	0.000	2019085	463.3	550.3	
4 Ethane						
2.200	2.200	0.000	3738415	536.4	565.4	
$ 5 1,1,1-Trifluoroethane						
3.340	3.340	0.000	23862324	9243.9	8088.9	
6 Propane						
4.547	4.547	0.000	5617853	786.0	851.1	

Reagents:

SARSKSURR_00010 Amount Added: 19.00 Units: mL
SARSKHIGHCALP_00008 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2017 16:43:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102003.D

Injection Date: 02-Nov-2017 11:45:39 Instrument ID: ZPID Operator ID:

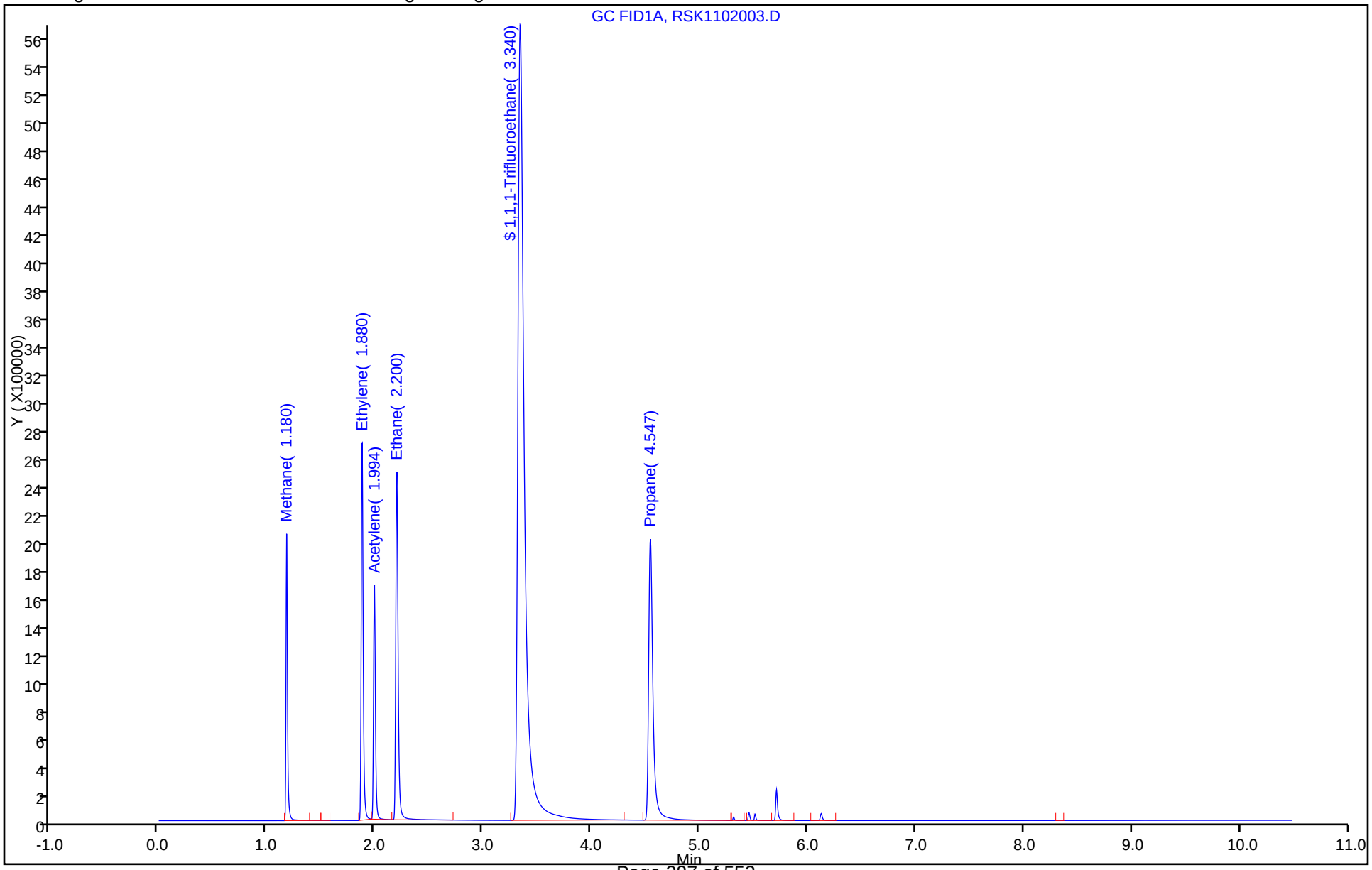
Lims ID: CCVRT Worklist Smp#: 3

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCV 240-301727/19 Calibration Date: 11/02/2017 16:19

Instrument ID: ZPID Calib Start Date: 10/15/2017 12:40

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2017 14:06

Lab File ID: RSK1102019.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Ave	6963	6752		277	285	-3.0	20.0
Ethylene	Ave	6405	6522		510	501	1.8	20.0
Acetylene	Ave	3669	4264		538	463	16.2	30.0
Ethane	Ave	6612	6711		544	536	1.5	20.0
Propane	Ave	6601	6706		798	786	1.6	20.0
1,1,1-Trifluoroethane	Ave	2950	2527		7920	9240	-14.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Lab Sample ID: CCV 240-301727/19 Calibration Date: 11/02/2017 16:19

Instrument ID: ZPID Calib Start Date: 10/15/2017 12:40

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2017 14:06

Lab File ID: RSK1102019.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.13	1.23
Ethylene	1.88	1.83	1.93
Acetylene	1.99	1.94	2.04
Ethane	2.20	2.00	2.40
Propane	4.55	4.50	4.60
1,1,1-Trifluoroethane	3.34	3.24	3.44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Nov-2017 16:19:39 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:37 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 16:43:15

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.182	1.180	0.002	1925328	285.1	276.5	
2 Ethylene						
1.878	1.880	-0.002	3266159	500.8	509.9	
3 Acetylene						
1.992	1.994	-0.002	1975602	463.3	538.5	
4 Ethane						
2.198	2.200	-0.002	3599823	536.4	544.5	
$ 5 1,1,1-Trifluoroethane						
3.342	3.340	0.002	23357047	9243.9	7917.6	
6 Propane						
4.545	4.547	-0.002	5270465	786.0	798.5	

Reagents:

SARSKSURR_00010 Amount Added: 19.00 Units: mL
SARSKHIGHCALP_00008 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2017 16:43:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102019.D

Injection Date: 02-Nov-2017 16:19:39 Instrument ID: ZPID Operator ID:

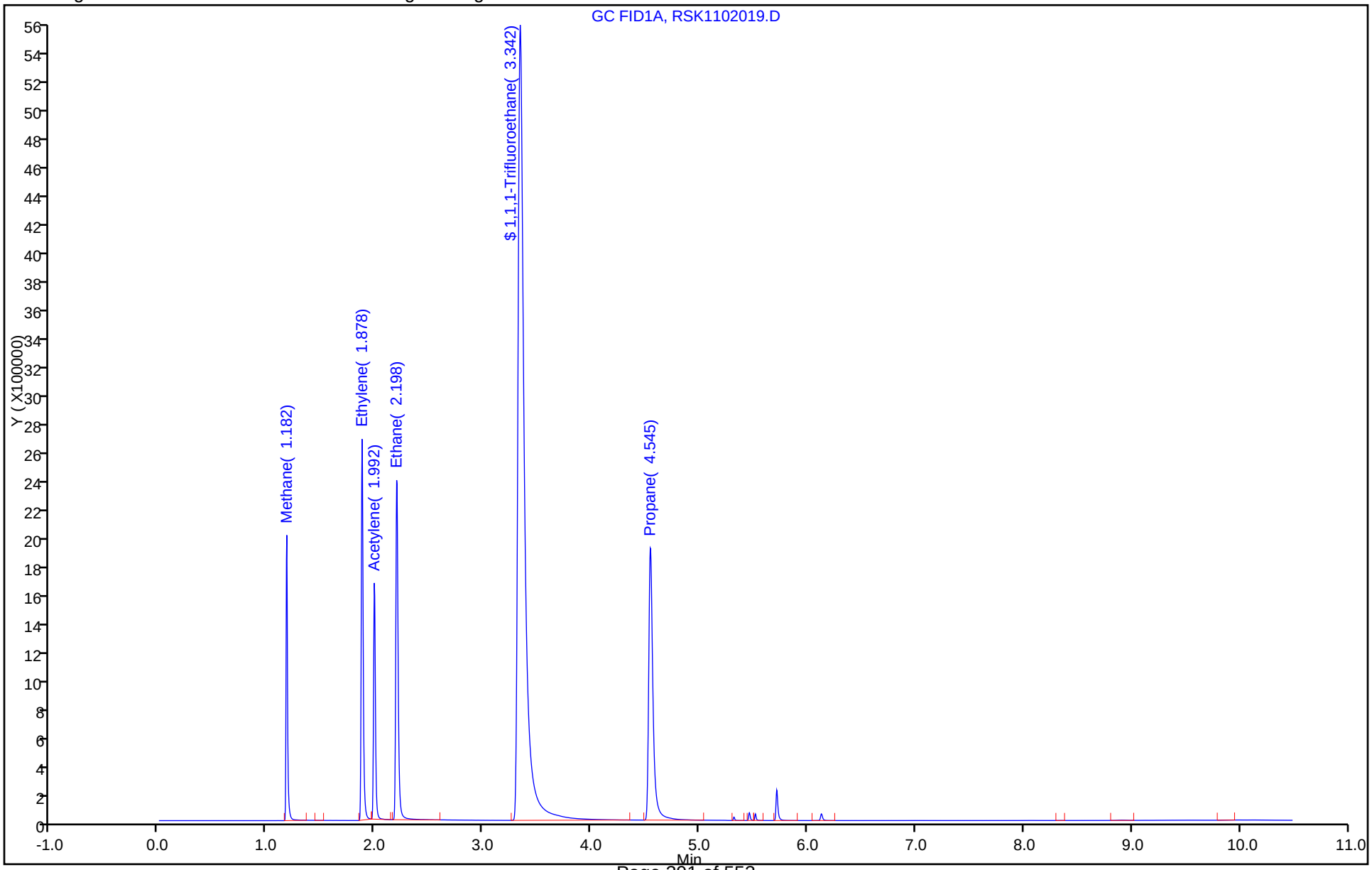
Lims ID: CCV Worklist Smp#: 19

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 19

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-301727/4

Matrix: Water | Lab File ID: RSK1102004.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 23(mL) | Date Analyzed: 11/02/2017 12:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301727 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-82-8	Methane	ND		1.0	0.17
74-84-0	Ethane	ND		1.0	0.10
74-85-1	Ethylene	ND		1.0	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	88		60-140

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Nov-2017 12:02:44 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-004
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:36:10

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.180					ND	
2 Ethylene						
1.880					ND	
3 Acetylene						
1.994					ND	
4 Ethane						
2.200					ND	
$ 5 1,1,1-Trifluoroethane						
3.342	3.340	0.002	25294259	9730.4	8574.3	
6 Propane						
4.547					ND	

Reagents:

SARSKSURR_00010 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 02-Nov-2017 16:43:25 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102004.D

Injection Date: 02-Nov-2017 12:02:44 Instrument ID: ZPID Operator ID:

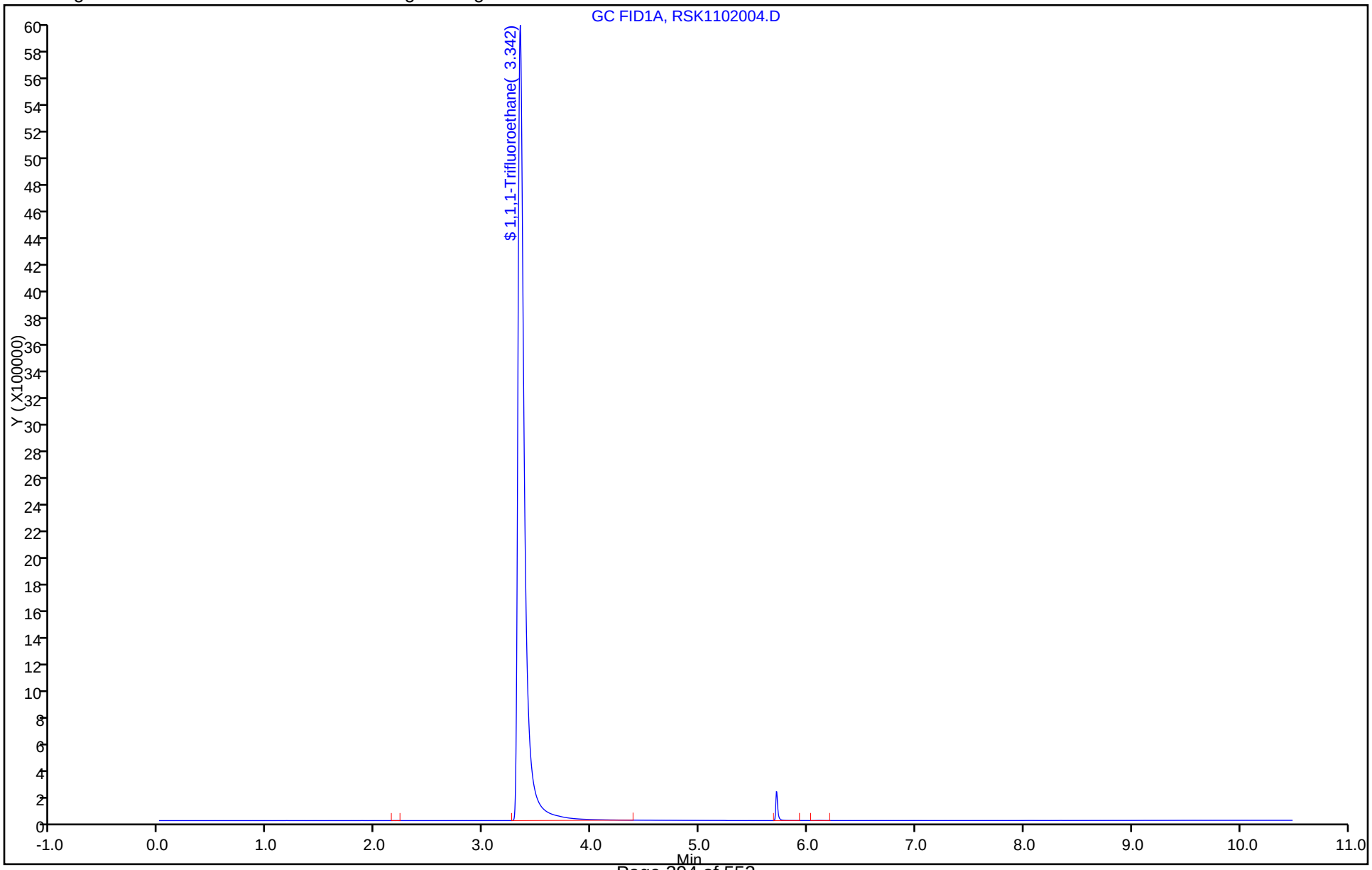
Lims ID: MB Worklist Smp#: 4

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Nov-2017 12:02:44 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-004
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:36:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,1,1-Trifluoroethane	9730.4	8574.3	88.12

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 500-136523-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-301727/5

Matrix: Water | Lab File ID: RSK1102005.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 23(mL) | Date Analyzed: 11/02/2017 12:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 301727 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-82-8	Methane	287		1.0	0.17
74-84-0	Ethane	566		1.0	0.10
74-85-1	Ethylene	529		1.0	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	88		60-140

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 12:19:52 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-005
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:36:22

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane						
1.183	1.180	0.003	2001027	285.1	287.4	
2 Ethylene						
1.883	1.880	0.003	3389891	500.8	529.2	
3 Acetylene						
1.996	1.994	0.002	1998640	463.3	544.7	
4 Ethane						
2.203	2.200	0.003	3741851	536.4	565.9	
$ 5 1,1,1-Trifluoroethane						
3.346	3.340	0.006	23958164	9243.9	8121.4	
6 Propane						
4.550	4.547	0.003	5600140	786.0	848.4	

Reagents:

SARSKSURR_00010 Amount Added: 19.00 Units: mL
SARSKHIGHCALP_00008 Amount Added: 1.00 Units: mL

Report Date: 02-Nov-2017 16:43:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102005.D

Injection Date: 02-Nov-2017 12:19:52 Instrument ID: ZPID Operator ID:

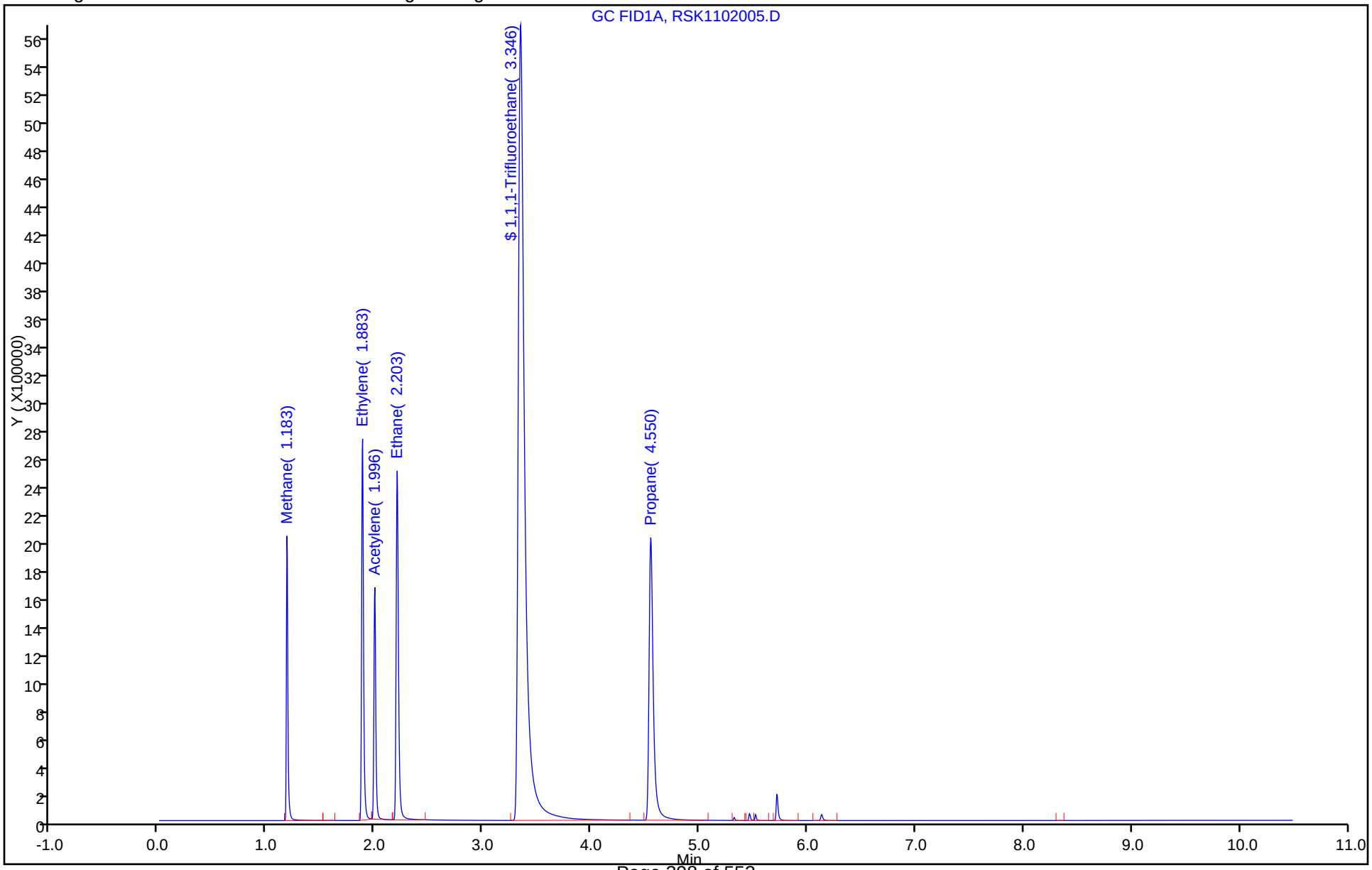
Lims ID: LCS Worklist Smp#: 5

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: RSK175 Limit Group: GCV RSK 175 ICAL

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK1102005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 12:19:52 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0070292-005
Operator ID: Instrument ID: ZPID

Method: \\ChromNA\Canton\ChromData\ZPID\20171102-70292.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 02-Nov-2017 16:43:23 Calib Date: 15-Oct-2017 14:06:25
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\ZPID\20171015-69667.b\RSK1015008.D

Column 1 : Det: GC FID1A
Process Host: XAWRK032

First Level Reviewer: mathenys Date: 02-Nov-2017 14:36:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,1,1-Trifluoroethane	9243.9	8121.4	87.86

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Instrument ID: ZPID Start Date: 10/15/2017 12:40

Analysis Batch Number: 299071 End Date: 10/15/2017 14:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-299071/3 IC		10/15/2017 12:40	1	RSK1015003.D	HP-PLOT/Q 0.53(mm)
STD2 240-299071/4 IC		10/15/2017 12:57	1	RSK1015004.D	HP-PLOT/Q 0.53(mm)
STD3 240-299071/5 ICRT		10/15/2017 13:14	1	RSK1015005.D	HP-PLOT/Q 0.53(mm)
STD4 240-299071/6 IC		10/15/2017 13:32	1	RSK1015006.D	HP-PLOT/Q 0.53(mm)
STD5 240-299071/7 IC		10/15/2017 13:49	1	RSK1015007.D	HP-PLOT/Q 0.53(mm)
STD6 240-299071/8 IC		10/15/2017 14:06	1	RSK1015008.D	HP-PLOT/Q 0.53(mm)
ICV 240-299071/9		10/15/2017 14:23	1	RSK1015009.D	HP-PLOT/Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 500-136523-1

SDG No.:

Instrument ID: ZPID Start Date: 11/02/2017 11:45

Analysis Batch Number: 301727 End Date: 11/02/2017 18:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-301727/3		11/02/2017 11:45	1	RSK1102003.D	HP-PLOT/Q 0.53(mm)
MB 240-301727/4		11/02/2017 12:02	1	RSK1102004.D	HP-PLOT/Q 0.53(mm)
LCS 240-301727/5		11/02/2017 12:19	1	RSK1102005.D	HP-PLOT/Q 0.53(mm)
500-136523-2		11/02/2017 12:36	1	RSK1102006.D	HP-PLOT/Q 0.53(mm)
500-136523-4		11/02/2017 12:54	1	RSK1102007.D	HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 13:11	5		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 13:28	5		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 13:45	5		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 14:02	2		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 14:19	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 14:36	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 14:54	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 15:11	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 15:28	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 15:45	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 16:02	1		HP-PLOT/Q 0.53(mm)
CCV 240-301727/19		11/02/2017 16:19	1	RSK1102019.D	HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 16:36	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 16:54	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 17:11	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 17:28	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 17:45	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 18:02	1		HP-PLOT/Q 0.53(mm)
ZZZZZ		11/02/2017 18:19	1		HP-PLOT/Q 0.53(mm)
CCV 240-301727/27		11/02/2017 18:36	1		HP-PLOT/Q 0.53(mm)

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-136523-1

SDG No.:

Project: Ellsworth Industrial Park

Client Sample ID	Lab Sample ID
OMW3D-GW-103017	500-136523-2
OMW4D-GW-103017	500-136523-4

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: OMW3D-GW-103017
Lab Sample ID: 500-136523-2
Lab Name: TestAmerica Chicago
Job No.: 500-136523-1
SDG ID.:
Matrix: Water
Date Sampled: 10/30/2017 09:45
Reporting Basis: WET
Date Received: 10/31/2017 11:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18496-25-8	Sulfide	ND	1.0	0.23	mg/L			1	SM 4500 S2 F
16887-00-6	Chloride	200	10	8.5	mg/L			50	9056A
14797-55-8	Nitrate as N	1.0	0.20	0.068	mg/L			1	9056A
14808-79-8	Sulfate	110	4.0	1.9	mg/L			20	9056A
7440-44-0	Total Organic Carbon - Duplicates	2.4	1.0	0.47	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: OMW4D-GW-103017
Lab Sample ID: 500-136523-4
Lab Name: TestAmerica Chicago
Job No.: 500-136523-1
SDG ID.:
Matrix: Water
Date Sampled: 10/30/2017 12:20
Reporting Basis: WET
Date Received: 10/31/2017 11:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18496-25-8	Sulfide	ND	1.0	0.23	mg/L			1	SM 4500 S2 F
16887-00-6	Chloride	220	10	8.5	mg/L			50	9056A
14797-55-8	Nitrate as N	1.7	0.20	0.068	mg/L			1	9056A
14808-79-8	Sulfate	120	4.0	1.9	mg/L			20	9056A
7440-44-0	Total Organic Carbon - Duplicates	1.4	1.0	0.47	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Analyst: CCK Batch Start Date: 11/01/2017

Reporting Units: mg/L Analytical Batch No.: 407999

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	09:16	Chloride	2.94	3.00	98	90-110		WSTICCL2_00016
			Nitrate as N	1.89	2.00	94	90-110		WSTICNO32_00014
			Sulfate	5.11	5.00	102	90-110		WSTICS2_00012
2	ICB	09:29	Chloride	ND					
			Nitrate as N	ND					
			Sulfate	ND					
13	CCV	11:45	Chloride	0.961	1.00	96	90-110		WSTICCL1_00016
			Nitrate as N	0.958	1.00	96	90-110		WSTICN031_00007
			Sulfate	2.39	2.50	96	90-110		WSTICS1_00010
14	CCB	11:57	Chloride	ND					
			Nitrate as N	ND					
			Sulfate	ND					
25	CCV	14:34	Chloride	0.994	1.00	99	90-110		WSTICCL1_00016
			Sulfate	2.43	2.50	97	90-110		WSTICS1_00010
26	CCB	14:47	Chloride	ND					
			Sulfate	ND					
37	CCV	17:32	Chloride	0.966	1.00	97	90-110		WSTICCL1_00016
			Nitrate as N	0.965	1.00	97	90-110		WSTICN031_00007
			Sulfate	2.41	2.50	96	90-110		WSTICS1_00010
38	CCB	17:44	Chloride	ND					
			Nitrate as N	ND					
			Sulfate	ND					
49	CCV	20:00	Chloride	1.00	1.00	100	90-110		WSTICCL1_00016
			Nitrate as N	0.962	1.00	96	90-110		WSTICN031_00007
			Sulfate	2.49	2.50	100	90-110		WSTICS1_00010
50	CCB	20:13	Chloride	ND					
			Nitrate as N	ND					
			Sulfate	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Analyst: HMW Batch Start Date: 11/07/2017

Reporting Units: mg/L Analytical Batch No.: 409001

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	17:29	Total Organic Carbon - Duplicates	20.3	20.0	102	90-110		WCSTTC2_00132
3	ICB	17:38	Total Organic Carbon - Duplicates	ND					
13	CCV	20:34	Total Organic Carbon - Duplicates	9.52	10.0	95	90-110		WCSTTC1_00122
14	CCB	20:43	Total Organic Carbon - Duplicates	ND					
27	CCV	00:12	Total Organic Carbon - Duplicates	10.2	10.0	102	90-110		WCSTTC1_00122
28	CCB	00:21	Total Organic Carbon - Duplicates	0.537				J	
30	CCV	02:45	Total Organic Carbon - Duplicates	10.1	10.0	101	90-110		WCSTTC1_00122
31	CCB	02:53	Total Organic Carbon - Duplicates	0.478				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 407999 Date: 11/01/2017 10:30							
9056A	MB 500-407999/7	Chloride	ND		mg/L	0.20	1
9056A	MB 500-407999/7	Nitrate as N	ND		mg/L	0.20	1
9056A	MB 500-407999/7	Sulfate	ND		mg/L	0.20	1
Batch ID: 409001 Date: 11/07/2017 17:47							
9060A	MB 500-409001/4	Total Organic Carbon - Duplicates	ND		mg/L	1.0	1
9060A	MB 500-409001/4	TOC Result 1	ND		mg/L	1.0	1
9060A	MB 500-409001/4	TOC Result 2	ND		mg/L	1.0	1
Batch ID: 408045 Date: 11/02/2017 06:35							
SM 4500 S2 F	MB 500-408045/1	Sulfide	ND		mg/L	1.0	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 407999 Date: 11/01/2017 17:57											
9056A	500-136523-4	Nitrate as N	1.7		mg/L						
9056A	500-136523-4 MS	Nitrate as N	2.71		mg/L	1.00	99	80-120			
Batch ID: 407999 Date: 11/01/2017 18:21											
9056A	500-136523-4	Sulfate	120		mg/L						
9056A	500-136523-4 MS	Sulfate	176		mg/L	50.0	111	80-120			
Batch ID: 407999 Date: 11/01/2017 18:46											
9056A	500-136523-4	Chloride	220		mg/L						
9056A	500-136523-4 MS	Chloride	263		mg/L	50.0	89	80-120			4

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 407999 Date: 11/01/2017 18:09											
9056A	500-136523-4 MSD	Nitrate as N	2.72		mg/L	1.00	100	80-120	0	15	
Batch ID: 407999 Date: 11/01/2017 18:34											
9056A	500-136523-4 MSD	Sulfate	174		mg/L	50.0	107	80-120	1	15	
Batch ID: 407999 Date: 11/01/2017 18:58											
9056A	500-136523-4 MSD	Chloride	270		mg/L	50.0	103	80-120	2	15	4

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 407999	Date: 11/01/2017 10:43										
						LCS Source: WSTICCL2_00016					
9056A	LCS 500-407999/8	Chloride	2.88		mg/L	3.00	96	80-120			
						LCS Source: WSTICNO32_00014					
9056A	LCS 500-407999/8	Nitrate as N	1.86		mg/L	2.00	93	80-120			
						LCS Source: WSTICS2_00012					
9056A	LCS 500-407999/8	Sulfate	5.00		mg/L	5.00	100	80-120			
Batch ID: 409001	Date: 11/07/2017 18:04										
						LCS Source: WCSTTC2_00132					
9060A	LCS 500-409001/5	Total Organic Carbon - Duplicates	9.61		mg/L	10.0	96	80-120			
9060A	LCS 500-409001/5	TOC Result 1	9.59		mg/L	10.0	96	80-120			
9060A	LCS 500-409001/5	TOC Result 2	9.63		mg/L	10.0	96	80-120			
Batch ID: 408045	Date: 11/02/2017 06:37										
						LCS Source: WSTSF1_00070					
SM 4500 S2 F	LCS 500-408045/2	Sulfide	3.06		mg/L	3.28	94	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-136523-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 4500 S2 F MDL Date: 03/29/2017 11:17

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Sulfide		1	0.231

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-136523-1

SDG Number:

Matrix: Water Instrument ID: IC5

Method: 9056A MDL Date: 03/29/2017 14:43

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Chloride		0.2	0.17
Nitrate as N		0.2	0.068
Sulfate		0.2	0.095

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-136523-1

SDG Number:

Matrix: Water Instrument ID: IC5

Method: 9056A XMDL Date: 03/29/2017 14:44

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Chloride		0.2	0.17
Nitrate as N		0.2	0.068
Sulfate		0.2	0.095

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-136523-1

SDG Number:

Matrix: Water Instrument ID: TOC3

Method: 9060A MDL Date: 03/30/2017 08:30

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Organic Carbon - Duplicates		1	0.47

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-136523-1

SDG Number:

Matrix: Water Instrument ID: TOC3

Method: 9060A XMDL Date: 03/30/2017 08:31

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon - Duplicates		1	0.47

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 4500 S2 F

Start Date: 11/02/2017 06:35 End Date: 11/02/2017 07:20

Lab Sample Id	D/F	Type	Time	Analytes																							
				S2																							
MB 500-408045/1	1	T	06:35	X																							
LCS 500-408045/2	1	T	06:37	X																							
ZZZZZZ			06:40																								
ZZZZZZ			06:43																								
ZZZZZZ			06:46																								
ZZZZZZ			06:49																								
ZZZZZZ			06:51																								
ZZZZZZ			06:54																								
ZZZZZZ			06:57																								
ZZZZZZ			07:00																								
500-136523-2	1	T	07:03	X																							
500-136523-4	1	T	07:06	X																							
ZZZZZZ			07:08																								
ZZZZZZ			07:11																								
ZZZZZZ			07:14																								
ZZZZZZ			07:17																								
ZZZZZZ			07:20																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Instrument ID: IC5 Analysis Method: 9056A

Start Date: 11/01/2017 09:16 End Date: 11/02/2017 00:07

Lab Sample Id	D/F	Type	Time	Analytes																							
				CL-	NO3	SO4																					
ICV 500-407999/1	1		09:16	X	X	X																					
ICB 500-407999/2	1		09:29	X	X	X																					
500-136523-2	1	T	09:41		X																						
ZZZZZZ			09:53																								
500-136523-4	1	T	10:06		X																						
ZZZZZZ			10:18																								
MB 500-407999/7	1	T	10:30	X	X	X																					
LCS 500-407999/8	1	T	10:43	X	X	X																					
ZZZZZZ			10:55																								
ZZZZZZ			11:07																								
ZZZZZZ			11:20																								
ZZZZZZ			11:32																								
CCV 500-407999/13	1		11:45	X	X	X																					
CCB 500-407999/14	1		11:57	X	X	X																					
ZZZZZZ			12:09																								
ZZZZZZ			12:43																								
ZZZZZZ			12:56																								
ZZZZZZ			13:08																								
ZZZZZZ			13:20																								
ZZZZZZ			13:33																								
ZZZZZZ			13:45																								
ZZZZZZ			13:57																								
ZZZZZZ			14:10																								
ZZZZZZ			14:22																								
CCV 500-407999/25	1		14:34	X		X																					
CCB 500-407999/26	1		14:47	X		X																					
ZZZZZZ			15:24																								
ZZZZZZ			15:36																								
ZZZZZZ			15:53																								
ZZZZZZ			16:05																								
ZZZZZZ			16:18																								
ZZZZZZ			16:30																								
500-136523-2	20	T	16:43			X																					
500-136523-2	50	T	16:55	X																							
500-136523-4	20	T	17:07			X																					
500-136523-4	50	T	17:20	X																							
CCV 500-407999/37	1		17:32	X	X	X																					
CCB 500-407999/38	1		17:44	X	X	X																					
500-136523-4 MS	1	T	17:57		X																						
500-136523-4 MSD	1	T	18:09		X																						
500-136523-4 MS	20	T	18:21			X																					

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Instrument ID: IC5 Analysis Method: 9056A

Start Date: 11/01/2017 09:16 End Date: 11/02/2017 00:07

Lab Sample Id	D/F	Type	Time	Analytes																							
				CL-	NO3	SO4																					
500-136523-4 MSD	20	T	18:34			X																					
500-136523-4 MS	50	T	18:46	X																							
500-136523-4 MSD	50	T	18:58	X																							
ZZZZZZ			19:11																								
ZZZZZZ			19:23																								
ZZZZZZ			19:36																								
ZZZZZZ			19:48																								
CCV 500-407999/49	1		20:00	X	X	X																					
CCB 500-407999/50	1		20:13	X	X	X																					
ZZZZZZ			20:50																								
ZZZZZZ			21:02																								
ZZZZZZ			21:14																								
ZZZZZZ			21:27																								
ZZZZZZ			21:39																								
ZZZZZZ			21:51																								
ZZZZZZ			22:04																								
ZZZZZZ			22:16																								
ZZZZZZ			22:29																								
ZZZZZZ			22:41																								
CCV 500-407999/61			22:53																								
CCB 500-407999/62			23:06																								
ZZZZZZ			23:18																								
ZZZZZZ			23:30																								
ZZZZZZ			23:43																								
CCV 500-407999/66			23:55																								
CCB 500-407999/67			00:07																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Instrument ID: TOC3 Analysis Method: 9060A

Start Date: 11/07/2017 17:19 End Date: 11/08/2017 02:53

Lab Sample Id	D/F	Type	Time	Analytes																								
				TOC1	TOC2	TOCD																						
ZZZZZZ			17:19																									
ICV 500-409001/2	1		17:29	X	X	X																						
ICB 500-409001/3	1		17:38			X																						
MB 500-409001/4	1	T	17:47			X																						
LCS 500-409001/5	1	T	18:04	X	X	X																						
ZZZZZZ			18:24																									
ZZZZZZ			18:44																									
ZZZZZZ			18:55																									
ZZZZZZ			19:05																									
ZZZZZZ			19:37																									
ZZZZZZ			19:59																									
ZZZZZZ			20:16																									
CCV 500-409001/13	1		20:34	X	X	X																						
CCB 500-409001/14	1		20:43			X																						
ZZZZZZ			20:53																									
ZZZZZZ			21:05																									
ZZZZZZ			21:25																									
ZZZZZZ			21:44																									
ZZZZZZ			22:02																									
ZZZZZZ			22:23																									
ZZZZZZ			22:43																									
ZZZZZZ			23:02																									
ZZZZZZ			23:13																									
500-136523-2	1	T	23:34			X																						
ZZZZZZ			23:53																									
ZZZZZZ			00:02																									
CCV 500-409001/27	1		00:12	X	X	X																						
CCB 500-409001/28	1		00:21			X																						
500-136523-4	1	T	00:31			X																						
CCV 500-409001/30	1		02:45	X	X	X																						
CCB 500-409001/31	1		02:53			X																						

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Batch Number: 408045 Batch Start Date: 11/02/17 06:35 Batch Analyst: Boyd, Cheryl L

Batch Method: SM 4500 S2 F Batch End Date: 11/02/17 07:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	IodineAmount	TitrantVolume1	InitialAmount	FinalAmount	CalcMsg	WSTSF1 00070
MB 500-408045/1		SM 4500 S2 F		5 mL	5.05 mL	250 mL	250 mL	OK	
LCS 500-408045/2		SM 4500 S2 F		5 mL	3.12 mL	250 mL	250 mL	OK	5 mL
500-136523-M-2	OMW3D-GW-103017	SM 4500 S2 F	T	5 mL	5.54 mL	250 mL	250 mL	OK	
500-136523-M-4	OMW4D-GW-103017	SM 4500 S2 F	T	5 mL	5.50 mL	250 mL	250 mL	OK	

Batch Notes	
First End time	07:23
Filter ID	WHATMANGLASSFIBERFILTER
Hydrochloric Acid ID	6NHCL00032
Iodine Lot Number	0.25NIODINE00051
Iodine Vendor	EMD
Normality of Iodine Solution	0.0253 N
Sodium Thiosulfate ID	0.025NA2S2O300040
Sodium Thiosulfate Vendor	JTBAKER
Sodium Thiosulfate Dispenser ID	C-3030
Nominal Amount Used	250 mL
Perform Calculation (0=No, 1=Yes)	1
Starch Lot Number	STARCHIND00020
First Start time	06:35
Normality of First Titrant	0.0252 N

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Batch Number: 407999 Batch Start Date: 11/01/17 09:16 Batch Analyst: Krupa, Colleen C

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WSTICBR1 00008	WSTICBR2 00009	WSTICCL1 00016	WSTICCL2 00016
ICV 500-407999/1		9056A		100 mL	100 mL		200 uL		300 uL
LCS 500-407999/8		9056A		100 mL	100 mL		200 uL		300 uL
CCV 500-407999/13		9056A		100 mL	100 mL	100 uL		100 uL	
CCV 500-407999/25		9056A		100 mL	100 mL	100 uL		100 uL	
CCV 500-407999/37		9056A		100 mL	100 mL	100 uL		100 uL	
500-136523-L-4 MS	OMW4D-GW-103017	9056A	T	100 mL	100 mL				
500-136523-L-4 MSD	OMW4D-GW-103017	9056A	T	100 mL	100 mL				
500-136523-L-4 MS	OMW4D-GW-103017	9056A	T	100 mL	100 mL				
500-136523-L-4 MSD	OMW4D-GW-103017	9056A	T	100 mL	100 mL				
500-136523-L-4 MS	OMW4D-GW-103017	9056A	T	100 mL	100 mL				100 uL
500-136523-L-4 MSD	OMW4D-GW-103017	9056A	T	100 mL	100 mL				100 uL
CCV 500-407999/49		9056A		100 mL	100 mL	100 uL		100 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	WSTICN031 00007	WSTICNO32 00014	WSTICS1 00010	WSTICS2 00012		
ICV 500-407999/1		9056A			200 uL		500 uL		
LCS 500-407999/8		9056A			200 uL		500 uL		
CCV 500-407999/13		9056A		100 uL		250 uL			
CCV 500-407999/25		9056A		100 uL		250 uL			
CCV 500-407999/37		9056A		100 uL		250 uL			
500-136523-L-4 MS	OMW4D-GW-103017	9056A	T		100 uL				
500-136523-L-4 MSD	OMW4D-GW-103017	9056A	T		100 uL				
500-136523-L-4 MS	OMW4D-GW-103017	9056A	T				250 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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Batch Number: 407999 Batch Start Date: 11/01/17 09:16 Batch Analyst: Krupa, Colleen C

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	WSTICN031 00007	WSTICNO32 00014	WSTICS1 00010	WSTICS2 00012		
500-136523-L-4 MSD	OMW4D-GW-103017	9056A	T				250 uL		
500-136523-L-4 MS	OMW4D-GW-103017	9056A	T						
500-136523-L-4 MSD	OMW4D-GW-103017	9056A	T						
CCV 500-407999/49		9056A		100 uL		250 uL			

Batch Notes	
Batch Comment	AG14A-5UM/AS14A-5UM
Eluent 1 ID	ELUENTCONC00023
Filter ID	WHATMAN-9831372 / 9814904 -0.45

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Chicago Job No.: 500-136523-1

SDG No.:

Batch Number: 409001 Batch Start Date: 11/07/17 17:19 Batch Analyst: Wontor, Heather M

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Res1&2RPD	RPDOK	WCSTTC1 00122	WCSTTC2 00132
ICV 500-409001/2		9060A		200 mL	200 mL	0 %	TOC Pass		2000 uL
ICB 500-409001/3		9060A				0 %	TOC Pass		
MB 500-409001/4		9060A				8 %	TOC Pass		
LCS 500-409001/5		9060A		200 mL	200 mL	0 %	TOC Pass		1000 uL
CCV 500-409001/13		9060A		200 mL	200 mL	0 %	TOC Pass	1 mL	
CCB 500-409001/14		9060A				0 %	TOC Pass		
500-136523-J-2	OMW3D-GW-103017	9060A	T			16 %	TOC Fail		
CCV 500-409001/27		9060A		200 mL	200 mL	0 %	TOC Pass	1 mL	
CCB 500-409001/28		9060A				0 %	TOC Pass		
500-136523-J-4	OMW4D-GW-103017	9060A	T			3 %	TOC Pass		
CCV 500-409001/30		9060A		200 mL	200 mL	0 %	TOC Pass	1 mL	
CCB 500-409001/31		9060A				0 %	TOC Pass		

Batch Notes	
First End time	See End Date/Time
Phosphoric Acid ID	21% H3PO4_00059
Sodium Persulfate ID	Na_Persulfate_00096
First Start time	See Start Date/Time

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.

TestAmerica Chicago

CHI-22-12-084/Y-09/15

Cover Page - Ion Chromatograph

LIMS Batch: 407999 **FILE ID:** 11-01-2017.csv

Calibration Date: 10/26/17

CH 11/1/17

Instrument: (Circle)	
a. IC5: Dionex Series ICS-1100	SevenAnions
b. IC8: Dionex Series ICS-1100	SevenAnions

Standard Traceability

Note: Working Standards are prepared daily from the noted Stock Solutions.

Test	Calibration Curve CCV Stock ID	LCS / MS ICV Stock ID	LCS mg/L	ICV / CCV mg/L	MS mg/L
Fluoride	WSTICF1-	WSTICF2-	1.0	1.0 / 0.6	0.6
Chloride	WSTICCL1-00016	WSTICCL2-00016	3.0	3.0 / 1.0	1.0
Nitrite-N	WSTICNI1-	WSTICNO2II-	2.0	2.0 / 1.0	1.0
Bromide	WSTICBR1-00008	WSTICBR2-00009	2.0	2.0 / 1.0	1.0
Nitrate-N	WSTICNO31-00007	WSTICNO32-00014	2.0	2.0 / 1.0	1.0
O-PO4	WSTICP1-	WSTICP2-	2.0	2.0 / 1.0	1.0
Sulfate	WSTICS1-00010	WSTICS2-00012	5.0	5.0 / 2.5	2.5

Test	Range of Curve (mg/L)
Fluoride	0.20 - 2.0
Chloride	0.20 - 7.5
Nitrite-N	0.20 - 5.0
Bromide	0.20 - 5.0
Nitrate-N	0.20 - 4.0
O-PO4	0.20 - 4.0
Sulfate	0.20 - 10.0

IC Data Qualifiers used by the analyst in the raw data evaluation.

CE = Co-Elution or masking of peak(s) has been identified
OR = Over Range - Peak exceeds the highest standard of the calibration curve
OD = Over Dilution - The ion is reported from a less dilute injection
NR = Not Required - analysis was not required for this ion
AD = Analyst Discretion was used in the evaluation and the reporting of the ion
RE = Reported Elsewhere
RT = Retention Time Shift
MI = Manual Integration (baseline)

Analyst Signature: Colleen Kemp Date: 11/1/17 – 11/2/17

Reviewer Signature: Josh Konrad Date: 11/2/17

TestAmerica Chicago

Retention Time Window Summary Table

Instrument:	IC5: ICS 1100	Method: SevenAnions
Batch:	407999	
Date:	11/1/2017	

Analyst:	Colleen Krupa

Parameter	ICV RT Minutes	RT Window +/- 2 %	
Fluoride		0.00	0.00
Chloride	3.63	3.56	3.70
Nitrite		0.00	0.00
Bromide	5.23	5.13	5.33
Nitrate	5.79	5.67	5.91
Orthophosphate		0.00	0.00
Sulfate	8.34	8.17	8.51

Analyst Signature: Colleen Krupa Date: 11/1/17

CHI-22-12-130/D-10/17

407999

Sequence Overview

Sequence Details

Name:	11-01-2017	*Created On:*	10/Apr/12 15:30:04
Directory:	Instrument Data\CHI-WC-IC5_1\Instrument	*Created By:*	moorec
Data Vault:	ChromeleonLocal	*Updated On:*	02/Nov/17 08:25:42
No. of Injections:	68	*Updated By:*	CHIINSTIC5

Injection Details

No.	Injection Name	Position	Type	Level	Inject Time	Comment
1	ICV	RA1	Check Standard	04	01/Nov/17 09:16:50	IC Stock II
2	ICB	RA2	Unknown		01/Nov/17 09:29:10	
3	500-136523-L-2	RB1	Unknown		01/Nov/17 09:41:33	CL, NO3, SO4
4	500-136523-L-2	RB2	Unknown		01/Nov/17 09:53:53	CL, NO3, SO4
5	500-136523-L-4	RB3	Unknown		01/Nov/17 10:06:12	CL, NO3, SO4
6	500-136523-L-4	RB4	Unknown		01/Nov/17 10:18:33	CL, NO3, SO4
7	MB	RA3	Unknown		01/Nov/17 10:30:53	
8	LCS	RA4	Check Standard	04	01/Nov/17 10:43:18	IC Stock II
9	500-136435-B-1	RB5	Unknown		01/Nov/17 10:55:38	CL
10	500-136451-B-1	RB6	Unknown		01/Nov/17 11:07:59	CL
11	500-136452-B-1	RB7	Unknown		01/Nov/17 11:20:19	CL
12	480-126640-F-1	RB8	Unknown		01/Nov/17 11:32:39	CL
13	CCV	RA5	Check Standard	03	01/Nov/17 11:45:00	IC Stock I
14	CCB	RA6	Unknown		01/Nov/17 11:57:20	
15	480-126640-F-1	RC1	Unknown		01/Nov/17 12:09:41	CL
16	500-135677-D-1	RC2	Unknown		01/Nov/17 12:43:43	CL, SO4
17	500-135677-D-1	RC3	Unknown		01/Nov/17 12:56:03	CL, SO4
18	500-136023-B-1	RC4	Unknown		01/Nov/17 13:08:24	CL, SO4
19	500-135994-B-1	RC5	Unknown		01/Nov/17 13:20:44	CL, SO4
20	500-135994-B-1	RC6	Unknown		01/Nov/17 13:33:05	CL, SO4
21	500-135994-B-2	RC7	Unknown		01/Nov/17 13:45:25	CL, SO4
22	500-135994-B-2	RC8	Unknown		01/Nov/17 13:57:45	CL, SO4
23	500-135994-C-3	RD1	Unknown		01/Nov/17 14:10:05	CL, SO4
24	500-135994-C-3	RD2	Unknown		01/Nov/17 14:22:26	CL, SO4
25	CCV	RA7	Check Standard	03	01/Nov/17 14:34:48	IC Stock I
26	CCB	RA8	Unknown		01/Nov/17 14:47:07	
27	500-136482-B-1	RD3	Unknown		01/Nov/17 15:24:13	CL
28	480-126698-A-1	RD4	Unknown		01/Nov/17 15:36:33	CL
29	480-126811-F-1	RD5	Unknown		01/Nov/17 15:53:30	CL
30	500-136554-B-1	RD6	Unknown		01/Nov/17 16:05:50	CL
31	480-126698-A-1	GA1	Unknown		01/Nov/17 16:18:14	CL
32	500-136554-B-1	GA2	Unknown		01/Nov/17 16:30:39	CL
33	500-136523-L-2	RD7	Unknown		01/Nov/17 16:43:03	CL, NO3, SO4
34	500-136523-L-2	RD8	Unknown		01/Nov/17 16:55:22	CL, NO3, SO4
35	500-136523-L-4	RE1	Unknown		01/Nov/17 17:07:42	CL, NO3, SO4
36	500-136523-L-4	RE2	Unknown		01/Nov/17 17:20:04	CL, NO3, SO4
37	CCV	RA5	Check Standard	03	01/Nov/17 17:32:25	IC Stock I
38	CCB	RA6	Unknown		01/Nov/17 17:44:46	
39	500-136523-L-4 MS	RE3	Spiked	03	01/Nov/17 17:57:10	CL, NO3, SO4
40	500-136523-L-4 MSD	RE4	Spiked	03	01/Nov/17 18:09:30	CL, NO3, SO4
41	500-136523-L-4 MS	RE5	Spiked	03	01/Nov/17 18:21:55	CL, NO3, SO4
42	500-136523-L-4 MSD	RE6	Spiked	03	01/Nov/17 18:34:15	CL, NO3, SO4

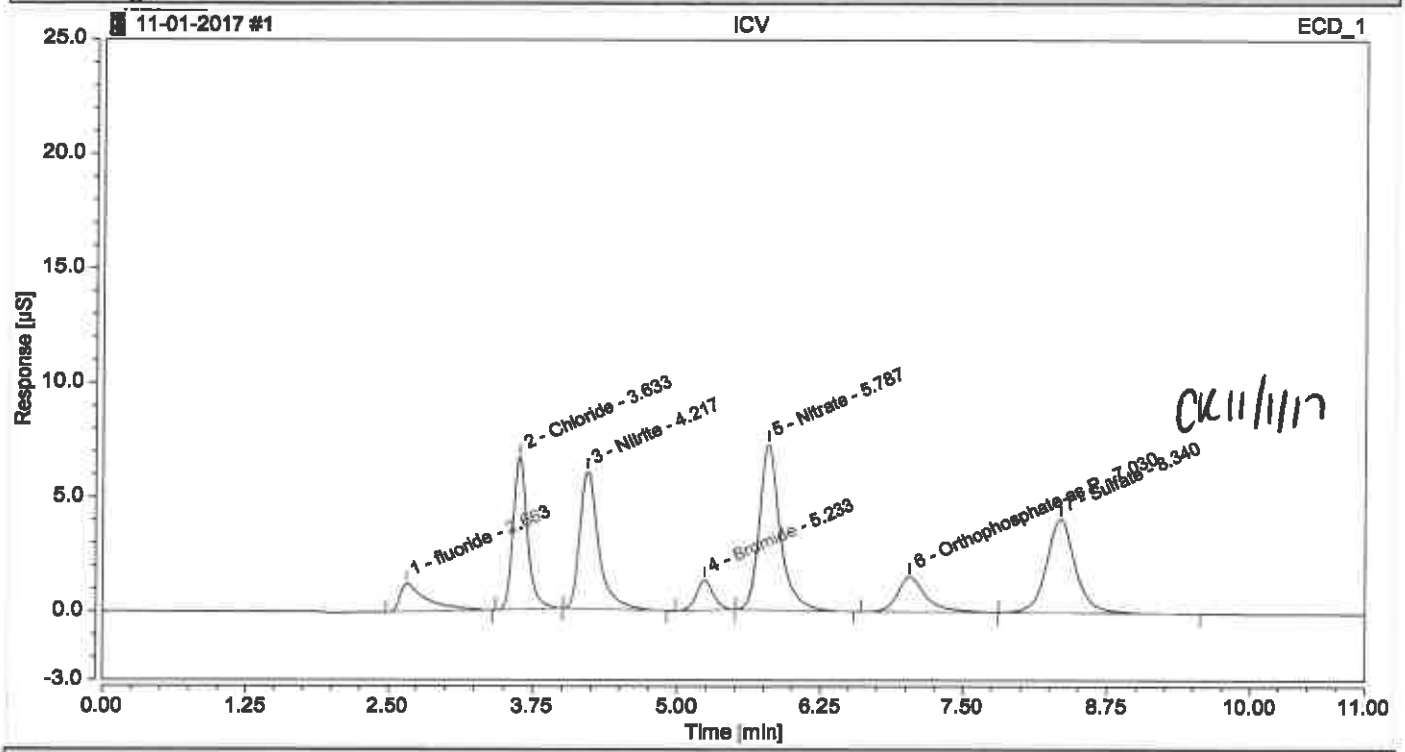
43	500-136523-L-4 MS	RE7	Spiked	03	01/Nov/17 18:46:36	CL, NO3, SO4
44	500-136523-L-4 MSD	RE8	Spiked	03	01/Nov/17 18:58:55	CL, NO3, SO4
45	500-135782-U-11	GA3	Unknown		01/Nov/17 19:11:20	BR
46	500-135782-U-11 MS	GA4	Spiked	03	01/Nov/17 19:23:41	BR
47	500-135782-U-11 MS	GA5	Spiked	03	01/Nov/17 19:36:02	BR
48	500-135952-U-1	GA6	Unknown		01/Nov/17 19:48:22	BR
49	CCV	RA7	Check Standard	03	01/Nov/17 20:00:43	IC Stock I
50	CCB	RA8	Unknown		01/Nov/17 20:13:03	
51	500-135952-U-3	GA7	Unknown		01/Nov/17 20:50:05	BR
52	500-135952-U-5	GA8	Unknown		01/Nov/17 21:02:25	BR
53	500-135952-U-7	GB1	Unknown		01/Nov/17 21:14:47	BR
54	MB	RA3	Unknown		01/Nov/17 21:27:08	
55	LCS	RA4	Check Standard	04	01/Nov/17 21:39:28	IC Stock II
56	500-136564-A-1	GC1	Unknown		01/Nov/17 21:51:49	CL
57	500-136564-A-2	GC2	Unknown		01/Nov/17 22:04:09	CL
58	500-136564-A-3	GC3	Unknown		01/Nov/17 22:16:43	CL
59	500-136564-A-4	GC4	Unknown		01/Nov/17 22:29:03	CL
60	500-136564-A-5	GC5	Unknown		01/Nov/17 22:41:24	CL
61	CCV	RA5	Check Standard	03	01/Nov/17 22:53:45	IC Stock I
62	CCB	RA6	Unknown		01/Nov/17 23:06:06	
63	500-136564-A-8	GC6	Unknown		01/Nov/17 23:18:27	CL
64	500-136564-A-8 MS	GC7	Spiked	03	01/Nov/17 23:30:47	CL
65	500-136564-A-8 MSD	GC8	Spiked	03	01/Nov/17 23:43:06	CL
66	CCV	RA7	Check Standard	03	01/Nov/17 23:55:27	IC Stock I
67	CCB	RA8	Unknown		02/Nov/17 00:07:48	
68	SHUTDOWN	RA6	Blank		02/Nov/17 00:18:50	

Chromatogram and Results

Injection Details

Injection Name:	**ICV**	*Run Time (min):*	**11.00**
Vial Number:	**RA1**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**04**	*Comments:*	**IC Stock II**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 09:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

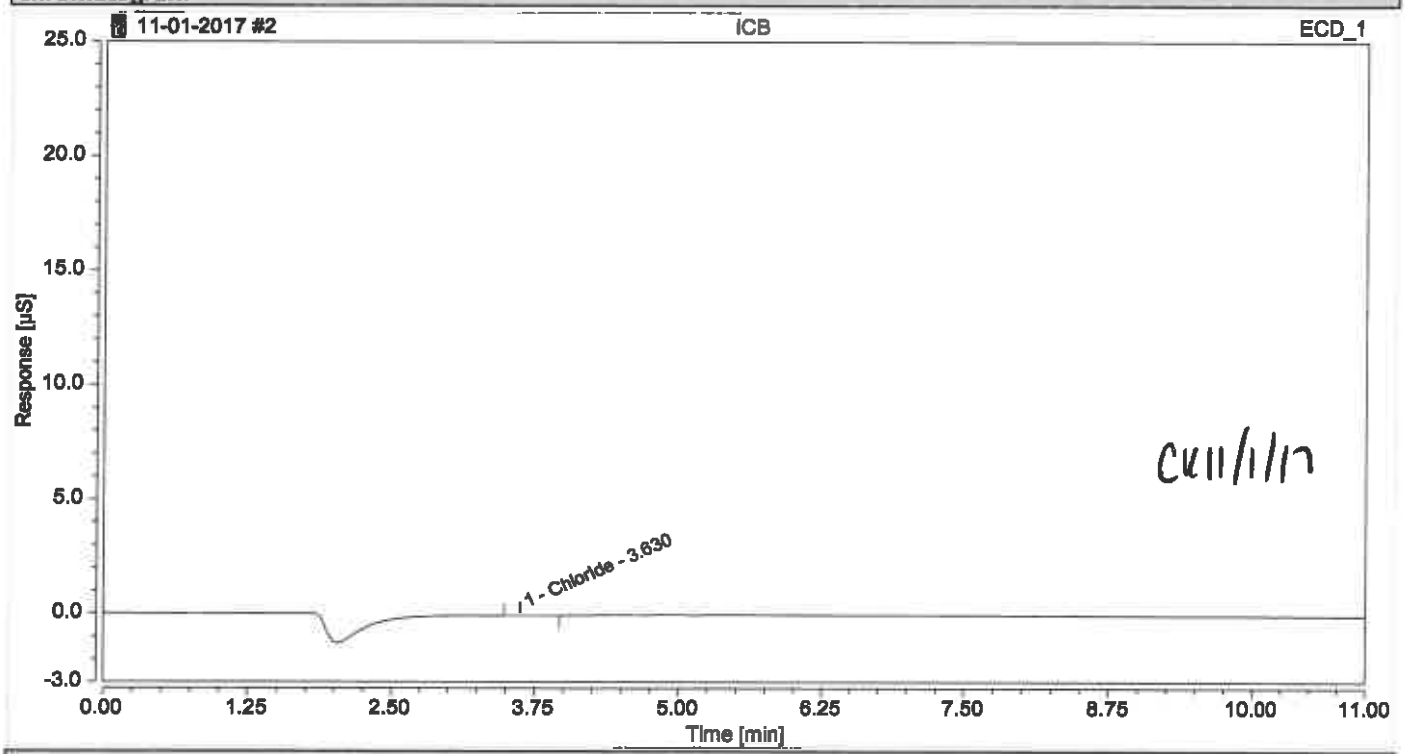
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.663	0.33313	1.227	5.74	4.36	0.8761
2	Chloride	3.633	0.92921	6.670	16.01	23.72	2.9370
3	Nitrite	4.217	1.11678	6.008	19.25	21.36	1.9068
4	Bromide	5.233	0.22792	1.309	3.93	4.66	1.9040
5	Nitrate	5.787	1.54289	7.263	26.59	25.83	1.8884
6	Orthophosphate as P	7.030	0.44891	1.542	7.74	5.48	1.8981
7	Sulfate	8.340	1.20360	4.104	20.74	14.59	5.1065
Total:			**5.802**	**28.123**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICB**	*Run Time (min):*	**11.00**
Vial Number:	**RA2**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 09:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

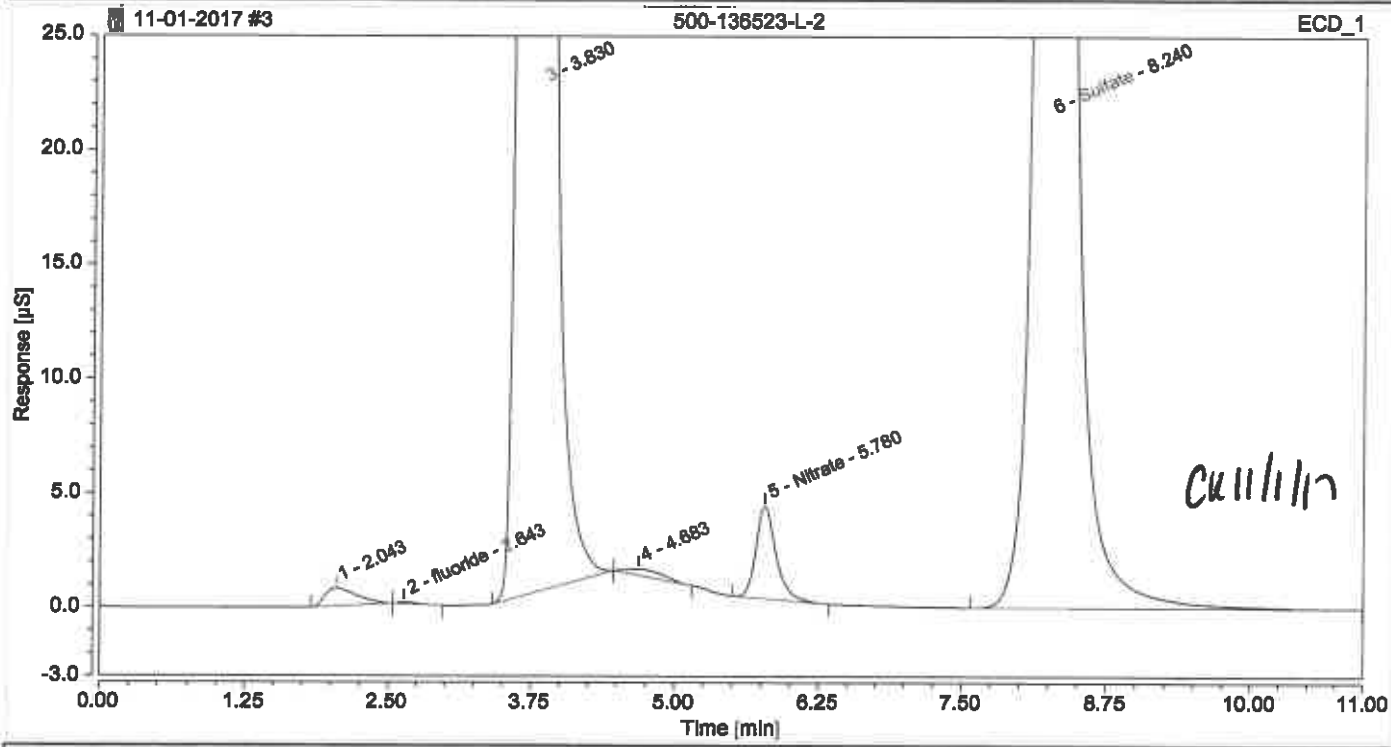
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.630	0.00193	0.011	100.00	100.00	0.0944
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.002**	**0.011**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-2**	*Run Time (min):*	**11.00**
Vial Number:	**RB1**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 09:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

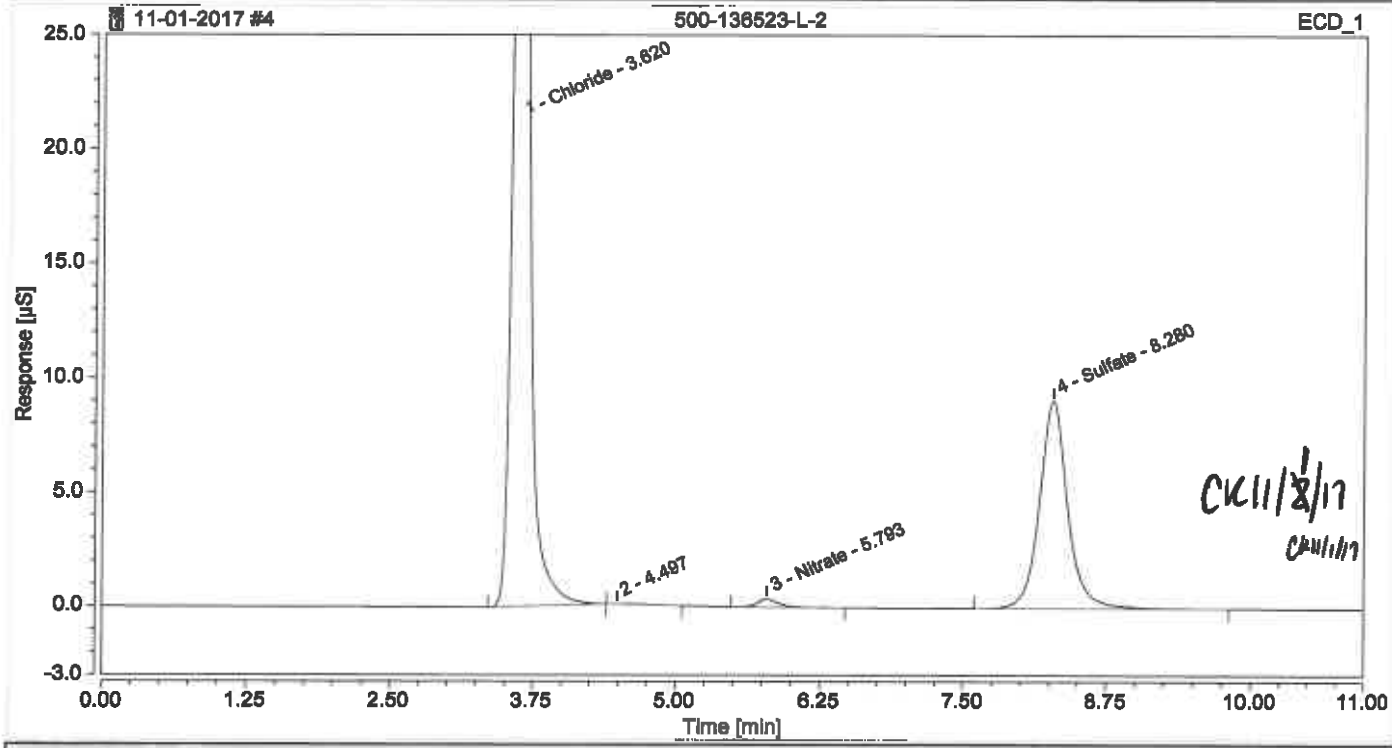
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.043	0.25366	0.791	0.20	0.13	n.a.
2	fluoride	2.643	0.01512	0.080	0.01	0.01	0.0335
n.a.	Chloride OK	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		3.830	92.92287	501.565	71.92	79.66	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		4.683	0.11135	0.275	0.09	0.04	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	5.780	0.82291	4.052	0.64	0.64	1.0353
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate OK	8.240	35.06820	122.835	27.14	19.51	148.2377
Total:			**129.194**	**629.597**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-2**	*Run Time (min):*	**11.00**
Vial Number:	**RB2**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Nov/17 09:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

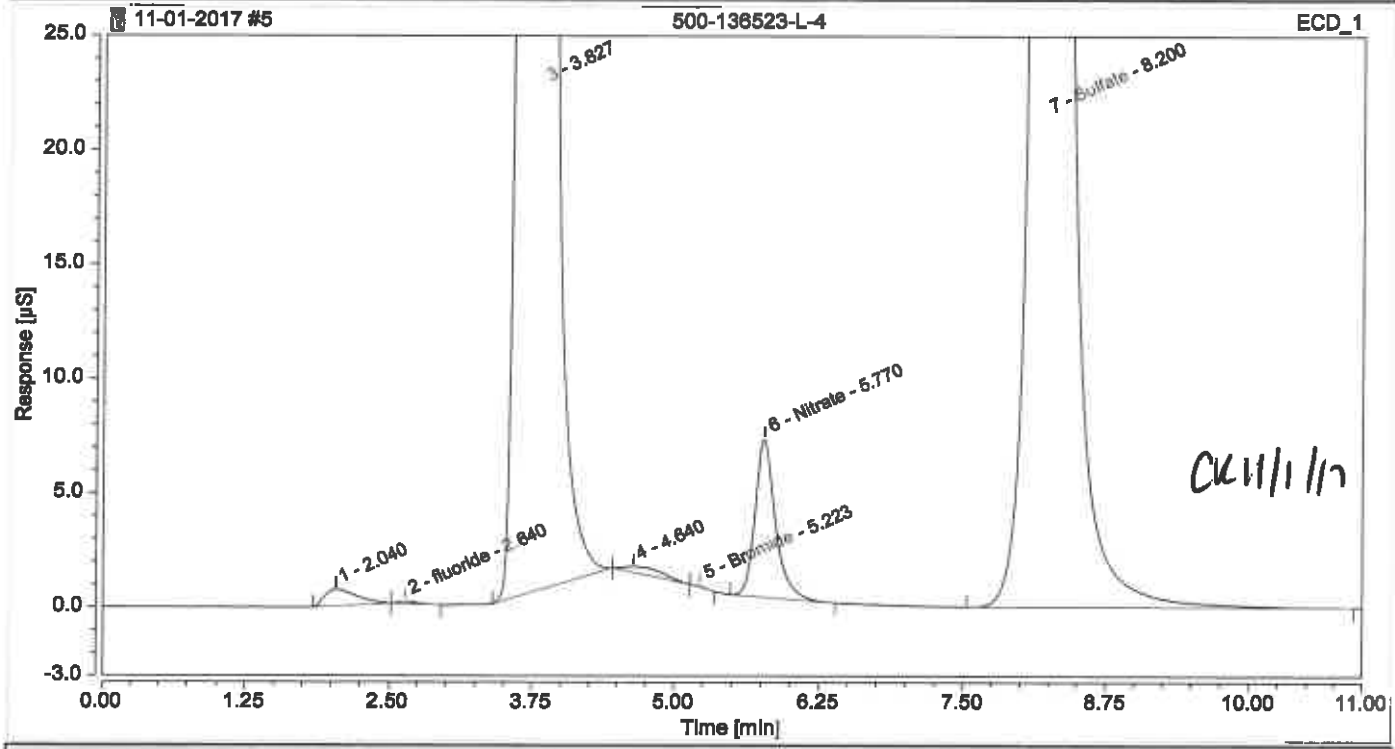
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride OK	3.620	7.18030	46.745	72.51	83.15	221.0008
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		4.497	0.00746	0.015	0.08	0.03	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate KE	5.793	0.08057	0.362	0.81	0.64	1.5562
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate OK	8.280	2.63387	9.095	26.60	16.18	111.5165
Total:			**9.902**	**56.216**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4**	*Run Time (min):*	**11.00**
Vial Number:	**RB3**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 10:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

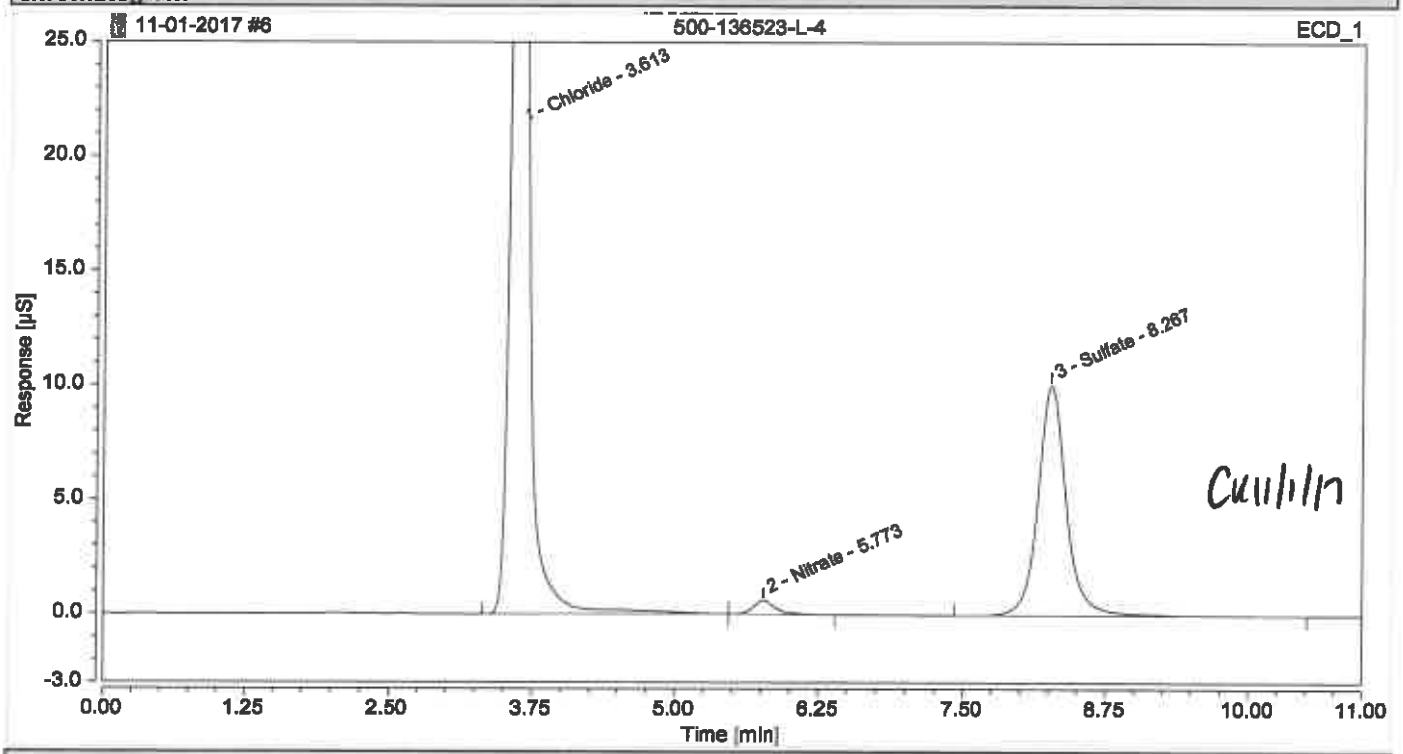
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.040	0.23307	0.716	0.17	0.11	n.a.
2	fluoride	2.640	0.02049	0.103	0.01	0.02	0.0477
n.a.	Chloride OK	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		3.827	100.90674	529.780	71.45	78.80	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		4.640	0.11636	0.247	0.08	0.04	n.a.
5	Bromide	5.223	0.00415	0.037	0.00	0.01	0.0663
6	Nitrate	5.770	1.39997	6.895	0.99	1.03	1.7190
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate OK	8.200	38.55422	134.491	27.30	20.01	162.9716
Total:			**141.235**	**672.269**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4**	*Run Time (min):*	**11.00**
Vial Number:	**RB4**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Nov/17 10:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

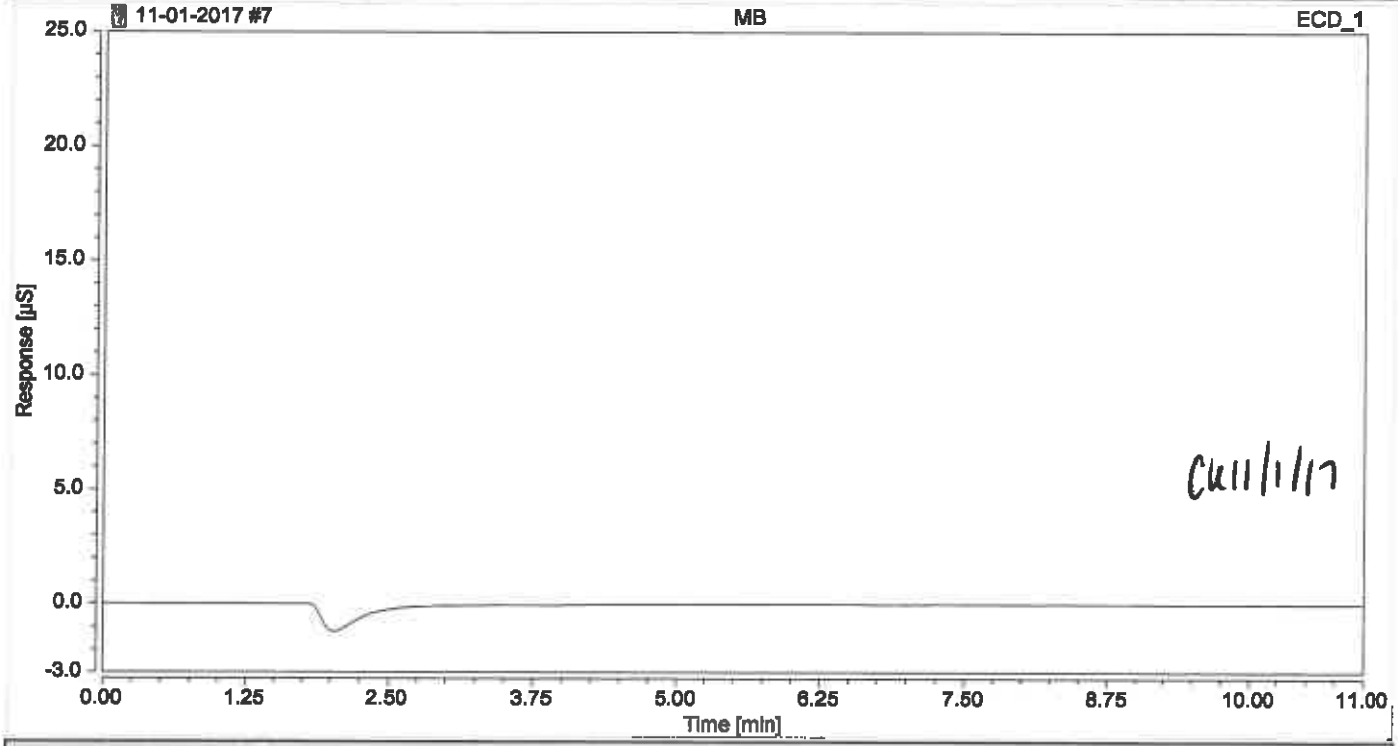
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride OK	3.613	8.14662	51.500	72.61	82.81	250.6239
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate	5.773	0.13180	0.602	1.17	0.97	2.1633
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate OK	8.267	2.94116	10.090	26.21	16.22	124.5042
Total:			**11.220**	**62.193**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**MB**	*Run Time (min):*	**11.00**
Vial Number:	**RA3**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 10:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

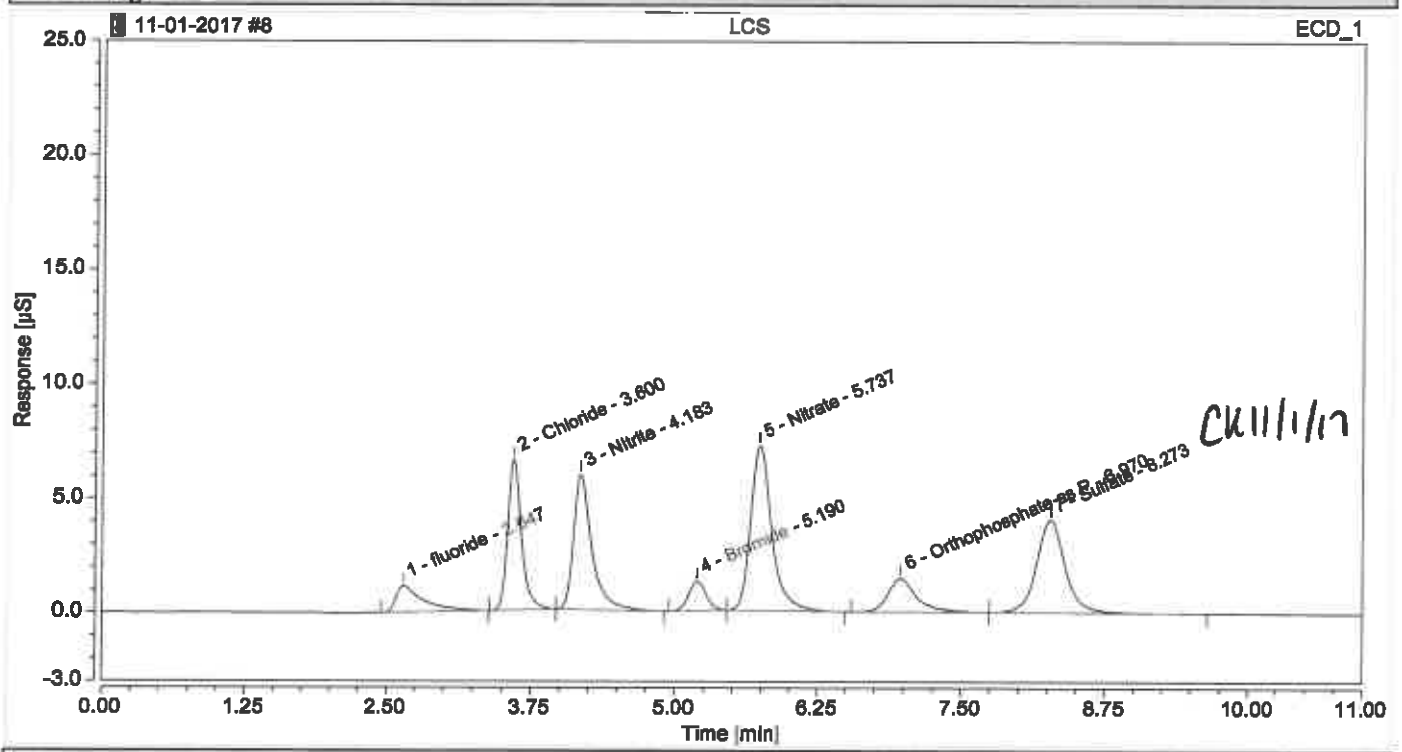
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**	

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**11.00**
Vial Number:	**RA4**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**04**	*Comments:*	**IC Stock II**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 10:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

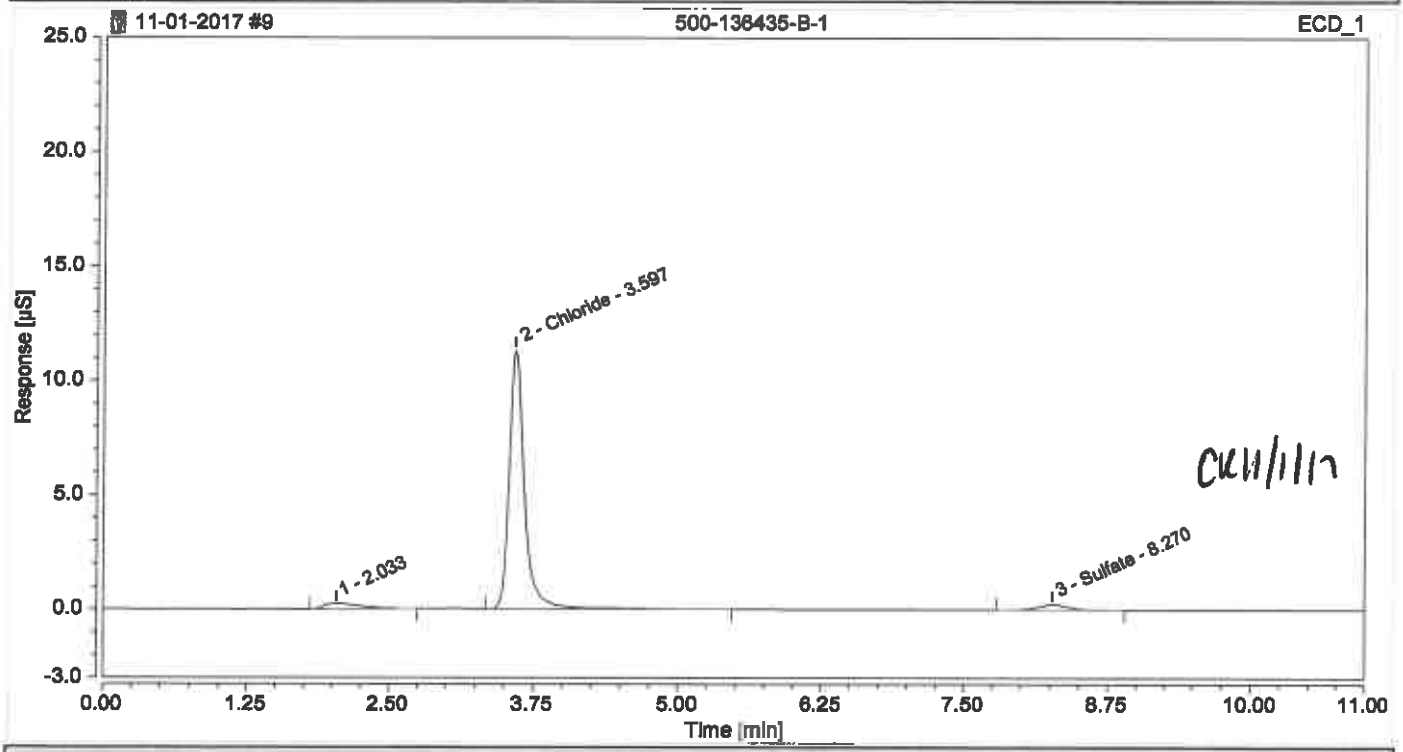
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.647	0.32303	1.166	5.68	4.20	0.8494
2	Chloride	3.600	0.91146	6.599	16.03	23.79	2.8826
3	Nitrite	4.183	1.09801	5.914	19.31	21.32	1.8766
4	Bromide	5.190	0.22557	1.308	3.97	4.71	1.8847
5	Nitrate	5.737	1.52234	7.224	26.78	26.04	1.8640
6	Orthophosphate as P	6.970	0.42654	1.478	7.50	5.33	1.8088
7	Sulfate	8.273	1.17800	4.054	20.72	14.61	4.9983
Total:			**5.685**	**27.744**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136435-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RB5**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**01/Nov/17 10:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

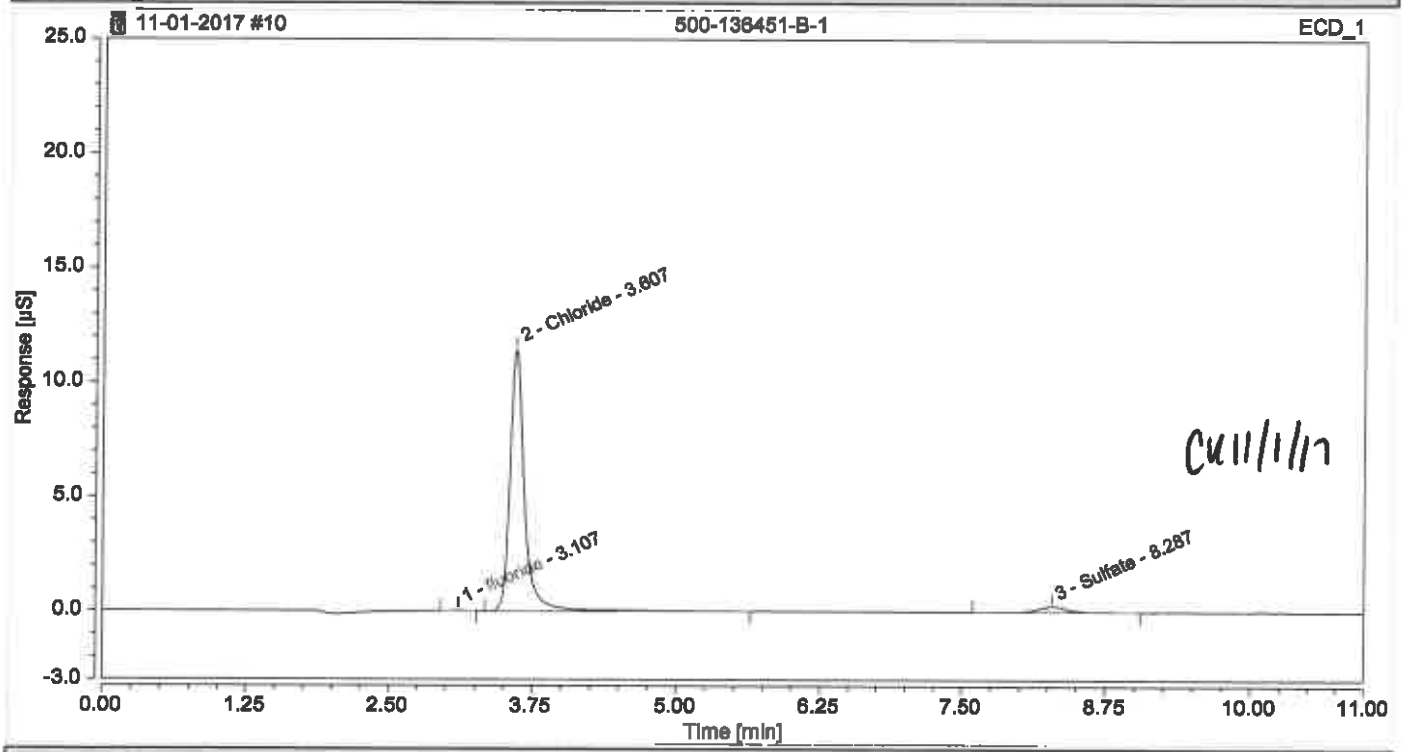
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.033	0.09253	0.257	5.02	2.17	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.597	1.67770	11.348	91.03	95.80	1046.3139
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.270	0.07276	0.240	3.95	2.03	65.3875
Total:			**1.843**	**11.845**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136451-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RB6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**01/Nov/17 11:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

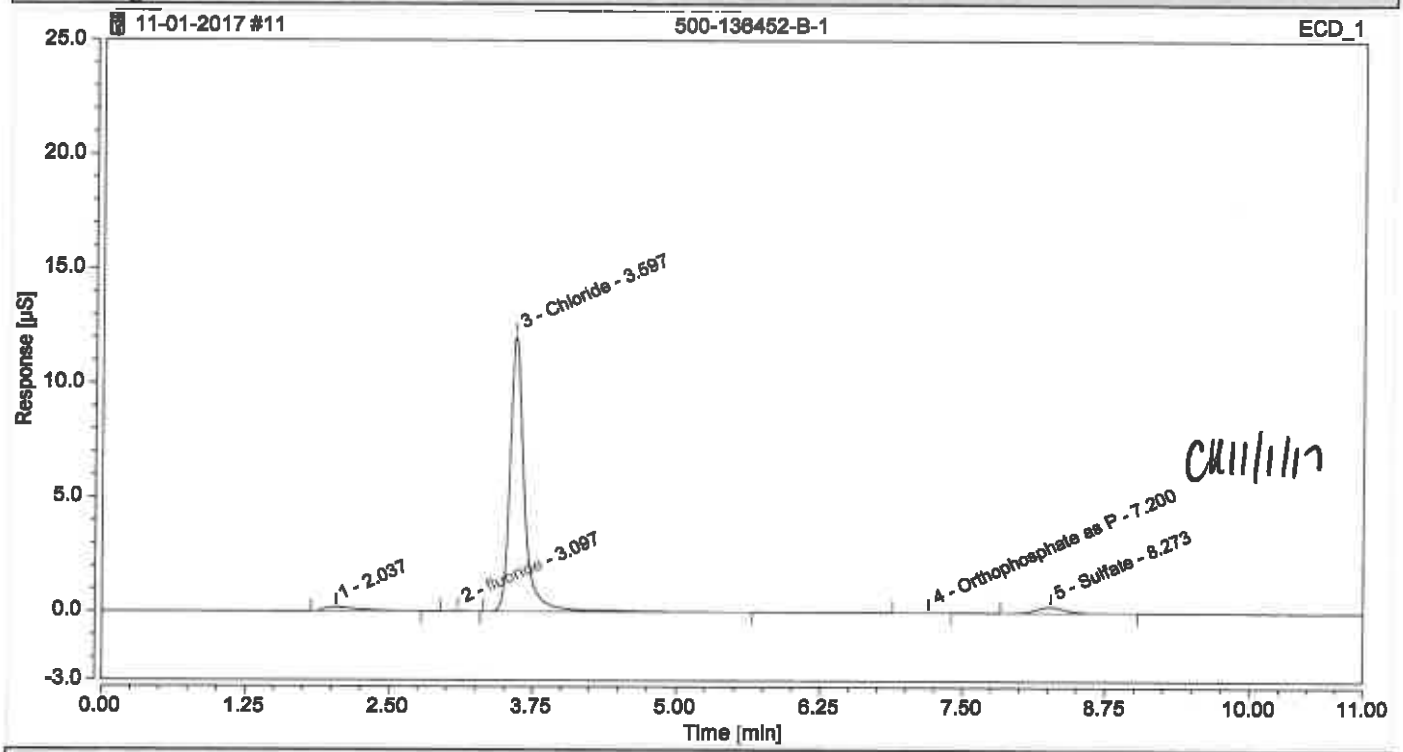
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	3.107	0.00420	0.034	0.24	0.29	0.9061
2	Chloride	3.607	1.65258	11.437	95.43	97.61	1030.9164
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.287	0.07496	0.246	4.33	2.10	67.2408
Total:			**1.732**	**11.716**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136452-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RB7**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**01/Nov/17 11:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

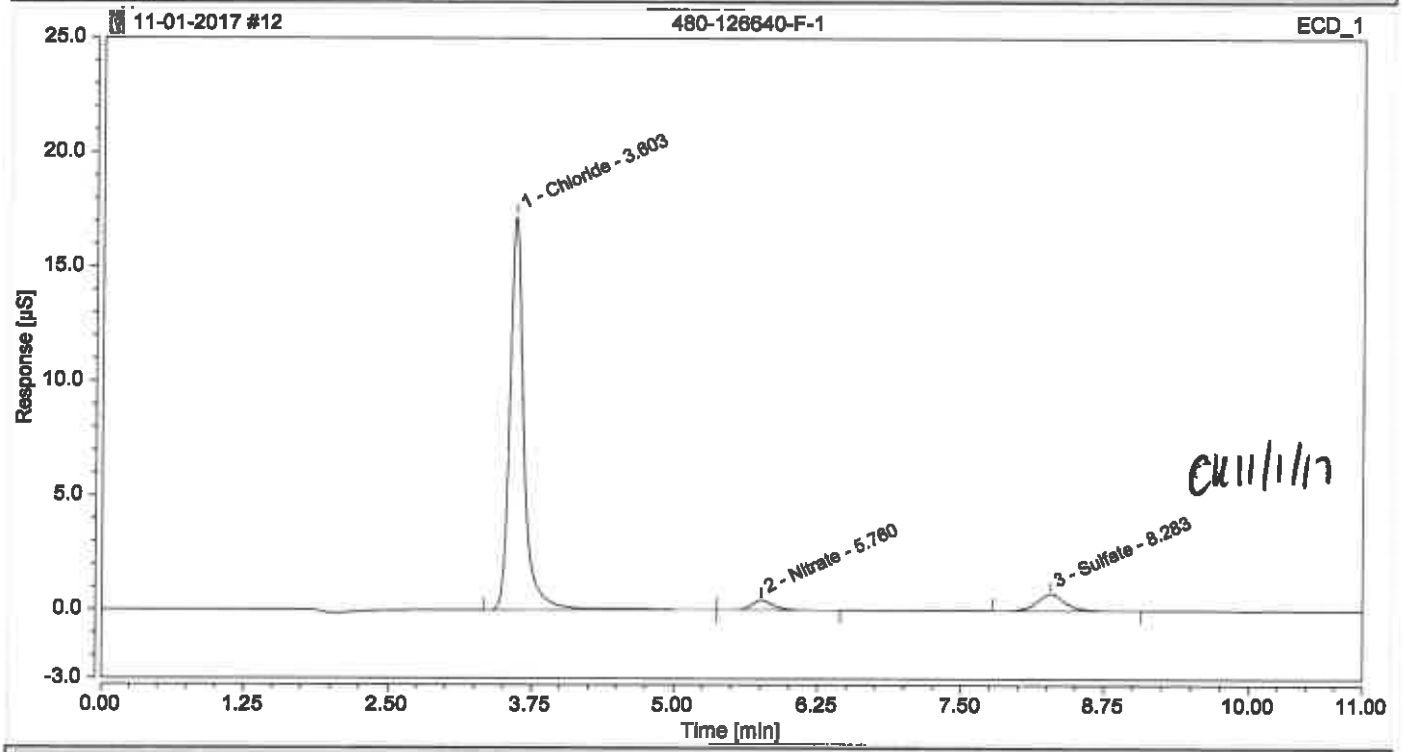
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.037	0.06615	0.179	3.41	1.43	n.a.
2	fluoride	3.097	0.00425	0.034	0.22	0.27	0.9352
3	Chloride	3.597	1.78457	12.080	92.06	96.14	1111.8426
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Orthophosphate as P	7.200	0.00144	0.006	0.07	0.05	22.5582
5	Sulfate	8.273	0.08205	0.266	4.23	2.11	73.2347
Total:			**1.938**	**12.566**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**480-126640-F-1**	*Run Time (min):*	**11.00**
Vial Number:	**RB8**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 11:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

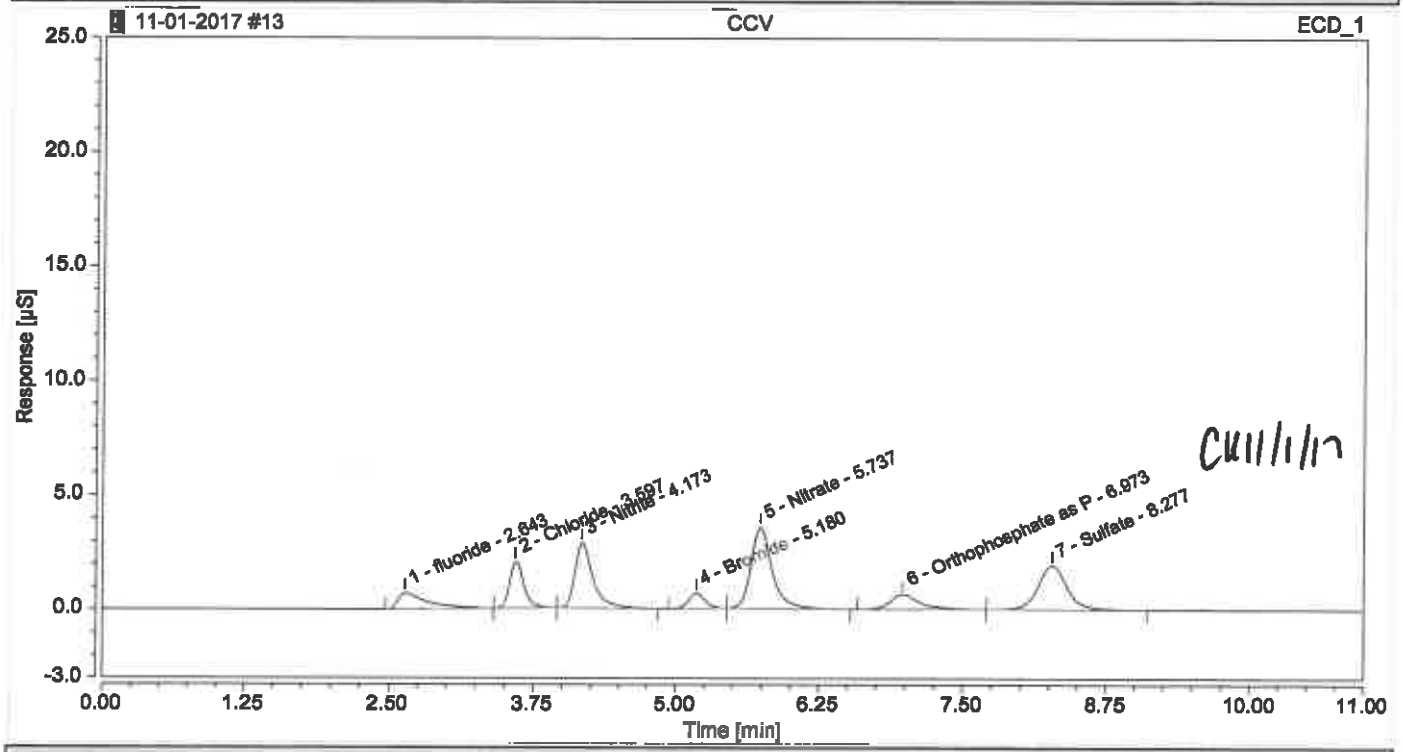
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride OK	3.603	2.43982	17.222	88.90	93.72	378.3958
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate	5.760	0.09250	0.431	3.37	2.35	8.4879
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.283	0.21213	0.723	7.73	3.94	45.7984
Total:			**2.744**	**18.376**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**11.00**
Vial Number:	**RA5**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 11:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

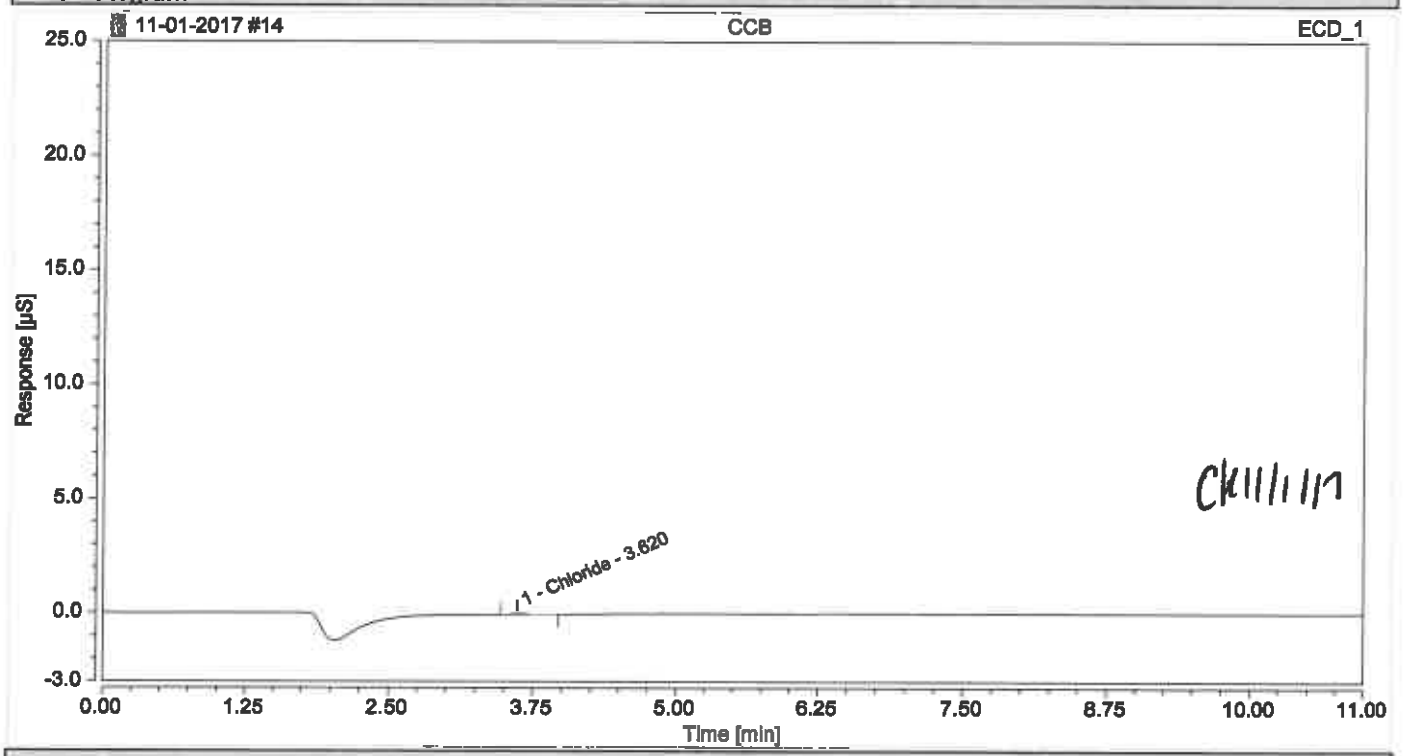
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.643	0.20264	0.708	7.66	5.71	0.5303
2	Chloride	3.597	0.28462	2.045	10.77	16.48	0.9610
3	Nitrite	4.173	0.52942	2.862	20.02	23.07	0.9621
4	Bromide	5.180	0.11623	0.667	4.40	5.37	0.9867
5	Nitrate	5.737	0.75744	3.560	28.65	28.70	0.9577
6	Orthophosphate as P	6.973	0.19312	0.645	7.30	5.20	0.8775
7	Sulfate	8.277	0.56032	1.919	21.19	15.47	2.3676
Total:			**2.644**	**12.406**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**11.00**
Vial Number:	**RA6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 11:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

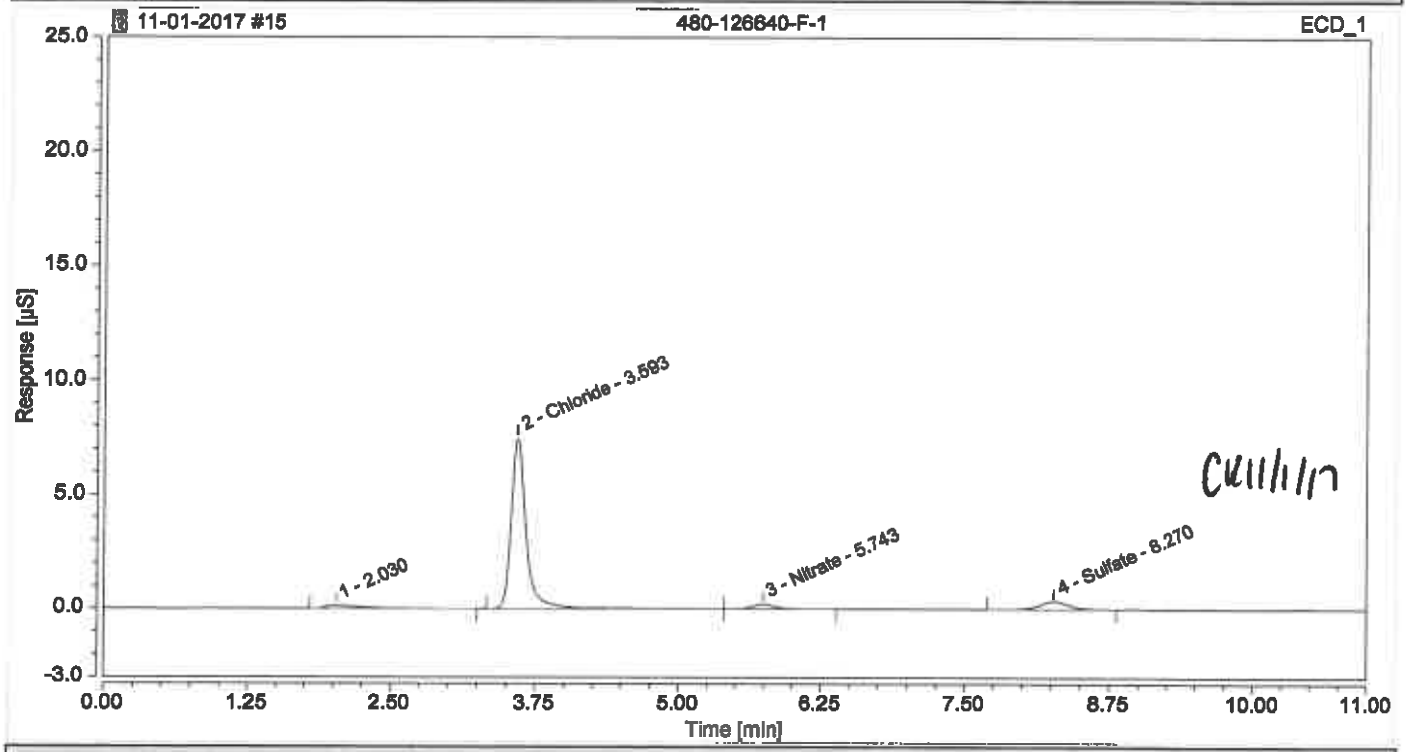
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.620	0.00708	0.047	100.00	100.00	0.1102
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.007**	**0.047**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**480-126640-F-1**	*Run Time (min):*	**11.00**
Vial Number:	**RC1**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 12:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

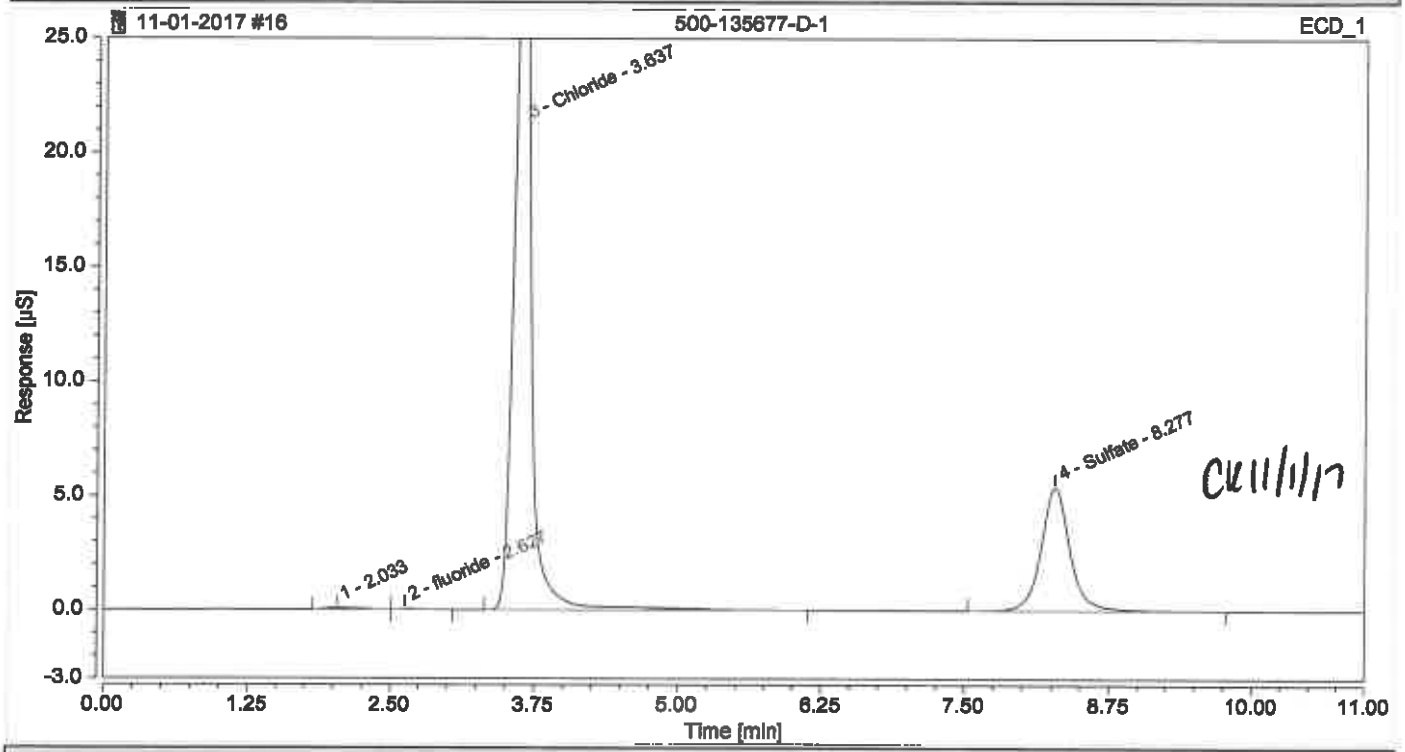
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.030	0.04671	0.112	3.59	1.38	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.593	1.10419	7.460	84.75	91.69	347.3457
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.743	0.04756	0.212	3.65	2.61	11.6505
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.270	0.10443	0.352	8.02	4.33	46.0774
Total:			**1.303**	**8.136**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135677-D-1**	*Run Time (min):*	**11.00**
Vial Number:	**RC2**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Nov/17 12:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

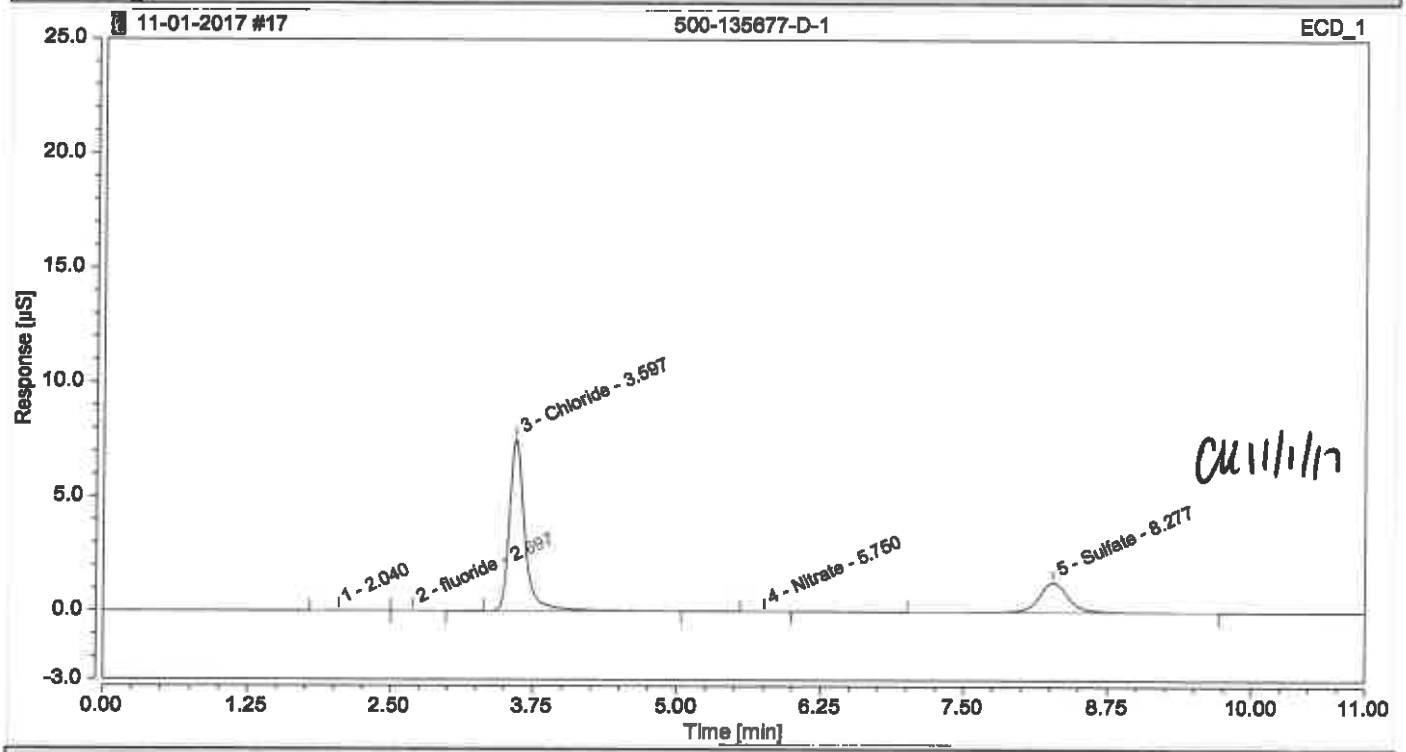
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.033	0.02725	0.079	0.39	0.20	n.a.
2	fluoride	2.627	0.00542	0.024	0.08	0.06	0.0388
3	Chloride OK	3.637	5.35574	35.150	76.83	86.45	82.5341
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.277	1.58279	5.407	22.70	13.30	33.5458
Total:			**6.971**	**40.661**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135677-D-1**	*Run Time (min):*	**11.00**
Vial Number:	**RC3**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Nov/17 12:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

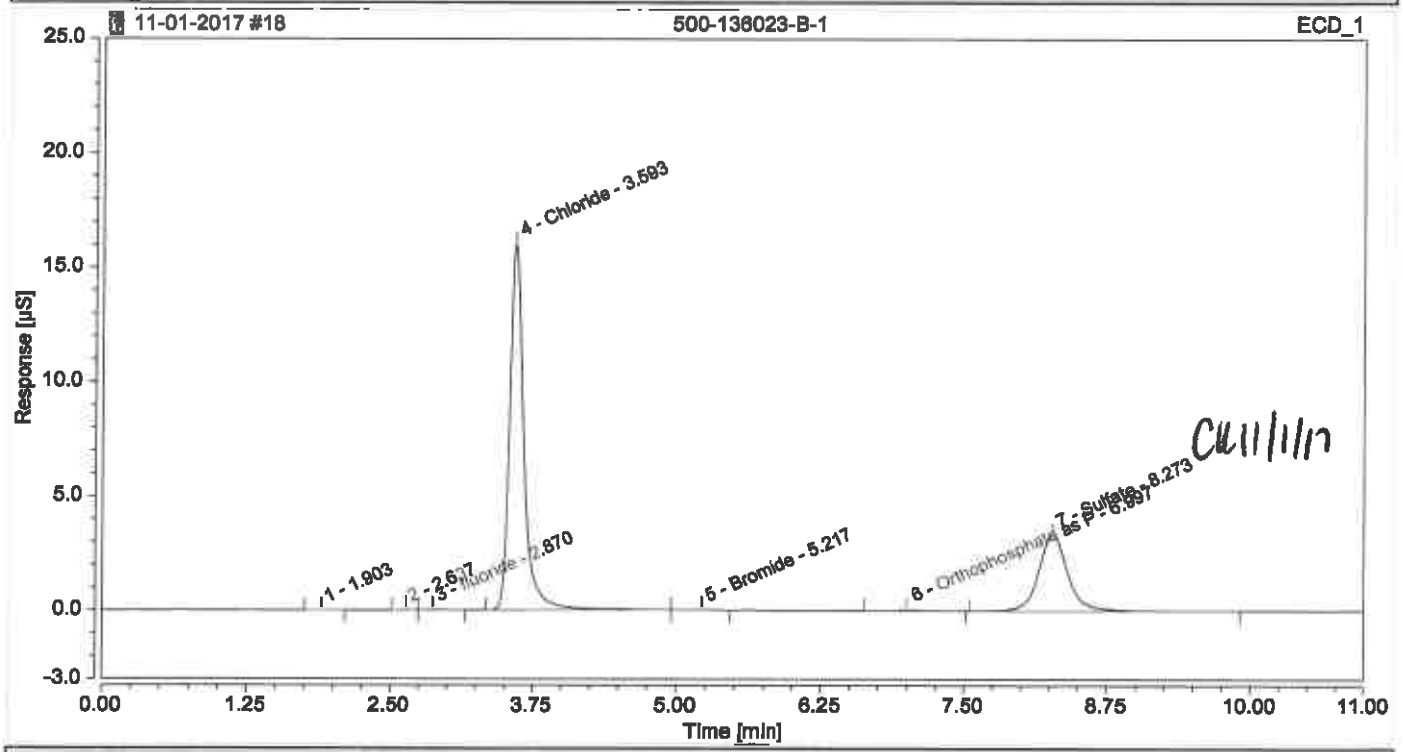
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.040	0.00335	0.010	0.22	0.11	n.a.
2	fluoride	2.697	0.00213	0.009	0.14	0.10	n.a.
3	Chloride	3.597	1.13335	7.492	73.72	84.93	71.2571
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Nitrate	5.750	0.00140	0.008	0.09	0.09	1.2363
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate KE	8.277	0.39710	1.304	25.83	14.78	33.9550
Total:			**1.537**	**8.822**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136023-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RC4**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 13:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

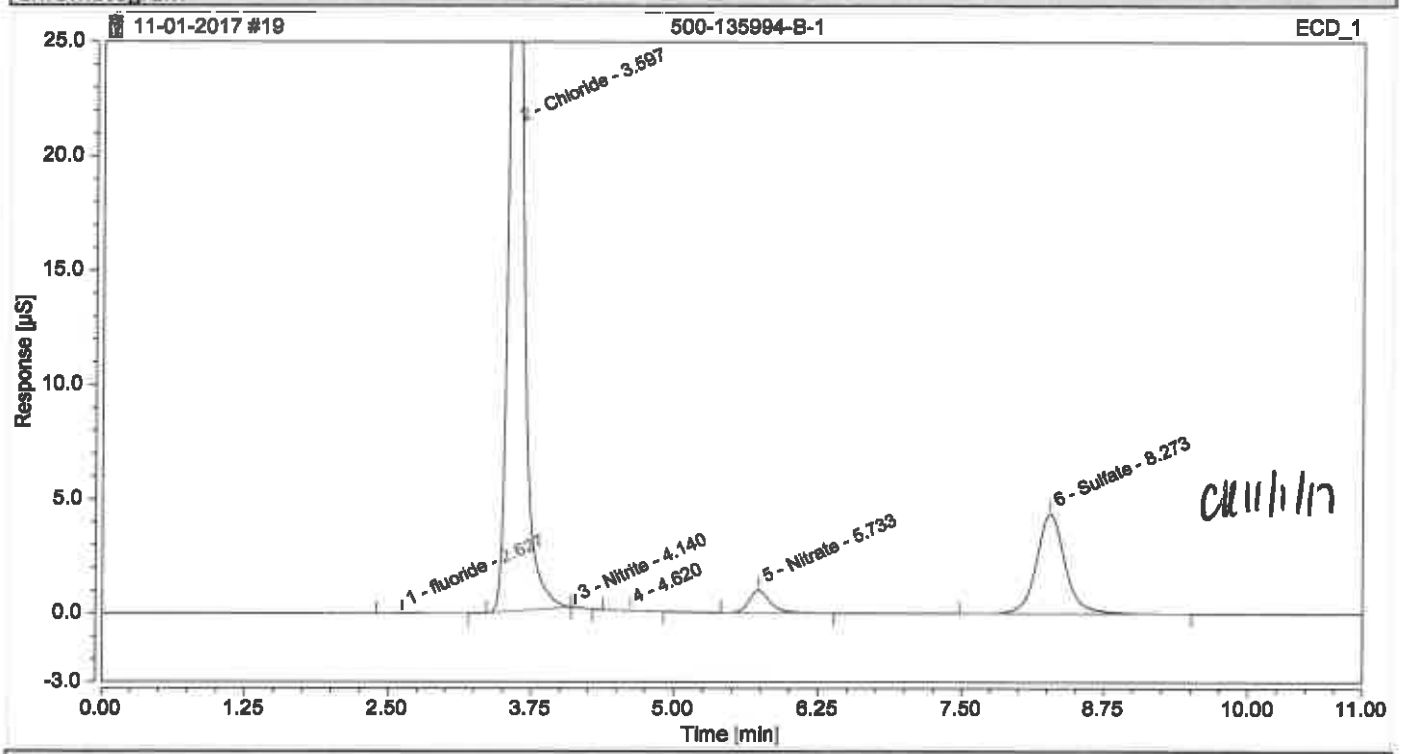
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		1.903	0.00090	0.005	0.03	0.03	n.a.
2		2.637	0.00149	0.012	0.04	0.06	n.a.
3	fluoride	2.870	0.00314	0.018	0.09	0.09	0.0864
4	Chloride	3.593	2.30573	16.036	69.48	82.40	357.8425
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Bromide	5.217	0.00449	0.020	0.14	0.10	3.4548
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Orthophosphate as P	6.997	0.01283	0.035	0.39	0.18	7.9115
7	Sulfate	8.273	0.98994	3.336	29.83	17.14	210.1720
Total:			3.319	19.461	100.00	100.00	

Chromatogram and Results

Injection Details

Injection Name:	**500-135994-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RC5**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**25.0000**
Injection Date/Time:	**01/Nov/17 13:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

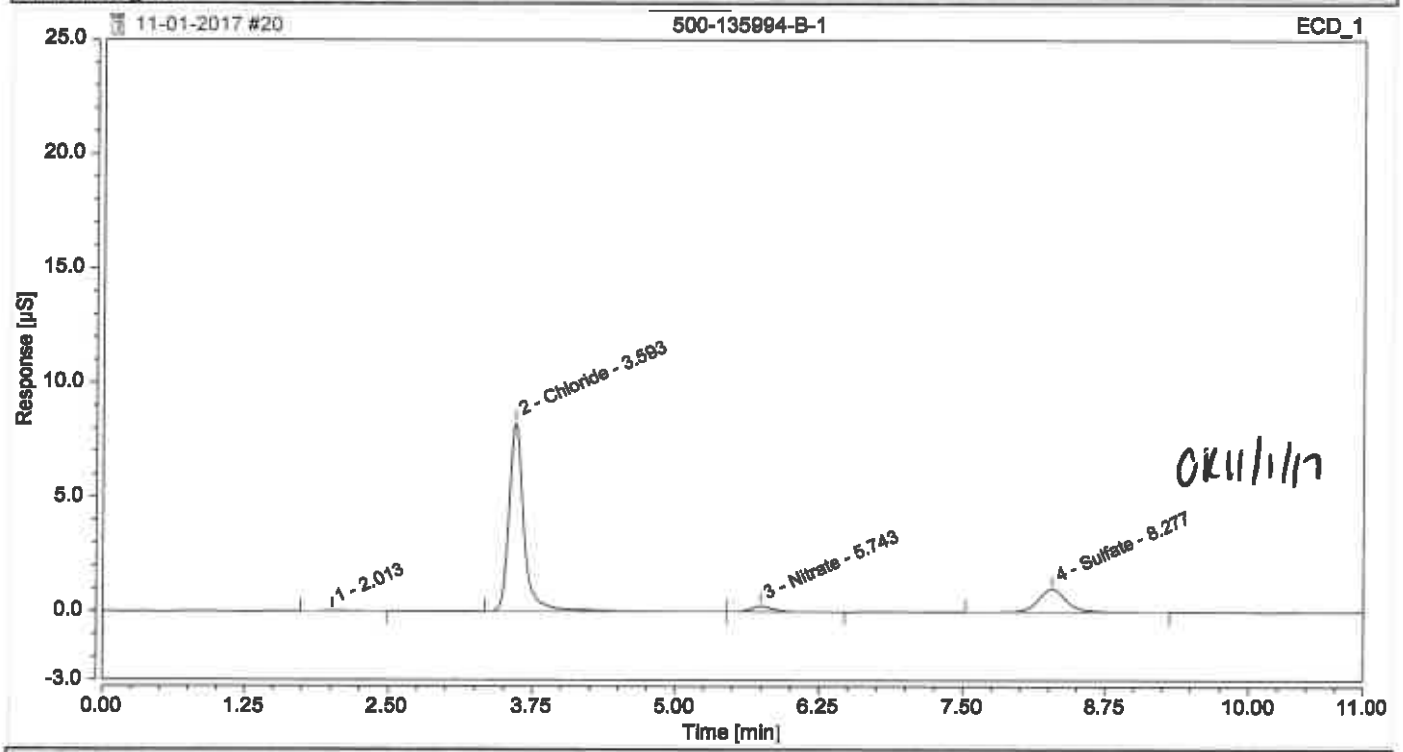
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.627	0.00587	0.021	0.08	0.05	0.2240
2	Chloride OK	3.597	5.56287	40.616	78.71	88.22	428.5445
3	Nitrite	4.140	0.00272	0.022	0.04	0.05	2.8772
4		4.620	0.00305	0.011	0.04	0.02	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	5.733	0.21317	0.991	3.02	2.15	7.8185
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	8.273	1.27967	4.375	18.11	9.50	135.7002
Total:			**7.067**	**46.037**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135994-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RC6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 13:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

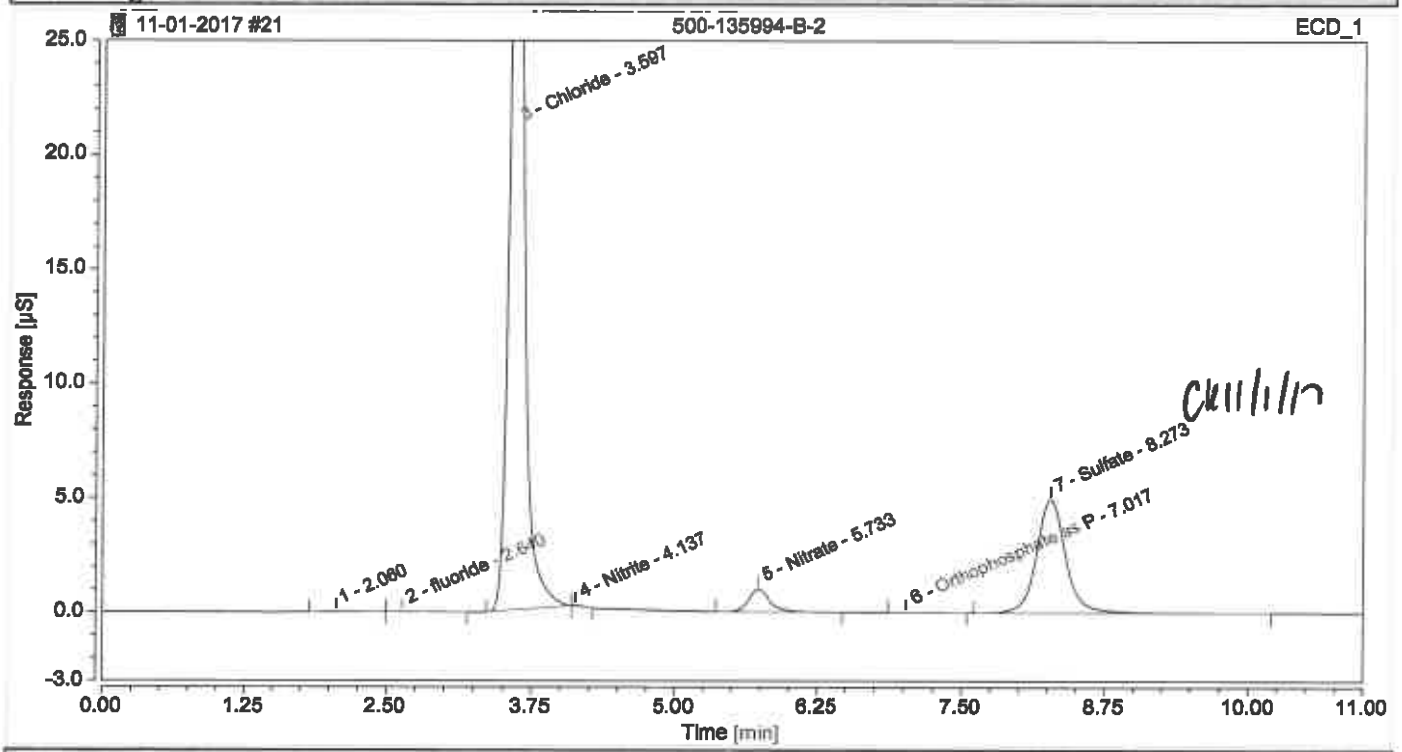
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.013	0.00846	0.029	0.53	0.30	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.593	1.22773	8.243	76.66	86.39	385.2191
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.743	0.05506	0.241	3.44	2.52	12.5392
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate K.E.	8.277	0.31029	1.030	19.37	10.79	133.0860
Total:			**1.602**	**9.542**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	500-135994-B-2	*Run Time (min):*	11.00
Vial Number:	RC7	*Injection Volume:*	25.00
Injection Type:	Unknown	*Channel:*	ECD_1
Calibration Level:		*Comments:*	CL, SO4
Instrument Method:	Seven Anion		n.a.
Processing Method:	Seven Anions	*Dilution Factor:*	25.0000
Injection Date/Time:	01/Nov/17 13:45	*Sample Weight:*	1.0000

Chromatogram



Integration Results

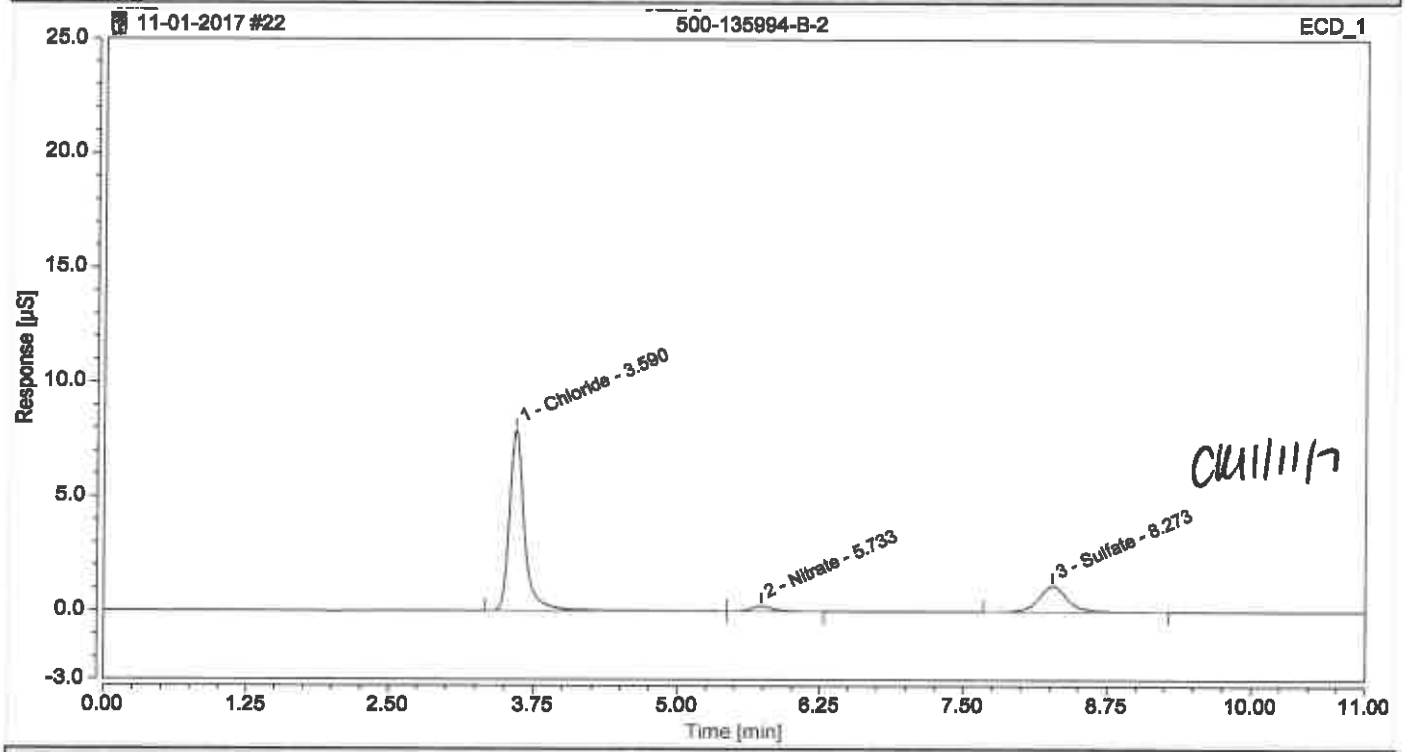
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.060	0.01124	0.031	0.16	0.07	n.a.
2	fluoride	2.640	0.00597	0.020	0.08	0.04	0.2306
3	Chloride OK	3.597	5.53573	40.250	76.47	86.90	426.4642
4	Nitrite	4.137	0.00303	0.024	0.04	0.05	2.8900
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	5.733	0.21564	1.002	2.98	2.16	7.8918
6	Orthophosphate as P	7.017	0.00271	0.009	0.04	0.02	2.9467
7	Sulfate	8.273	1.46469	4.980	20.23	10.75	155.2501
Total:			7.239	46.315	100.00	100.00	

Chromatogram and Results

Injection Details

Injection Name:	**500-135994-B-2**	*Run Time (min):*	**11.00**
Vial Number:	**RC8**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 13:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

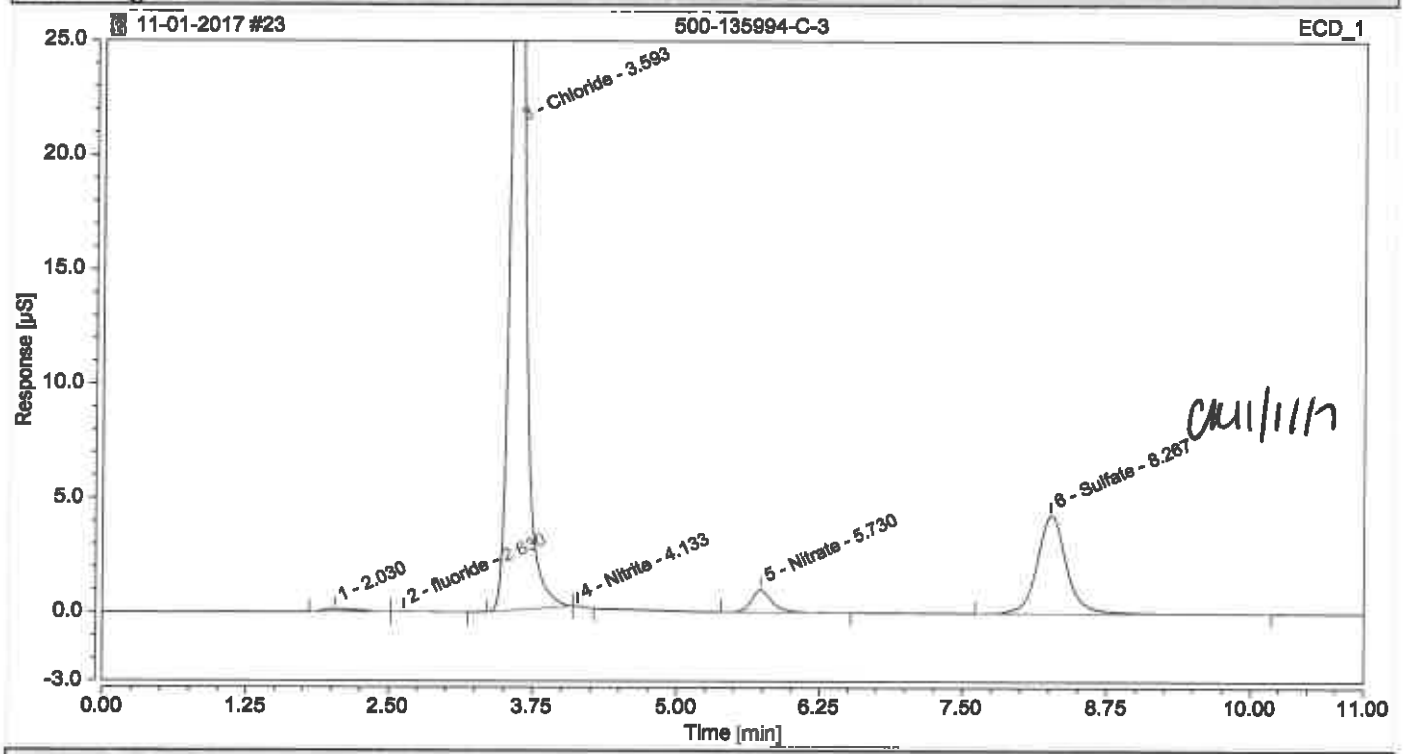
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.590	1.16846	7.904	74.87	85.21	367.0487
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate	5.733	0.05134	0.238	3.29	2.56	12.0985
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate CL	8.273	0.34089	1.134	21.84	12.22	146.0195
Total:			**1.561**	**9.276**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	500-135994-C-3	*Run Time (min):*	11.00
Vial Number:	RD1	*Injection Volume:*	25.00
Injection Type:	Unknown	*Channel:*	ECD_1
Calibration Level:		*Comments:*	CL, SO4
Instrument Method:	Seven Anion		n.a.
Processing Method:	Seven Anions	*Dilution Factor:*	25.0000
Injection Date/Time:	01/Nov/17 14:10	*Sample Weight:*	1.0000

Chromatogram



Integration Results

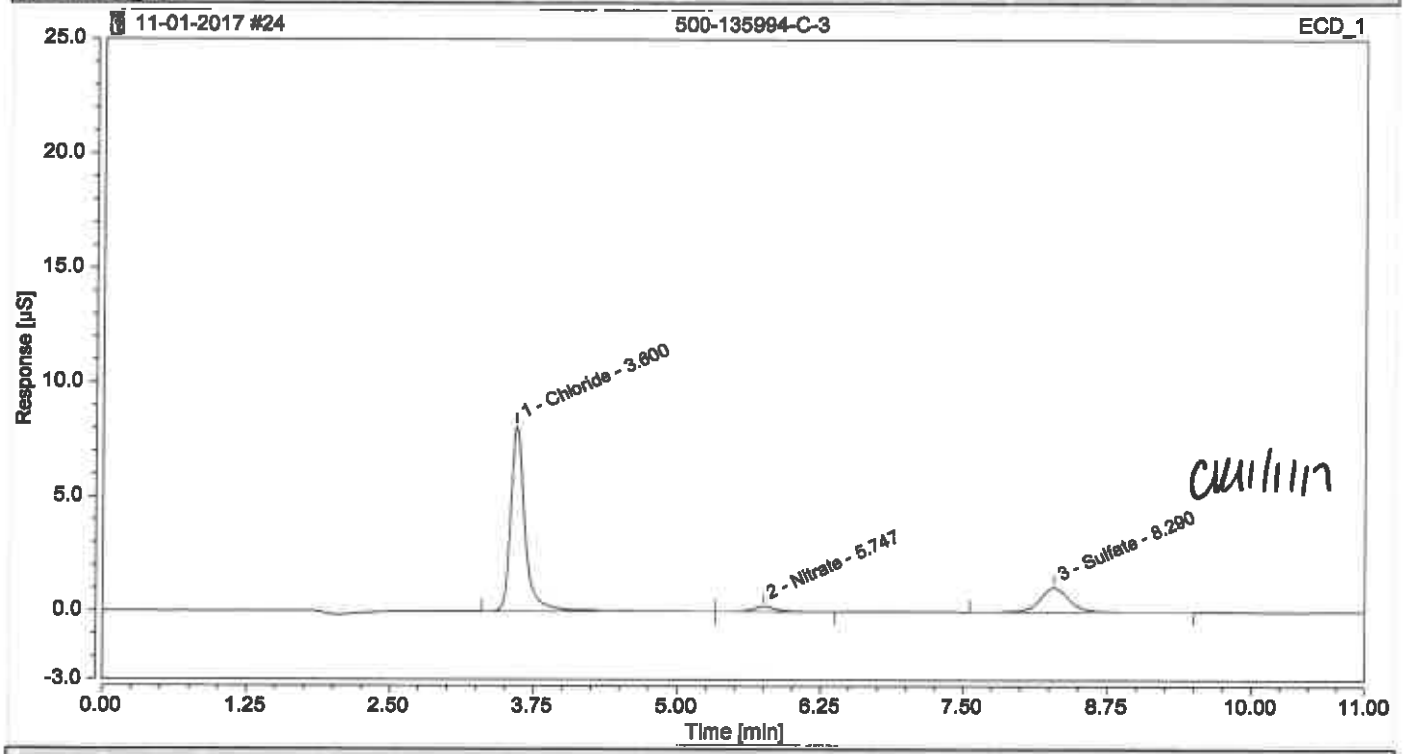
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.030	0.04386	0.133	0.62	0.29	n.a.
2	fluoride	2.630	0.00514	0.017	0.07	0.04	0.1757
3	Chloride	3.593	5.57543	40.150	78.29	88.00	429.5069
4	Nitrite	4.133	0.00288	0.022	0.04	0.05	2.8838
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	5.730	0.21593	0.992	3.03	2.17	7.9005
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	8.267	1.27813	4.311	17.95	9.45	135.5374
Total:			7.121	45.625	100.00	100.00	

Chromatogram and Results

Injection Details

Injection Name:	**500-135994-C-3**	*Run Time (min):*	**11.00**
Vial Number:	**RD2**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 14:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

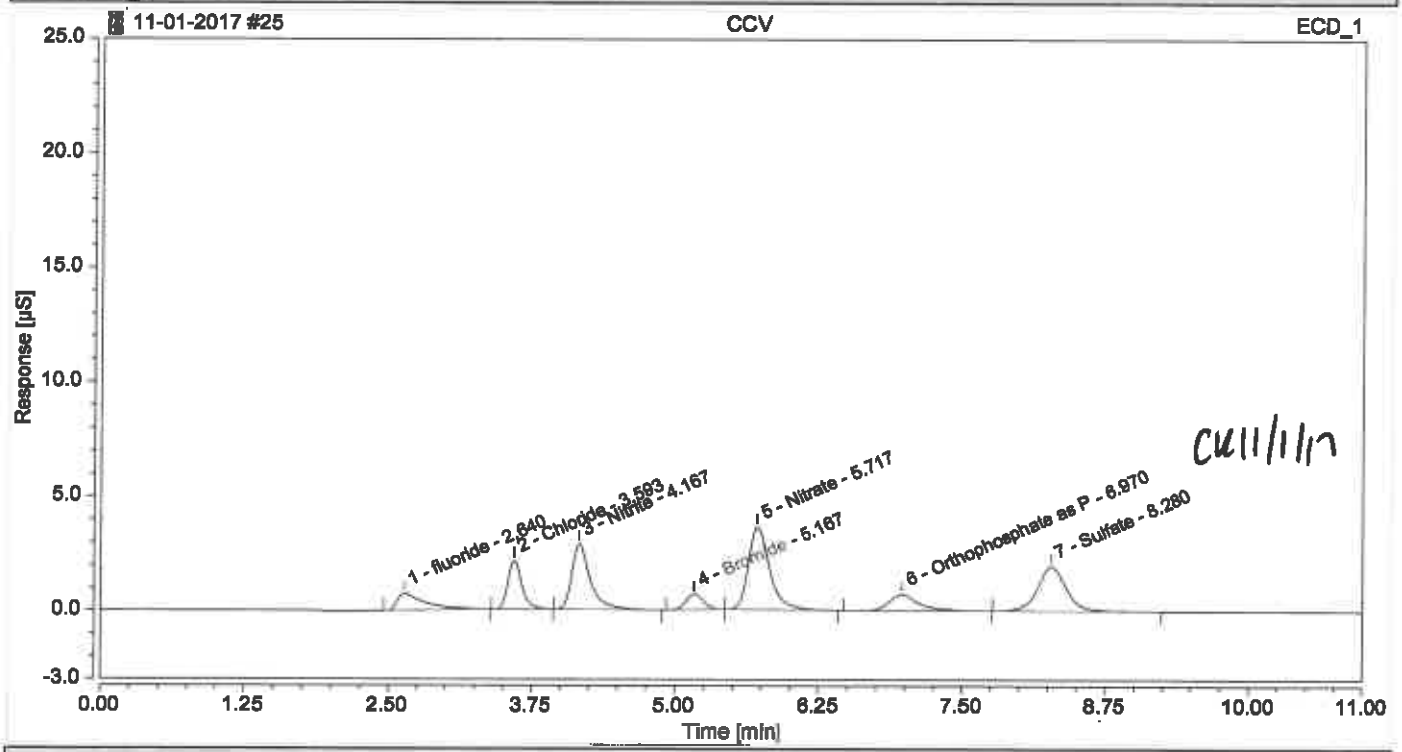
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.600	1.18736	8.129	76.03	86.20	372.8412
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate	5.747	0.05355	0.236	3.43	2.51	12.3610
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate KE	8.290	0.32077	1.065	20.54	11.29	137.5159
Total:			**1.562**	**9.431**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**11.00**
Vial Number:	**RA7**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 14:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

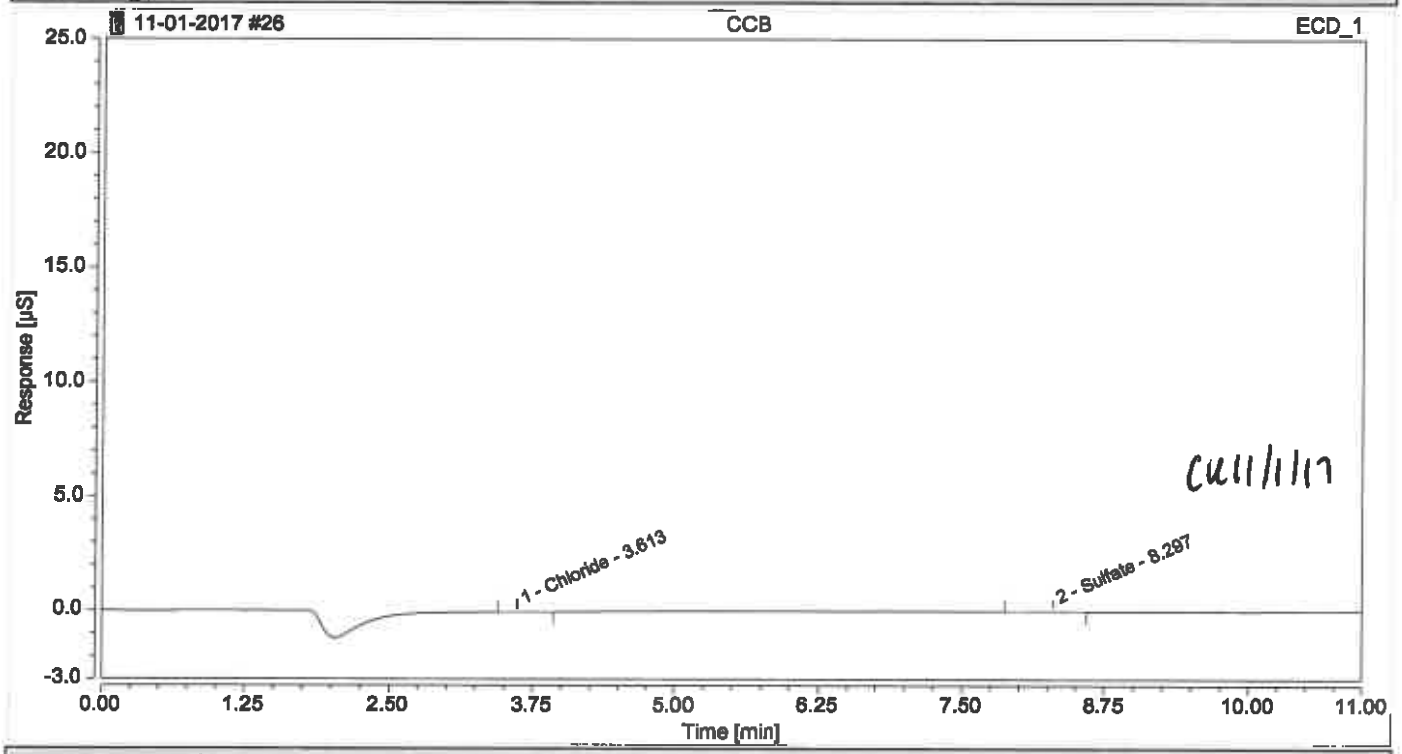
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.640	0.20791	0.743	7.71	5.84	0.5443
2	Chloride	3.593	0.29540	2.135	10.96	16.79	0.9941
3	Nitrite	4.167	0.53386	2.881	19.81	22.66	0.9693
4	Bromide	5.167	0.11810	0.681	4.38	5.36	1.0021
5	Nitrate	5.717	0.76446	3.617	28.37	28.44	0.9660
6	Orthophosphate as P	6.970	0.20505	0.698	7.61	5.49	0.9251
7	Sulfate	8.280	0.57009	1.961	21.15	15.42	2.4289
Total:			**2.695**	**12.715**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**11.00**
Vial Number:	**RA8**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 14:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

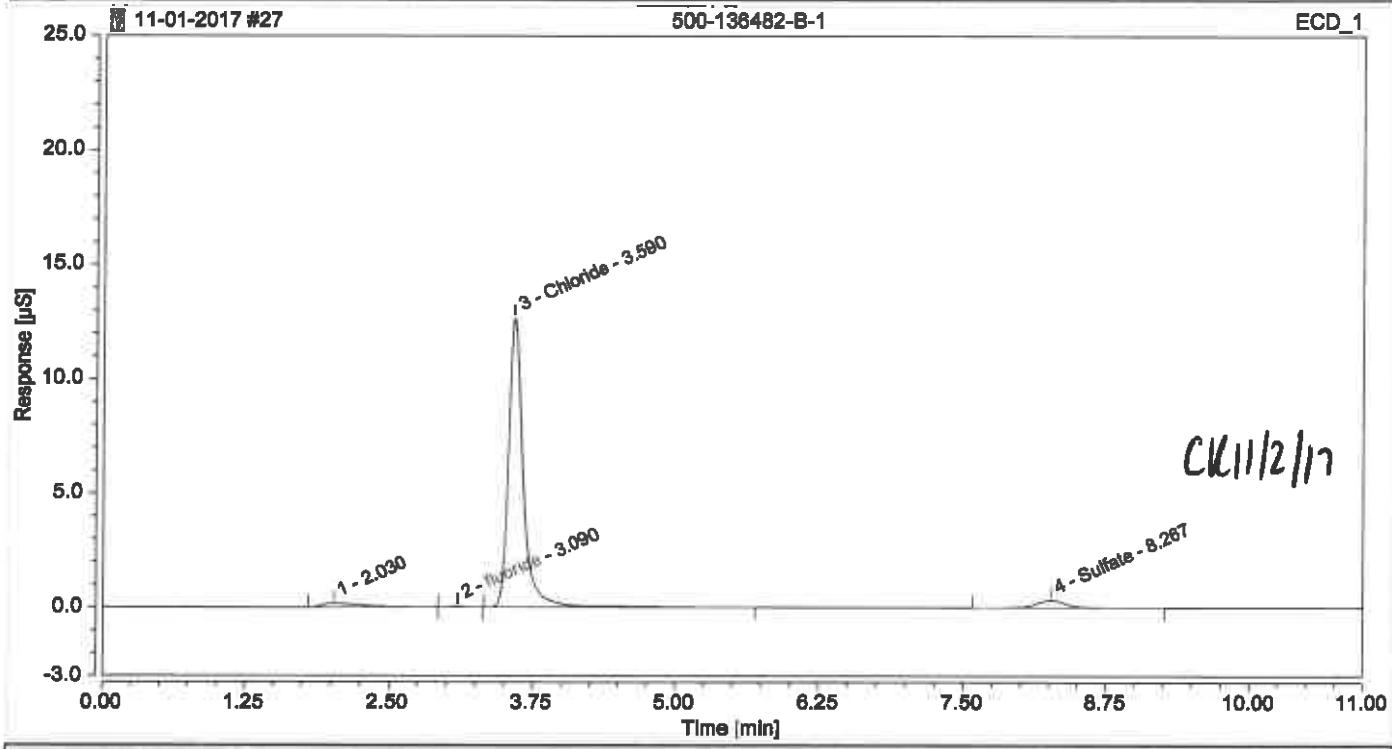
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.613	0.00215	0.010	37.88	47.62	0.0951
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Sulfate	8.297	0.00352	0.011	62.12	52.38	0.0343
Total:			**0.006**	**0.022**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136482-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RD3**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**01/Nov/17 15:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

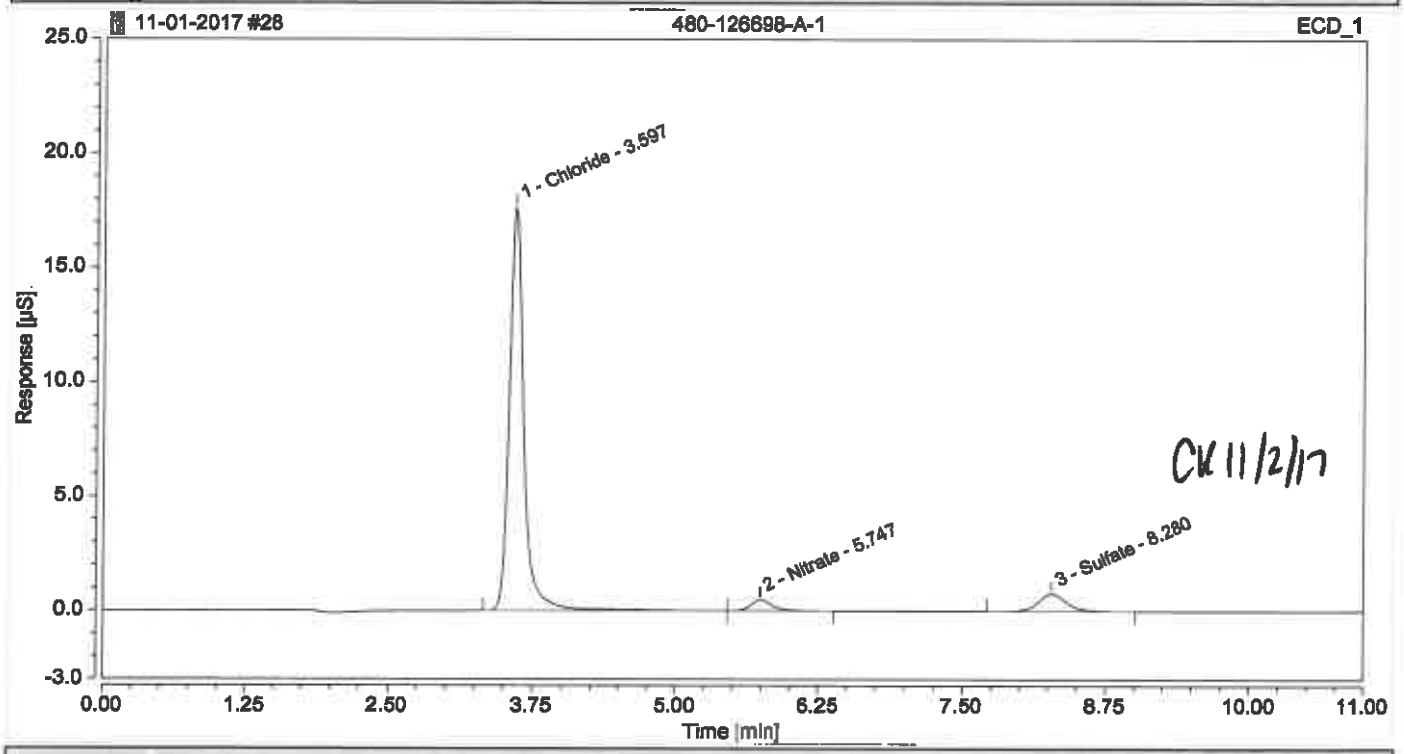
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.030	0.06608	0.173	3.24	1.31	n.a.
2	fluoride	3.090	0.00482	0.034	0.24	0.26	1.2377
3	Chloride	3.590	1.86578	12.660	91.51	95.94	1161.6297
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.267	0.10223	0.329	5.01	2.49	90.2996
Total:			**2.039**	**13.196**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**480-126698-A-1**	*Run Time (min):*	**11.00**
Vial Number:	**RD4**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 15:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

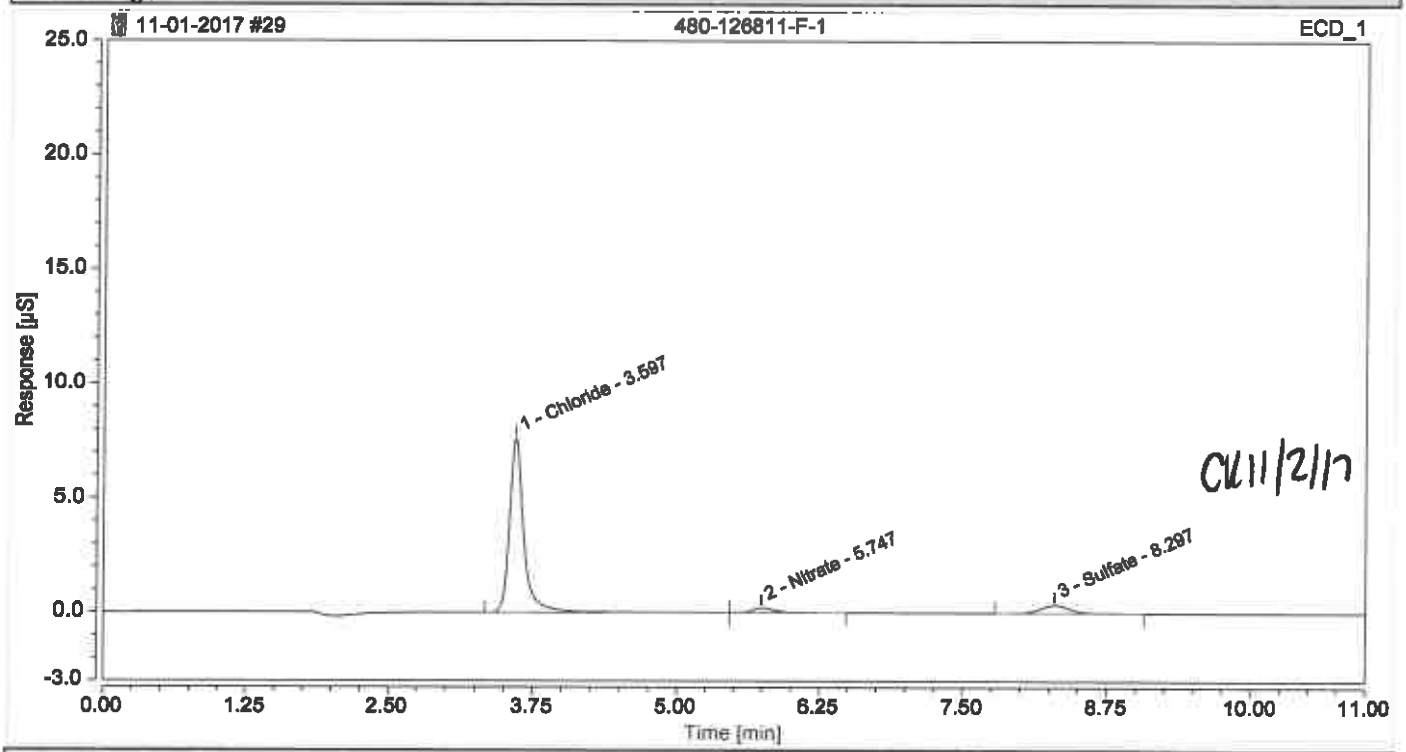
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride DR	3.597	2.51019	17.679	88.41	93.41	389.1815
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate	5.747	0.10398	0.481	3.66	2.54	9.1683
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.280	0.22523	0.766	7.93	4.05	48.5682
Total:			**2.839**	**18.927**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**480-126811-F-1**	*Run Time (min):*	**11.00**
Vial Number:	**RD5**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 15:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

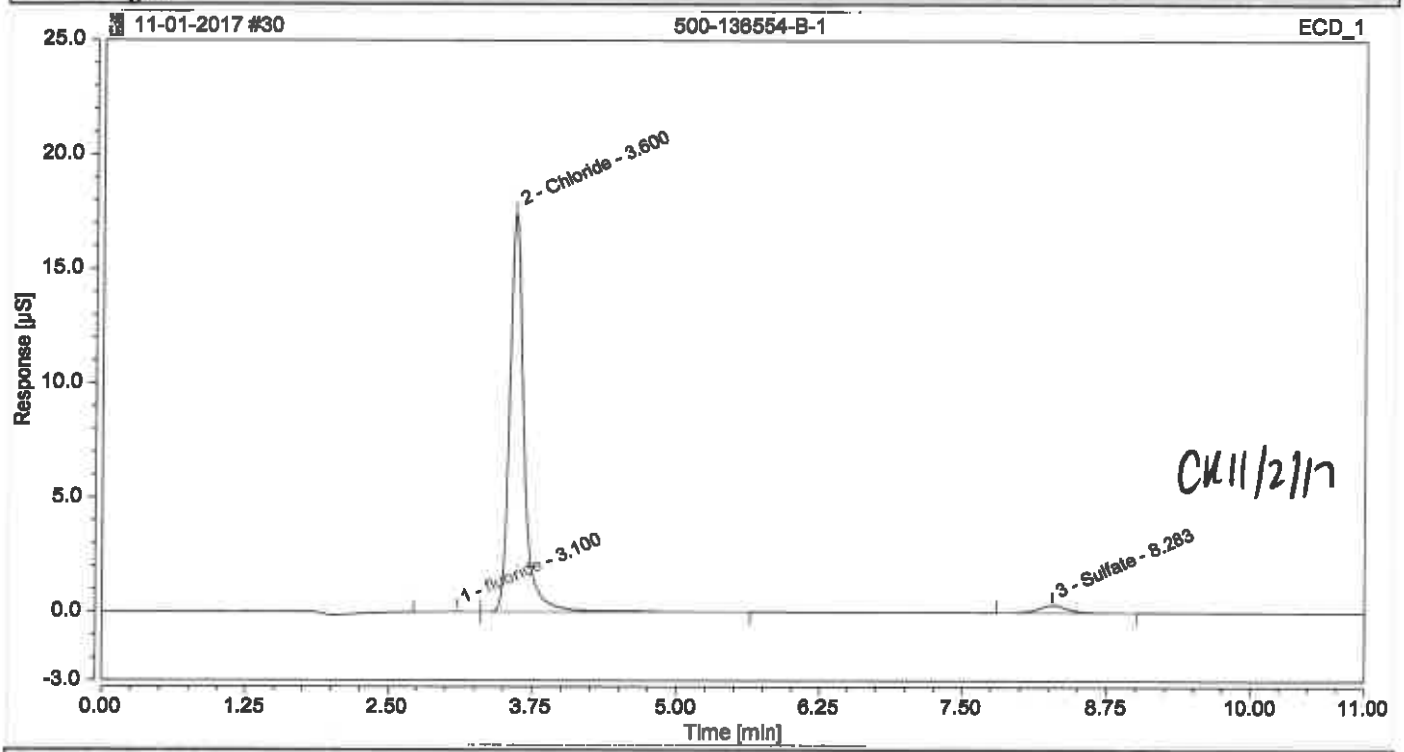
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.597	1.10132	7.616	87.68	92.95	346.4671
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate	5.747	0.04832	0.216	3.85	2.63	11.7414
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.297	0.10646	0.362	8.48	4.42	46.9359
Total:			**1.256**	**8.194**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136554-B-1**	*Run Time (min):*	**11.00**
Vial Number:	**RD6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**01/Nov/17 16:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

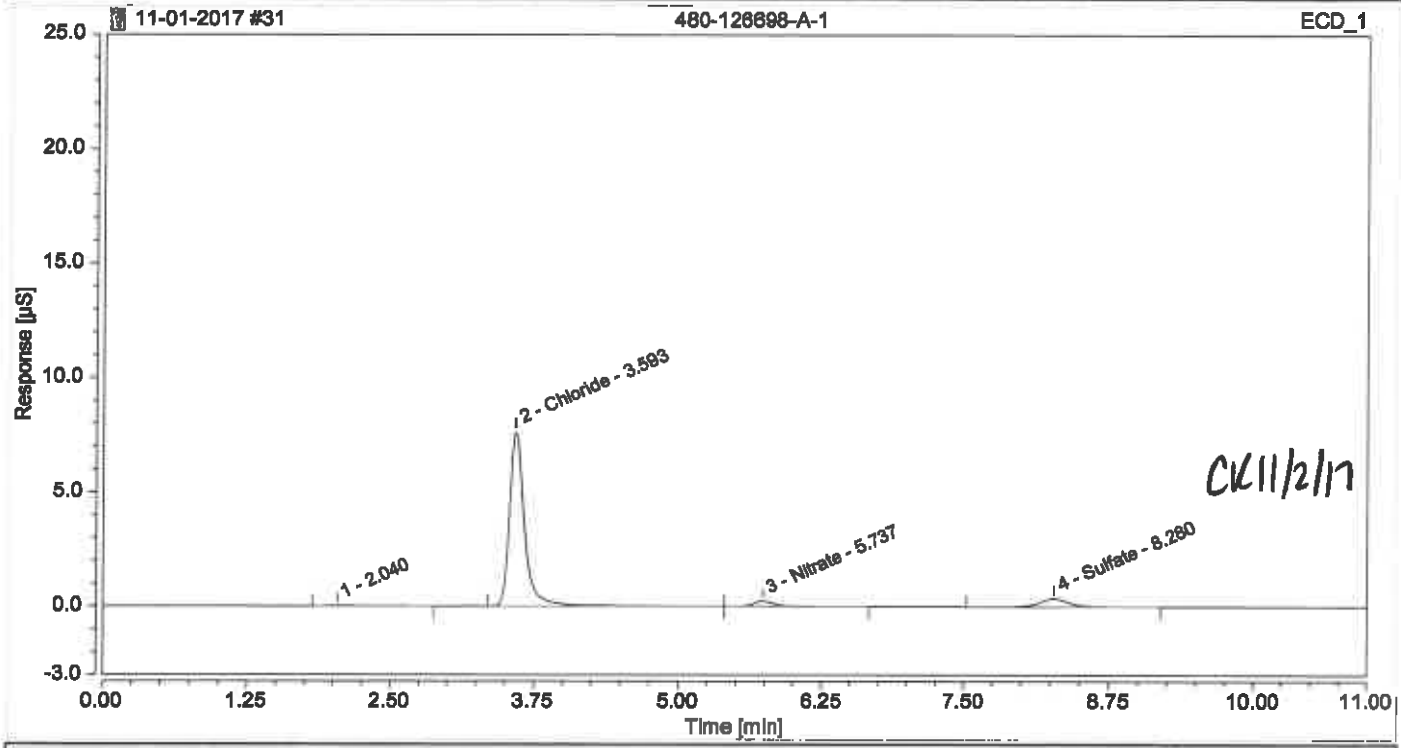
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	3.100	0.00629	0.032	0.25	0.18	2.0141
2	Chloride OK	3.600	2.45600	17.474	95.99	98.01	1523.5004
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.283	0.09621	0.322	3.76	1.81	85.2059
Total:			**2.558**	**17.828**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**480-126698-A-1**	*Run Time (min):*	**11.00**
Vial Number:	**GA1**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 16:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

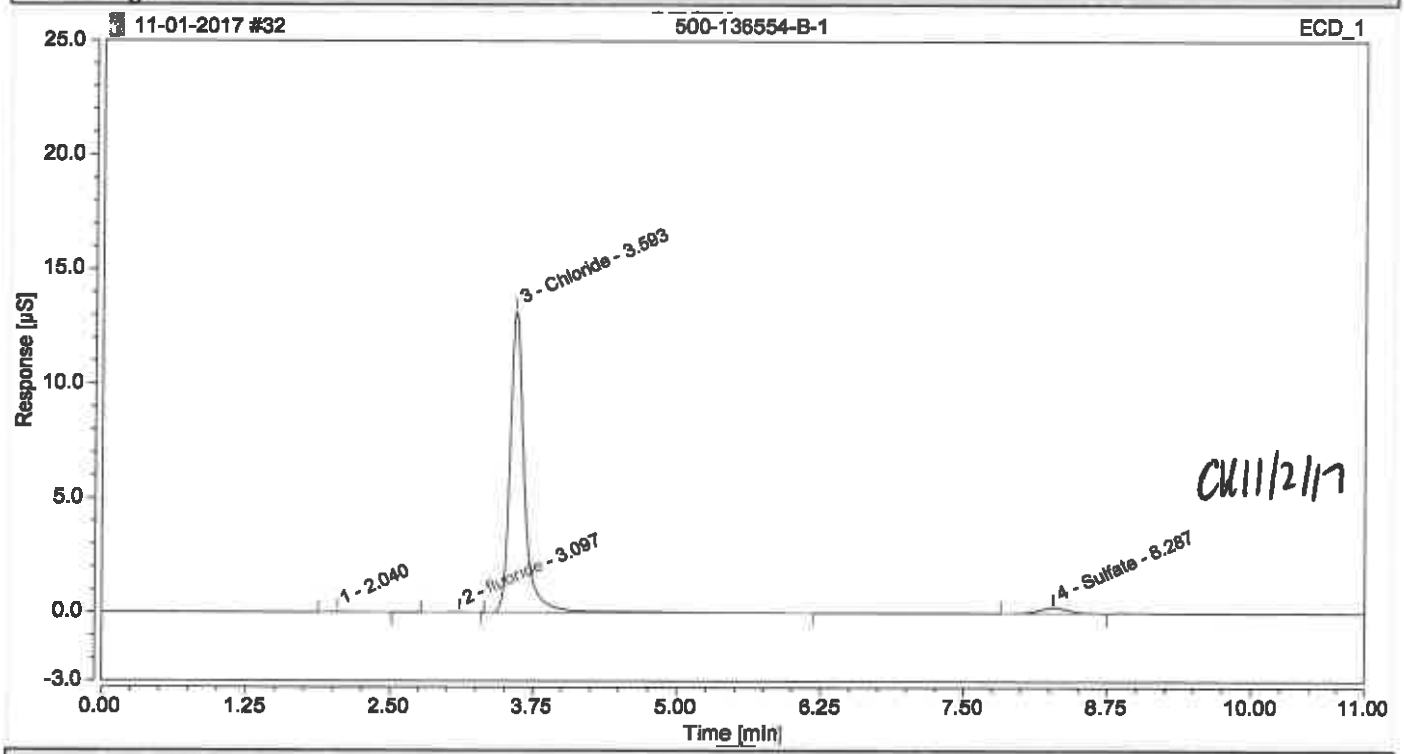
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.040	0.01341	0.030	1.03	0.36	n.a.
n.a	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.593	1.13161	7.659	86.54	92.53	355.7504
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.737	0.05162	0.228	3.95	2.75	12.1322
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.280	0.11091	0.361	8.48	4.36	48.8165
Total:			**1.308**	**8.277**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	500-136554-B-1	*Run Time (min):*	11.00
Vial Number:	GA2	*Injection Volume:*	25.00
Injection Type:	Unknown	*Channel:*	ECD_1
Calibration Level:		*Comments:*	CL
Instrument Method:	Seven Anion		n.a.
Processing Method:	Seven Anions	*Dilution Factor:*	250.0000
Injection Date/Time:	01/Nov/17 16:30	*Sample Weight:*	1.0000

Chromatogram



Integration Results

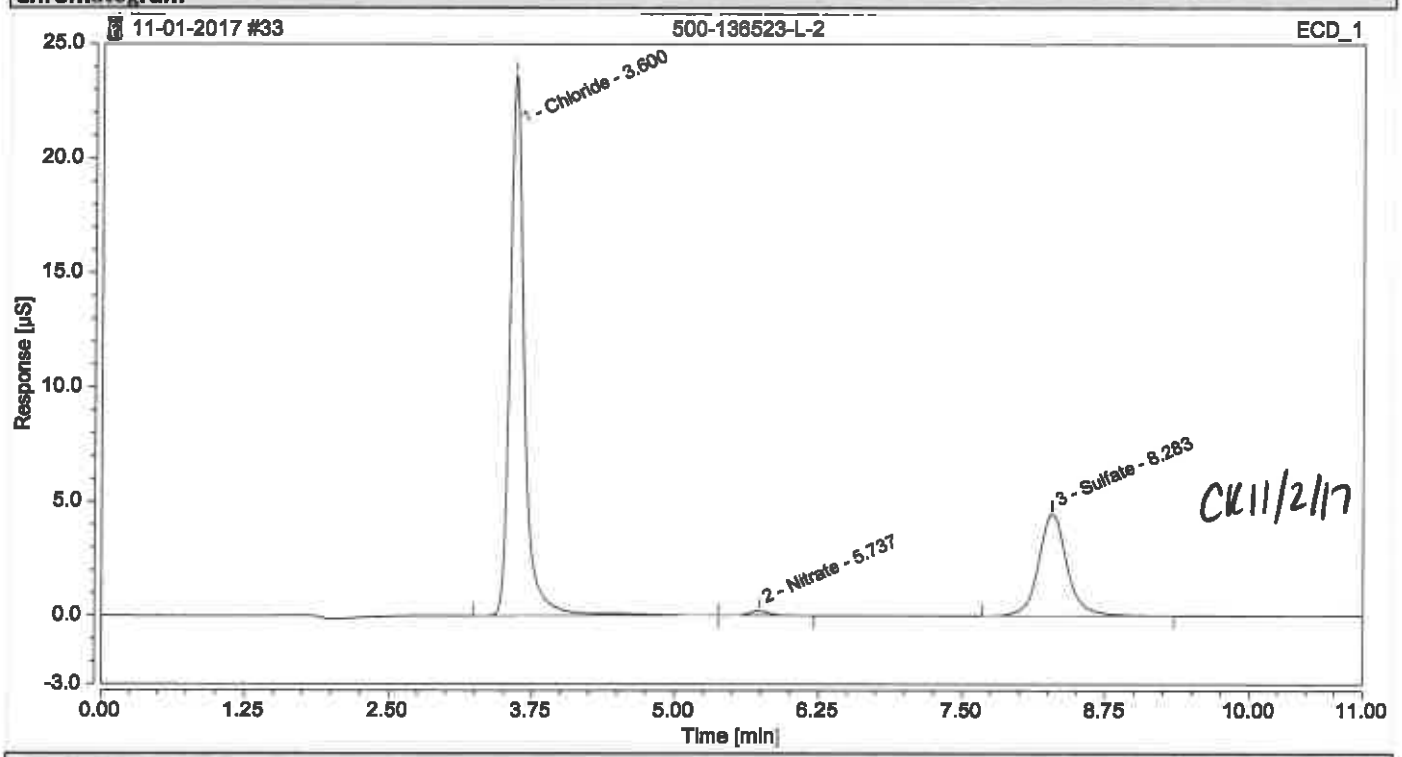
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.040	0.00679	0.023	0.34	0.17	n.a.
2	fluoride	3.097	0.00486	0.026	0.24	0.19	1.5701
3	Chloride	3.593	1.93988	13.206	95.91	97.85	1508.8286
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.287	0.07100	0.242	3.51	1.79	79.8661
Total:			**2.023**	**13.497**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-2**	*Run Time (min):*	**11.00**
Vial Number:	**RD7**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Nov/17 16:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

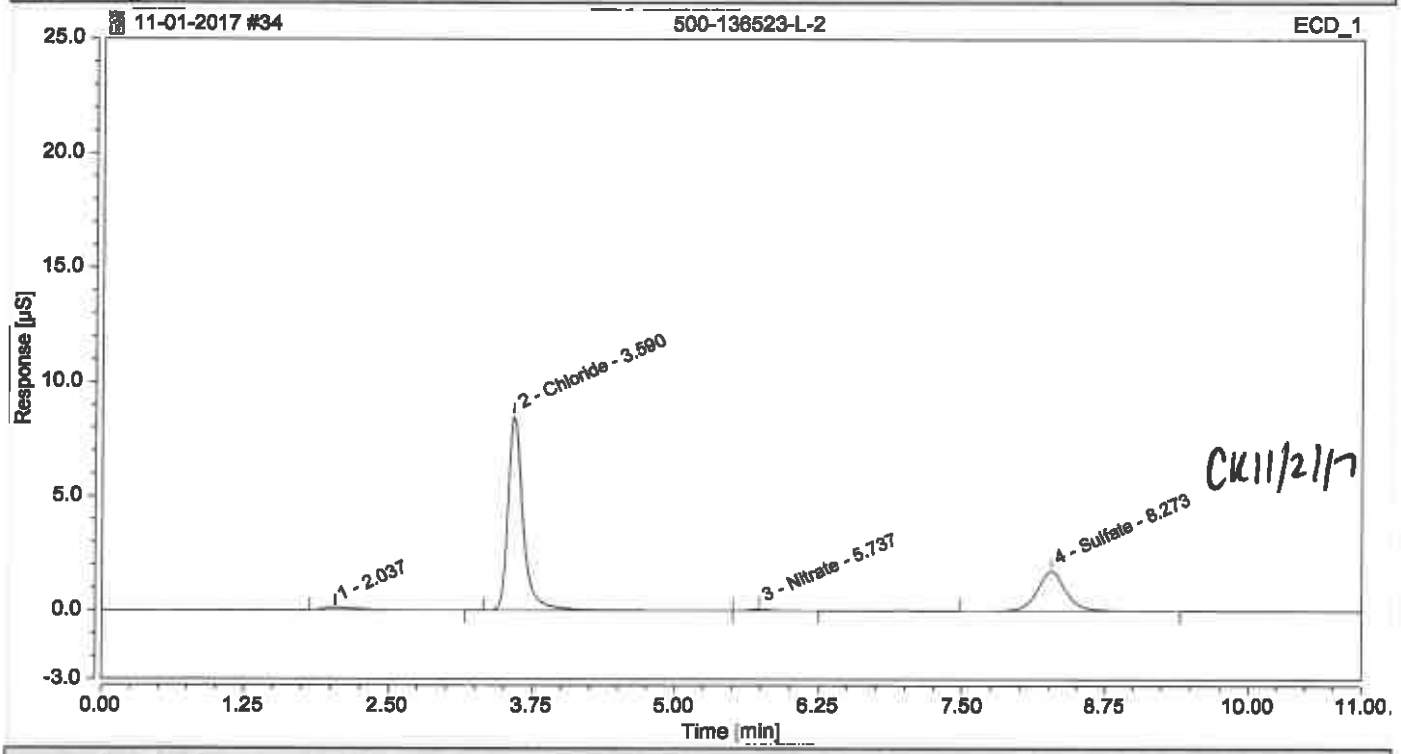
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride OK	3.600	3.44210	23.691	72.04	83.57	212.8092
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate OK	5.737	0.03953	0.186	0.83	0.66	2.1399
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.283	1.29657	4.470	27.14	15.77	109.9888
Total:			**4.778**	**28.348**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-2**	*Run Time (min):*	**11.00**
Vial Number:	**RD8**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 16:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

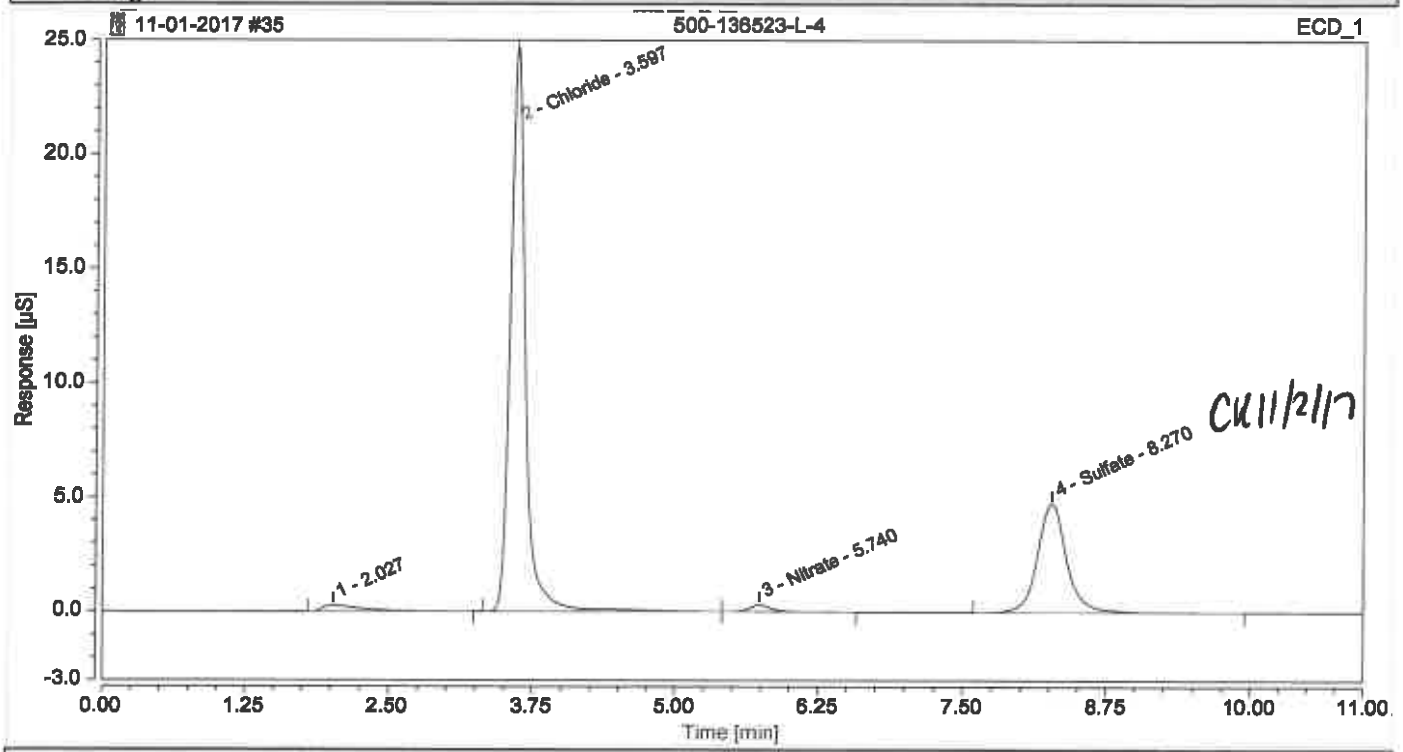
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.037	0.04943	0.119	2.66	1.14	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.590	1.27731	8.518	68.62	81.45	200.2080
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate KE	5.737	0.01490	0.074	0.80	0.71	3.8904
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate KE	8.273	0.51983	1.747	27.93	16.71	110.8254
Total:			**1.861**	**10.459**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4**	*Run Time (min):*	**11.00**
Vial Number:	**RE1**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Nov/17 17:07**	*Sample Weight:*	**1.0000**

Chromatogram



CU 11/2/17

Integration Results

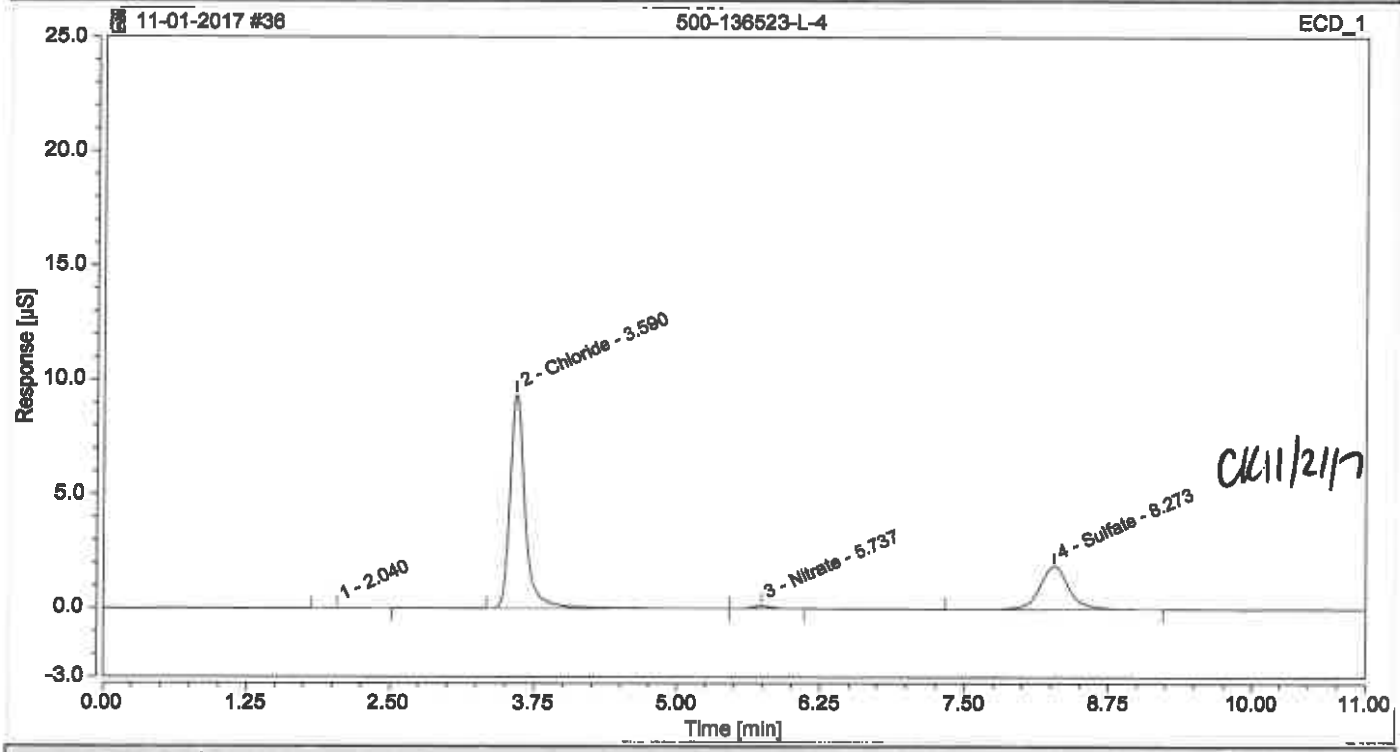
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.027	0.10783	0.260	2.03	0.87	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride DK	3.597	3.72596	24.719	70.06	82.21	230.2129
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate KE	5.740	0.06653	0.299	1.25	0.99	2.7798
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.270	1.41780	4.790	26.66	15.93	120.2368
Total:			**5.318**	**30.068**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4**	*Run Time (min):*	**11.00**
Vial Number:	**RE2**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 17:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

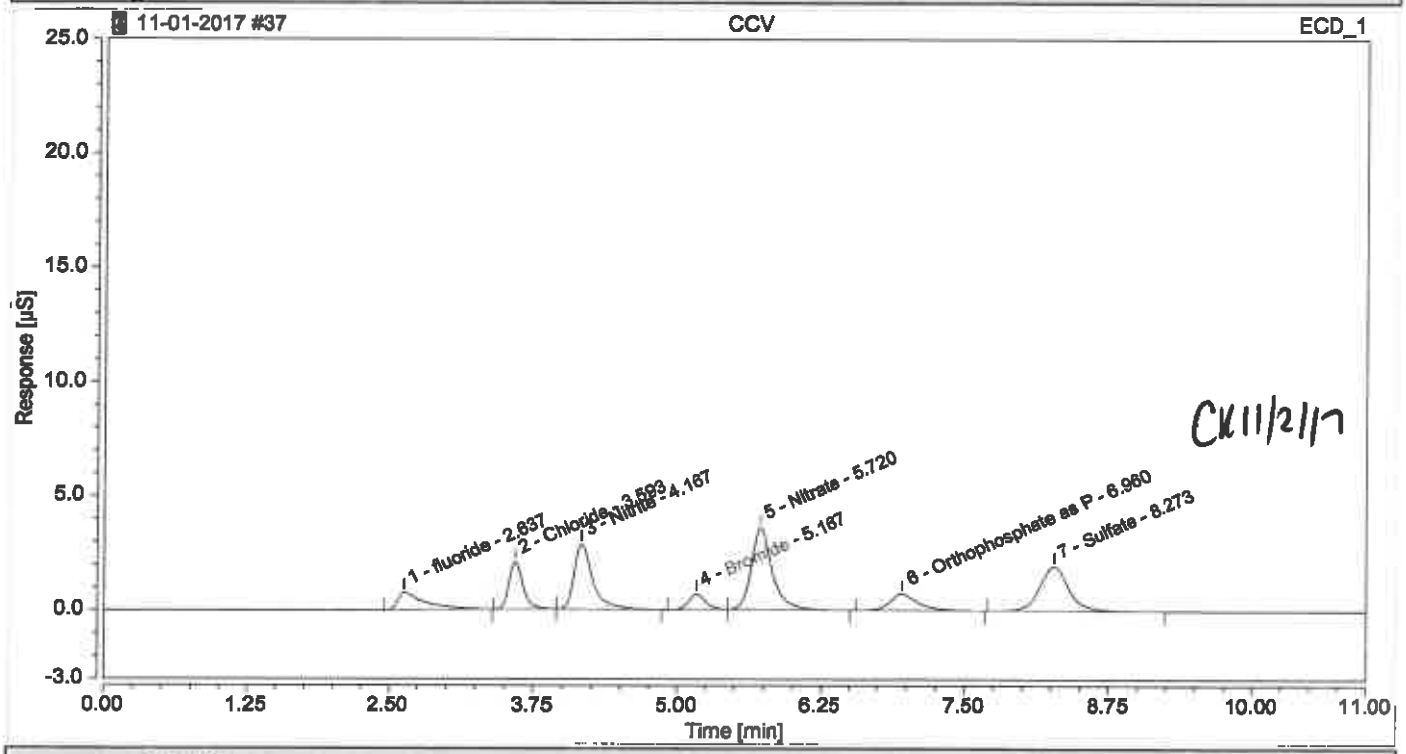
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.040	0.00877	0.025	0.44	0.22	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.590	1.39646	9.378	70.11	82.11	218.4712
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate RE	5.737	0.02374	0.117	1.19	1.03	4.4139
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate RE	8.273	0.56283	1.901	28.26	16.64	119.9124
Total:			**1.992**	**11.421**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**11.00**
Vial Number:	**RA5**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 17:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

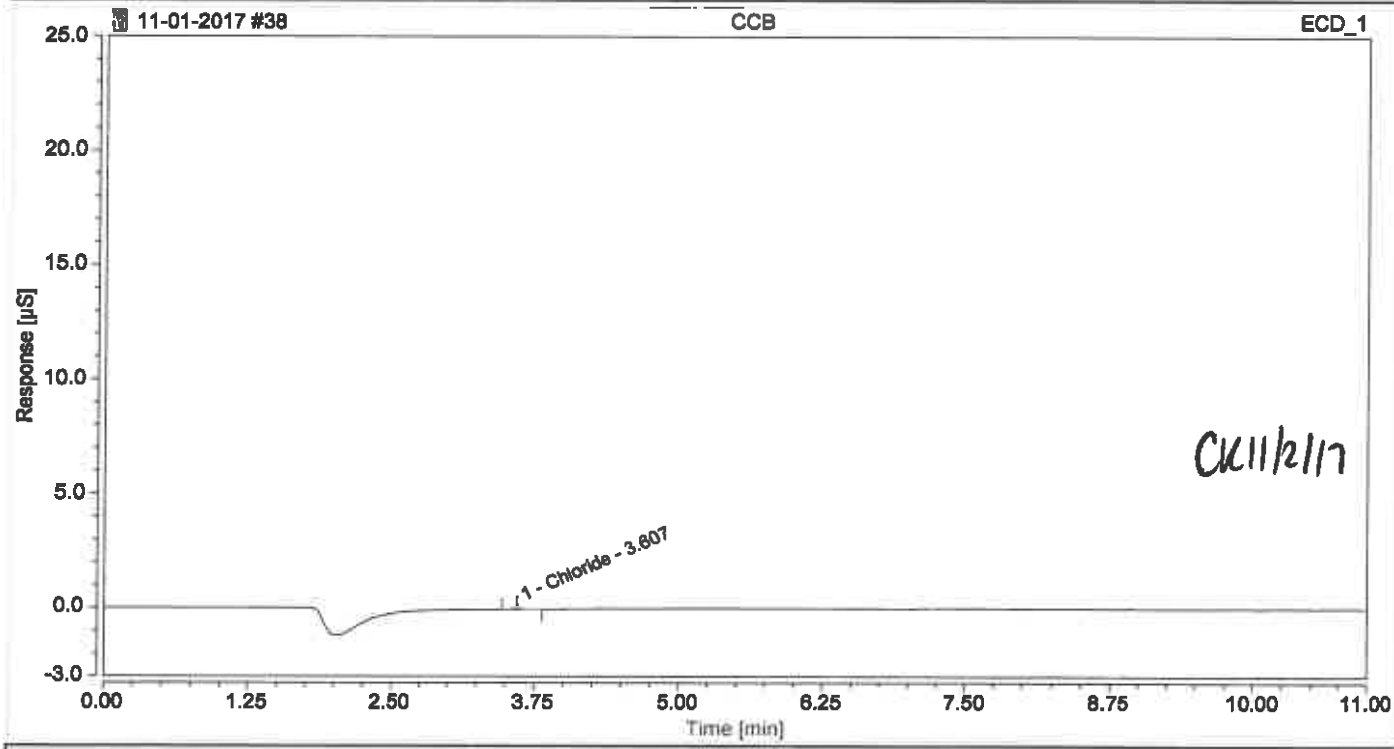
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.637	0.21144	0.772	7.89	6.11	0.5537
2	Chloride	3.593	0.28633	2.057	10.68	16.27	0.9663
3	Nitrite	4.167	0.52851	2.862	19.72	22.64	0.9607
4	Bromide	5.167	0.11790	0.677	4.40	5.36	1.0005
5	Nitrate	5.720	0.76371	3.600	28.49	28.48	0.9651
6	Orthophosphate as P	6.960	0.20660	0.724	7.71	5.73	0.9313
7	Sulfate	8.273	0.56575	1.947	21.11	15.40	2.4106
Total:			**2.680**	**12.641**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**11.00**
Vial Number:	**RA6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 17:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

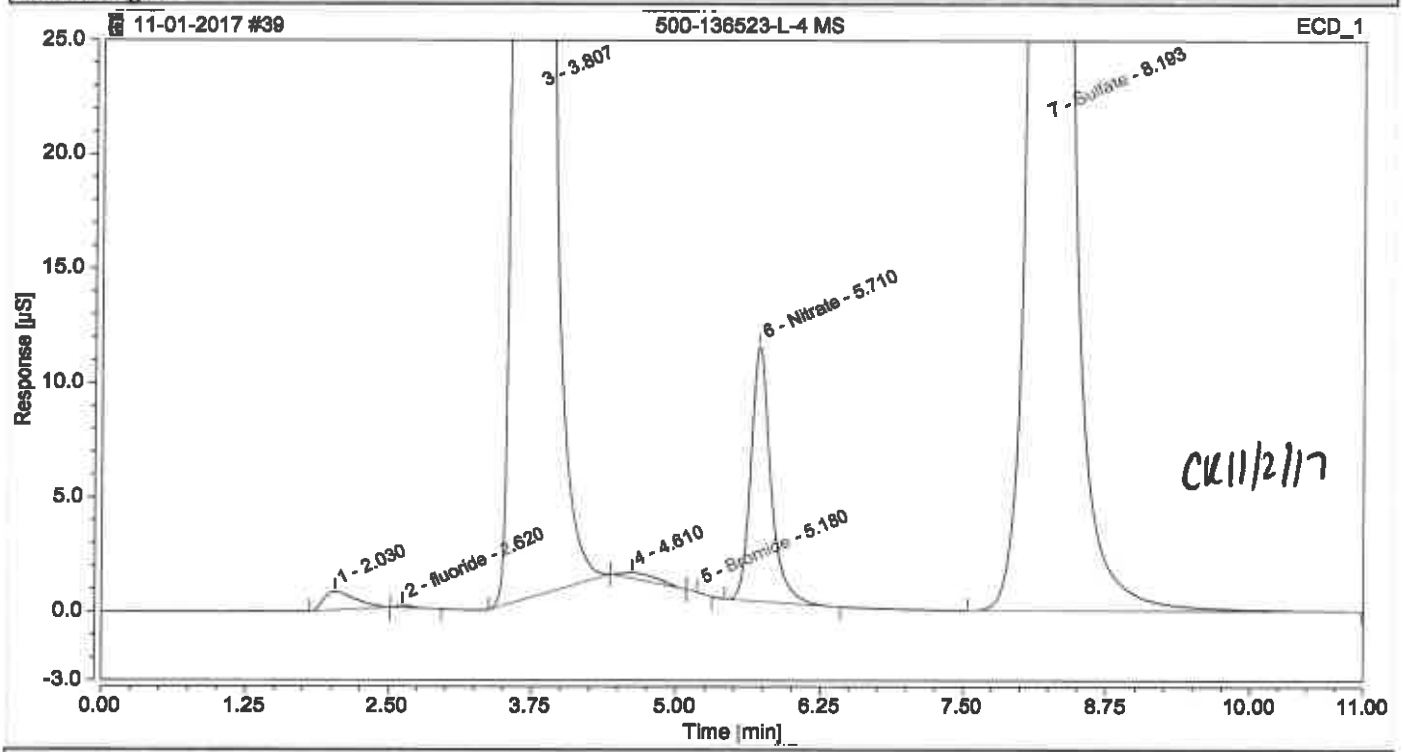
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.607	0.00491	0.041	100.00	100.00	0.1036
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.005**	**0.041**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4 MS**	*Run Time (min):*	**11.00**
Vial Number:	**RE3**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 17:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

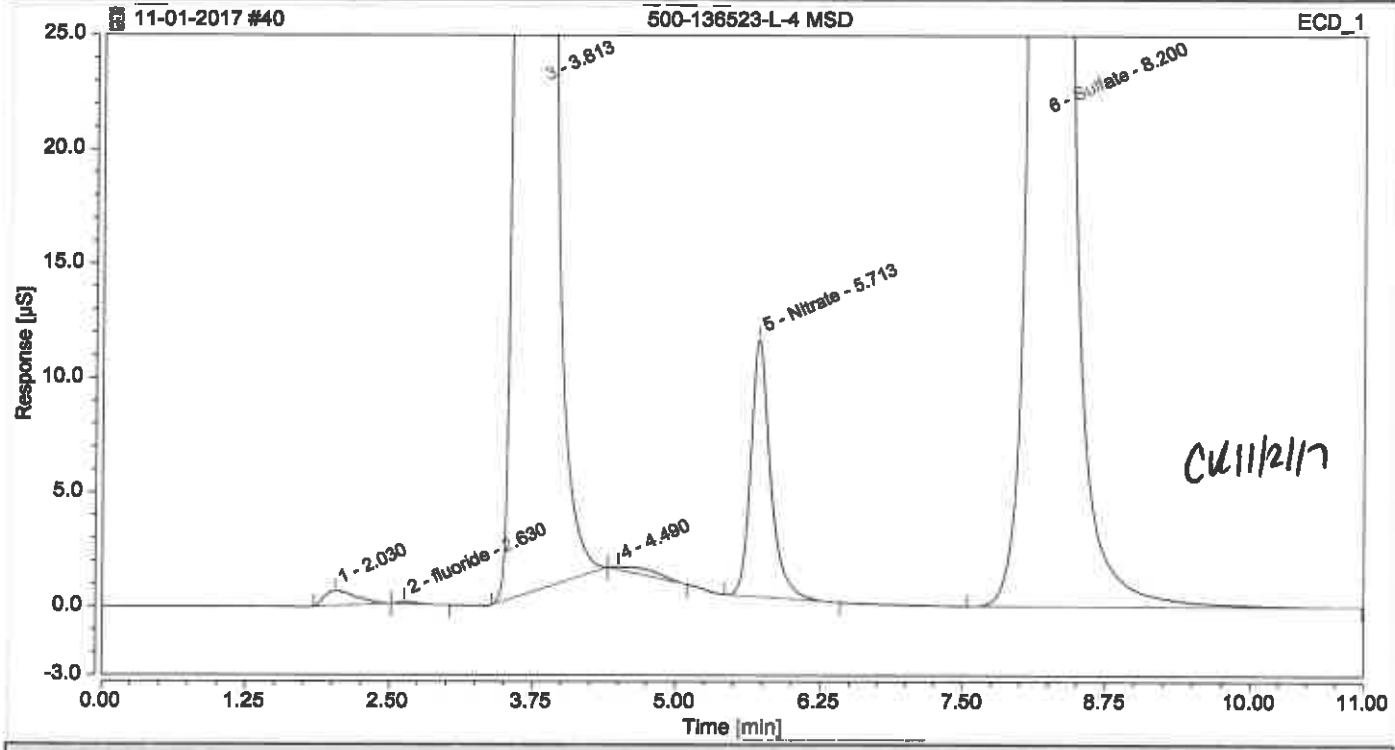
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.030	0.26205	0.804	0.18	0.12	n.a.
2	fluoride	2.620	0.01560	0.085	0.01	0.01	0.0347
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		3.807	101.85042	530.405	70.98	78.07	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		4.610	0.10395	0.233	0.07	0.03	n.a.
5	Bromide	5.180	0.00461	0.040	0.00	0.01	0.0701
6	Nitrate	5.710	2.23940	11.177	1.56	1.65	2.7137
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	8.193	39.01651	136.630	27.19	20.11	164.9255
Total:			**143.493**	**679.374**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4 MSD**	*Run Time (min):*	**11.00**
Vial Number:	**RE4**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 18:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

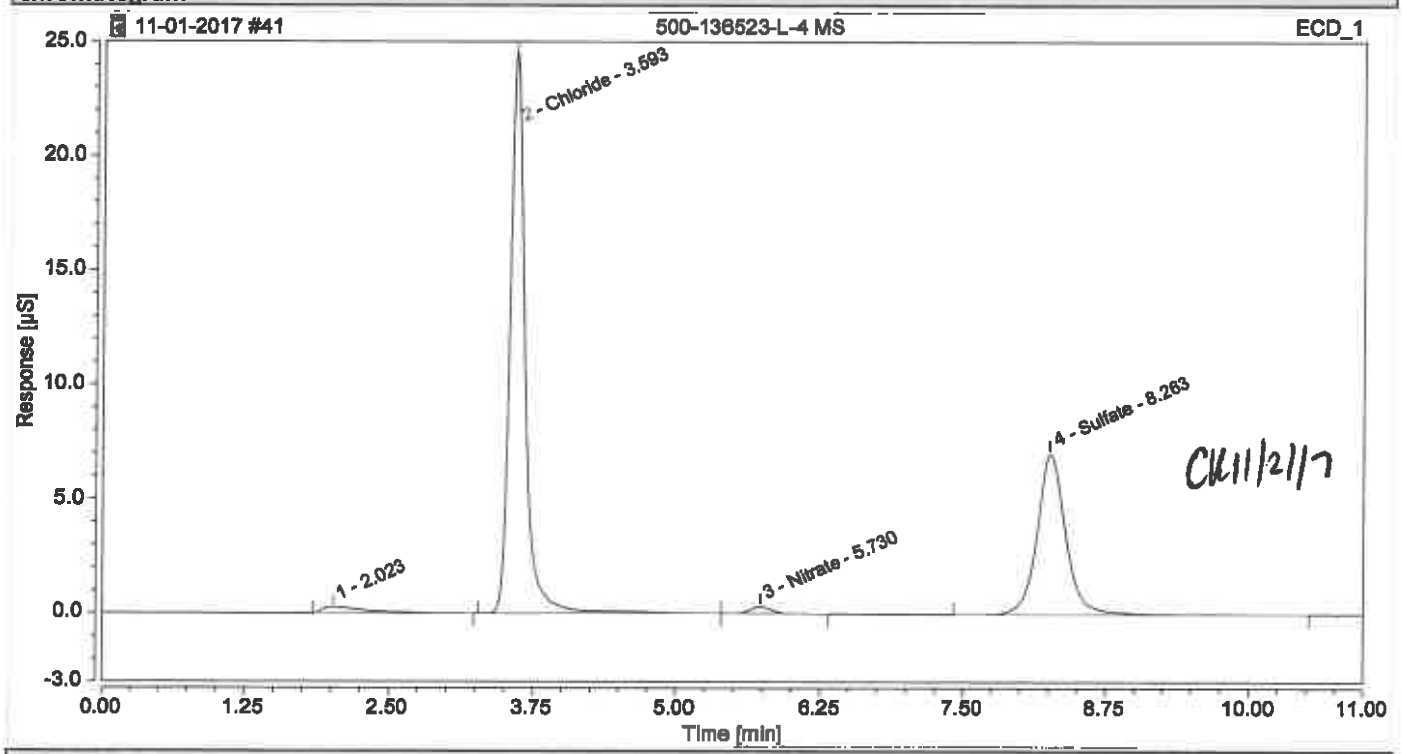
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.030	0.20753	0.636	0.14	0.09	n.a.
2	fluoride	2.630	0.01966	0.098	0.01	0.01	0.0455
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		3.813	102.09246	531.257	71.03	78.04	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		4.490	0.10267	0.100	0.07	0.01	n.a.
n.a	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	5.713	2.24489	11.274	1.56	1.66	2.7202
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	8.200	39.05518	137.389	27.17	20.18	165.0889
Total:			**143.722**	**680.754**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4 MS**	*Run Time (min):*	**11.00**
Vial Number:	**RE5**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Nov/17 18:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

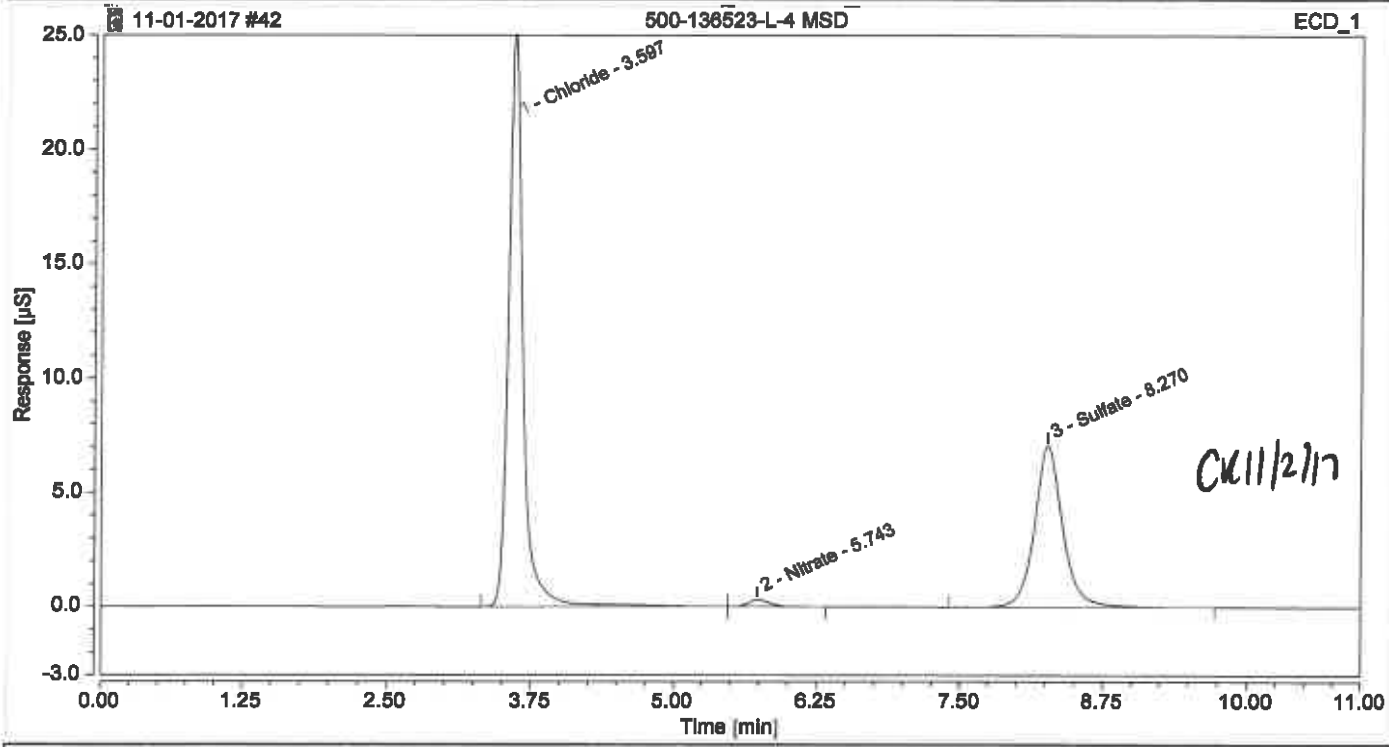
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.023	0.11275	0.273	1.90	0.85	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.593	3.68125	24.575	62.05	76.34	227.4717
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.730	0.06384	0.301	1.08	0.93	2.7159
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.263	2.07484	7.043	34.97	21.88	175.7771
Total:			**5.933**	**32.191**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4 MSD**	*Run Time (min):*	**11.00**
Vial Number:	**RE6**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Nov/17 18:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

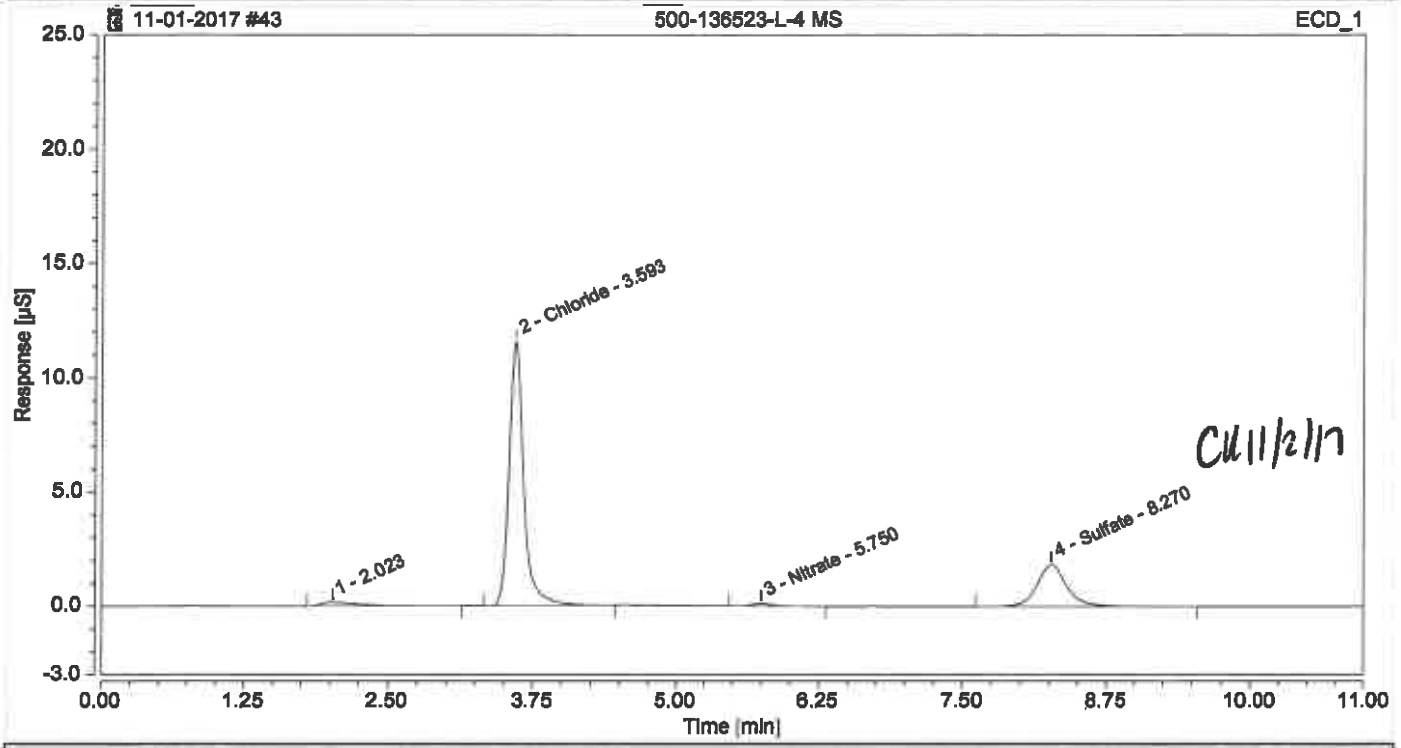
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.597	3.69346	25.320	63.57	77.40	228.2200
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Nitrate	5.743	0.06443	0.301	1.11	0.92	2.7300
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.270	2.05250	7.093	35.32	21.68	173.8883
Total:			**5.810**	**32.713**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4 MS**	*Run Time (min):*	**11.00**
Vial Number:	**RE7**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 18:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

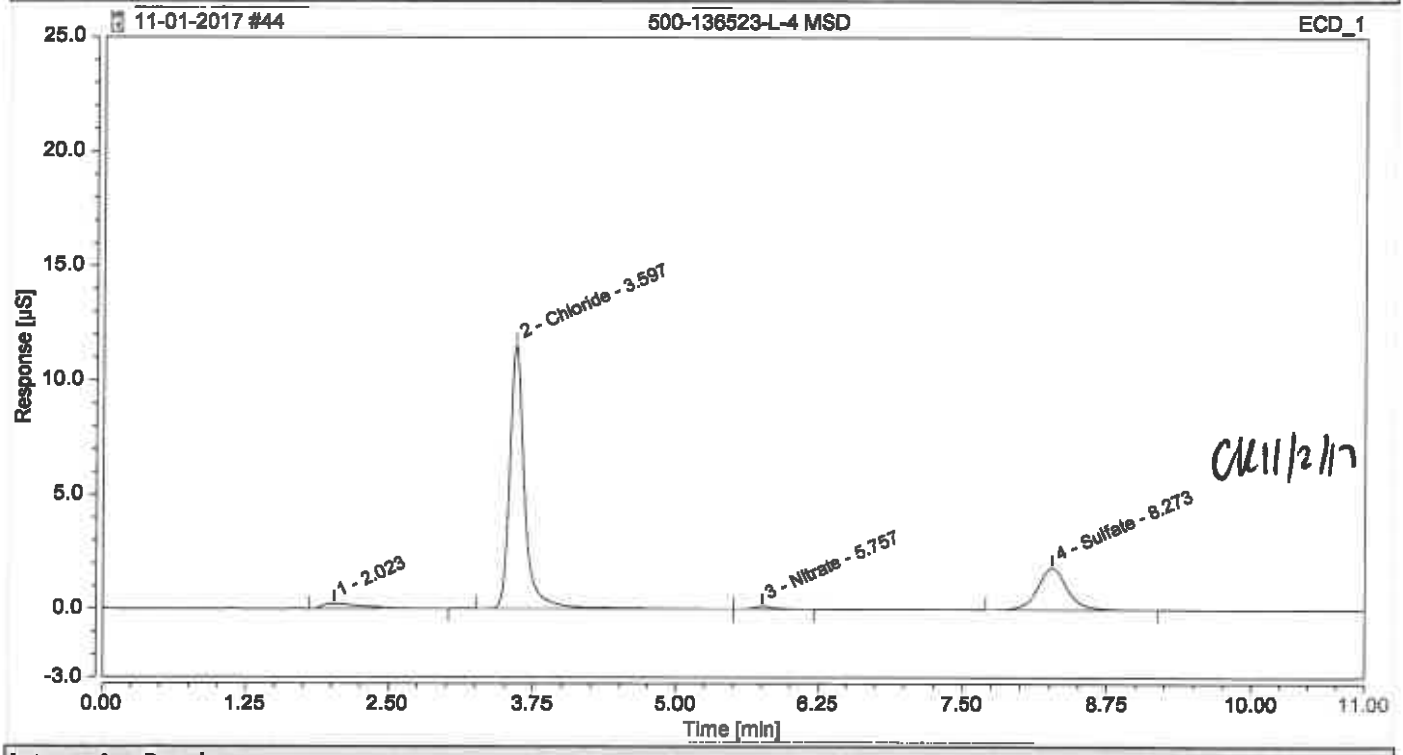
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.023	0.06715	0.165	2.87	1.20	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.593	1.68785	11.576	72.16	84.42	263.1346
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.750	0.02650	0.117	1.13	0.85	4.5774
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.270	0.55769	1.854	23.84	13.52	118.8265
Total:			**2.339**	**13.712**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136523-L-4 MSD**	*Run Time (min):*	**11.00**
Vial Number:	**RE8**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL, NO3, SO4**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 18:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

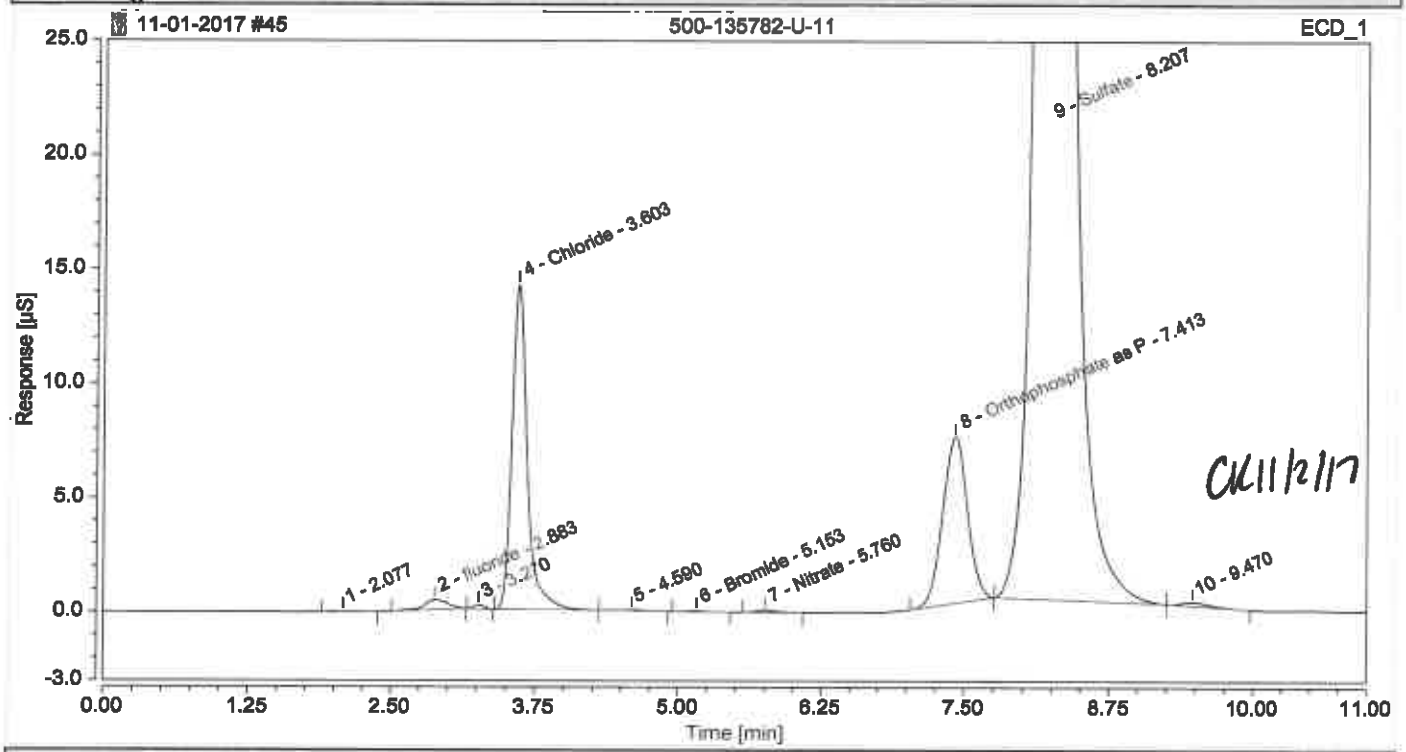
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.023	0.08606	0.210	3.60	1.54	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.597	1.73119	11.520	72.51	84.14	269.7777
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.757	0.02512	0.115	1.05	0.84	4.4956
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.273	0.54504	1.847	22.83	13.49	116.1513
Total:			**2.387**	**13.692**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135782-U-11**	*Run Time (min):*	**11.00**
Vial Number:	**GA3**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**BR**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**25.0000**
Injection Date/Time:	**01/Nov/17 19:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

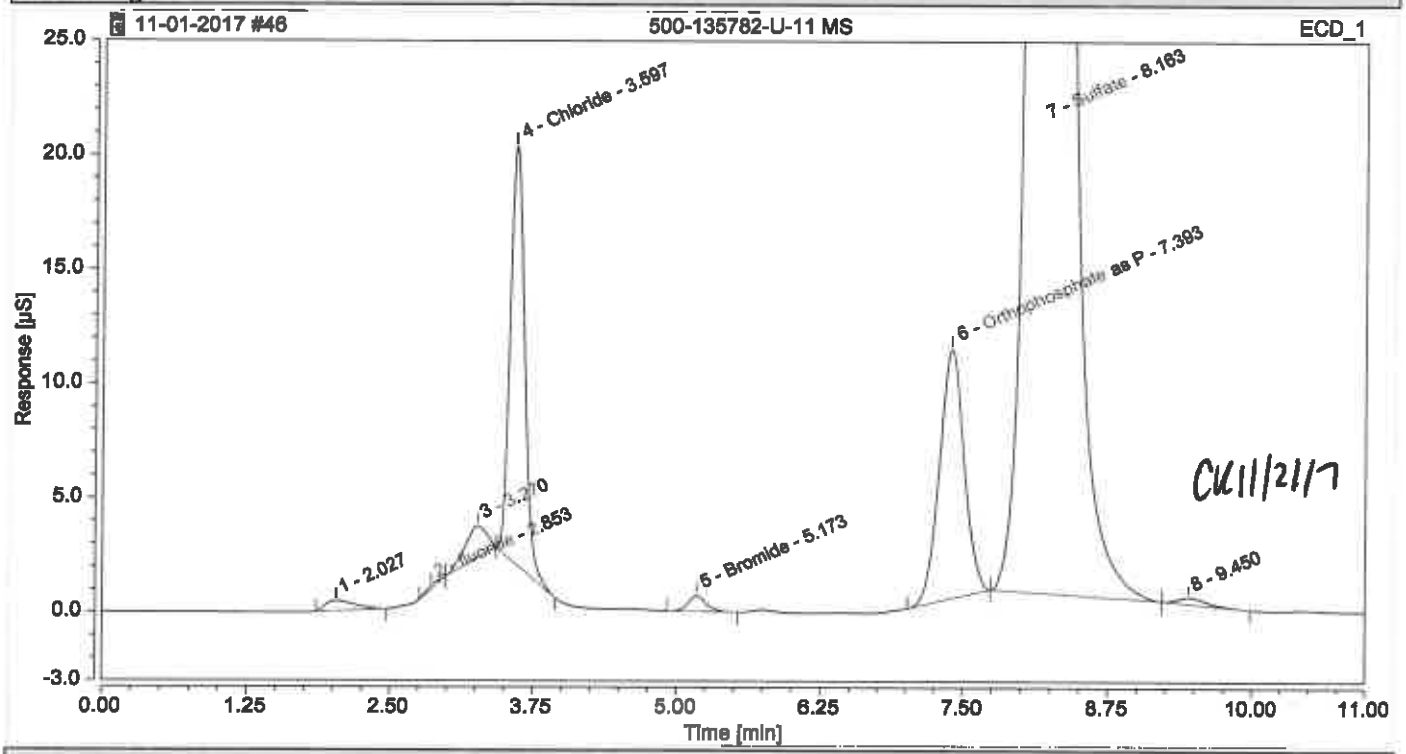
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.077	0.00963	0.035	0.03	0.03	n.a.
2	fluoride	2.883	0.10363	0.428	0.30	0.32	6.6999
3		3.270	0.01785	0.162	0.05	0.12	n.a.
4	Chloride	3.603	2.09663	14.240	5.99	10.79	162.8962
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		4.590	0.01156	0.040	0.03	0.03	n.a.
6	Bromide AD	5.153	0.00682	0.033	0.02	0.02	2.2059
7	Nitrate	5.760	0.01911	0.095	0.05	0.07	2.0698
8	Orthophosphate as P	7.413	1.82287	7.289	5.21	5.52	184.4947
9	Sulfate	8.207	30.86270	109.545	88.18	82.97	3261.5702
10		9.470	0.04778	0.168	0.14	0.13	n.a.
Total:			**34.999**	**132.034**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135782-U-11 MS**	*Run Time (min):*	**11.00**
Vial Number:	**GA4**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**BR**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**25.0000**
Injection Date/Time:	**01/Nov/17 19:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

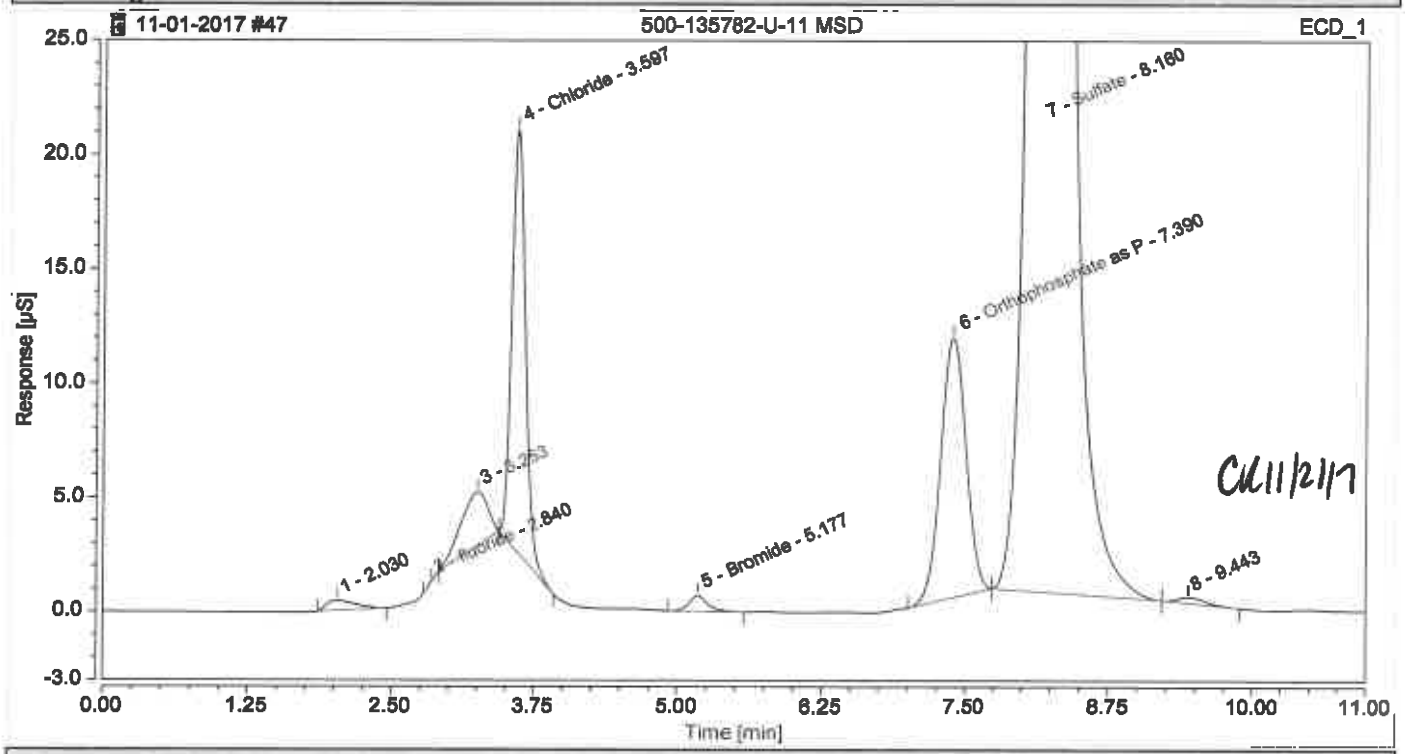
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.027	0.13037	0.437	0.25	0.23	n.a.
2	fluoride	2.853	0.02277	0.182	0.04	0.10	1.3434
3		3.270	0.30397	1.376	0.59	0.72	n.a.
4	Chloride	3.597	2.57855	18.274	4.96	9.62	199.8296
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Bromide	5.173	0.12868	0.684	0.25	0.36	27.2256
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Orthophosphate as P	7.393	2.76828	10.926	5.33	5.75	278.7932
7	Sulfate	8.163	45.93975	157.721	88.43	83.07	4854.6763
8		9.450	0.08079	0.274	0.16	0.14	n.a.
Total:			**51.953**	**189.874**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	500-135782-U-11 MSD	*Run Time (min):*	**11.00**
Vial Number:	GA5	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**BR**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**25.0000**
Injection Date/Time:	**01/Nov/17 19:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

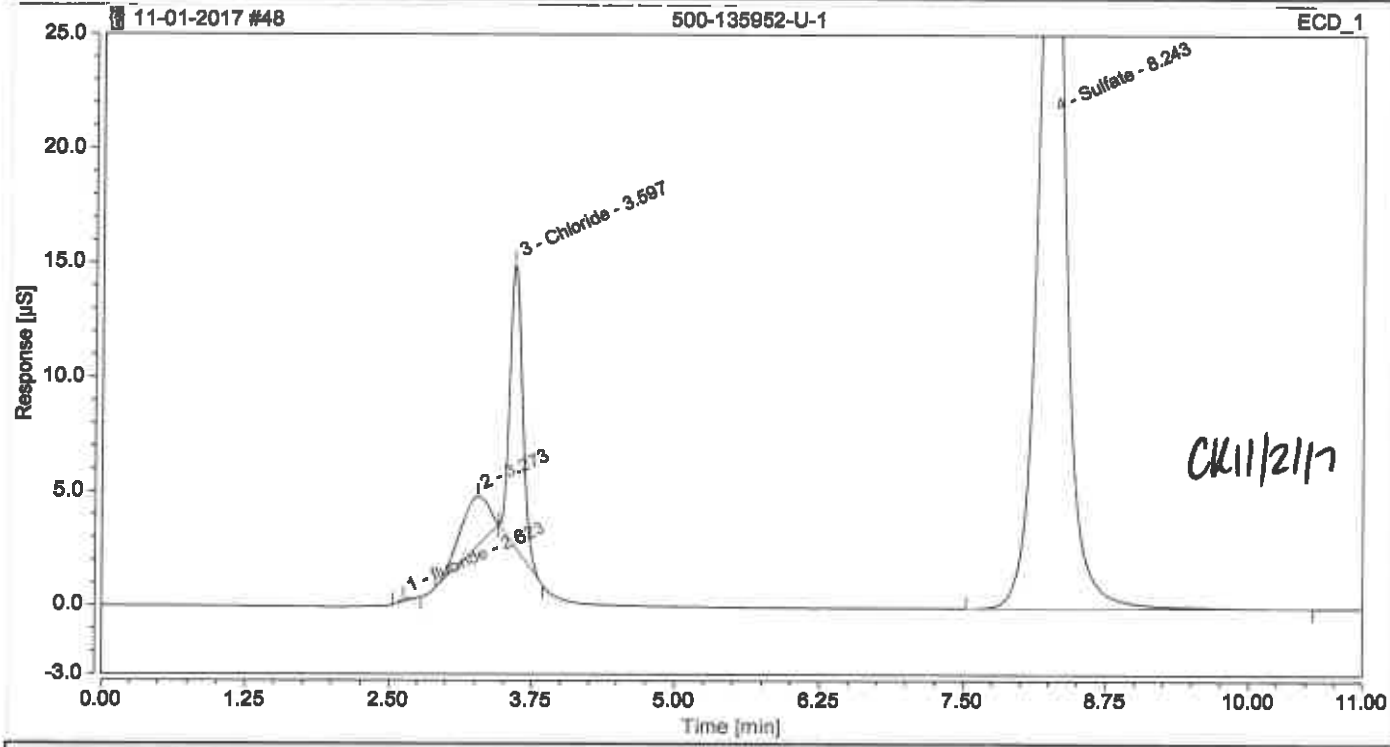
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.030	0.12845	0.440	0.24	0.23	n.a.
2	fluoride	2.840	0.00492	0.066	0.01	0.03	0.1612
3		3.253	0.64387	2.335	1.22	1.21	n.a.
4	Chloride	3.597	2.52247	18.467	4.78	9.59	195.5317
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Bromide	5.177	0.13243	0.689	0.25	0.36	27.9953
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Orthophosphate as P	7.390	2.89763	11.372	5.49	5.91	291.6949
7	Sulfate	8.160	46.41810	158.854	87.87	82.53	4905.2213
8		9.443	0.07638	0.268	0.14	0.14	n.a.
Total:			**52.824**	**192.491**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135952-U-1**	*Run Time (min):*	**11.00**
Vial Number:	**GA6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**BR**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Nov/17 19:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

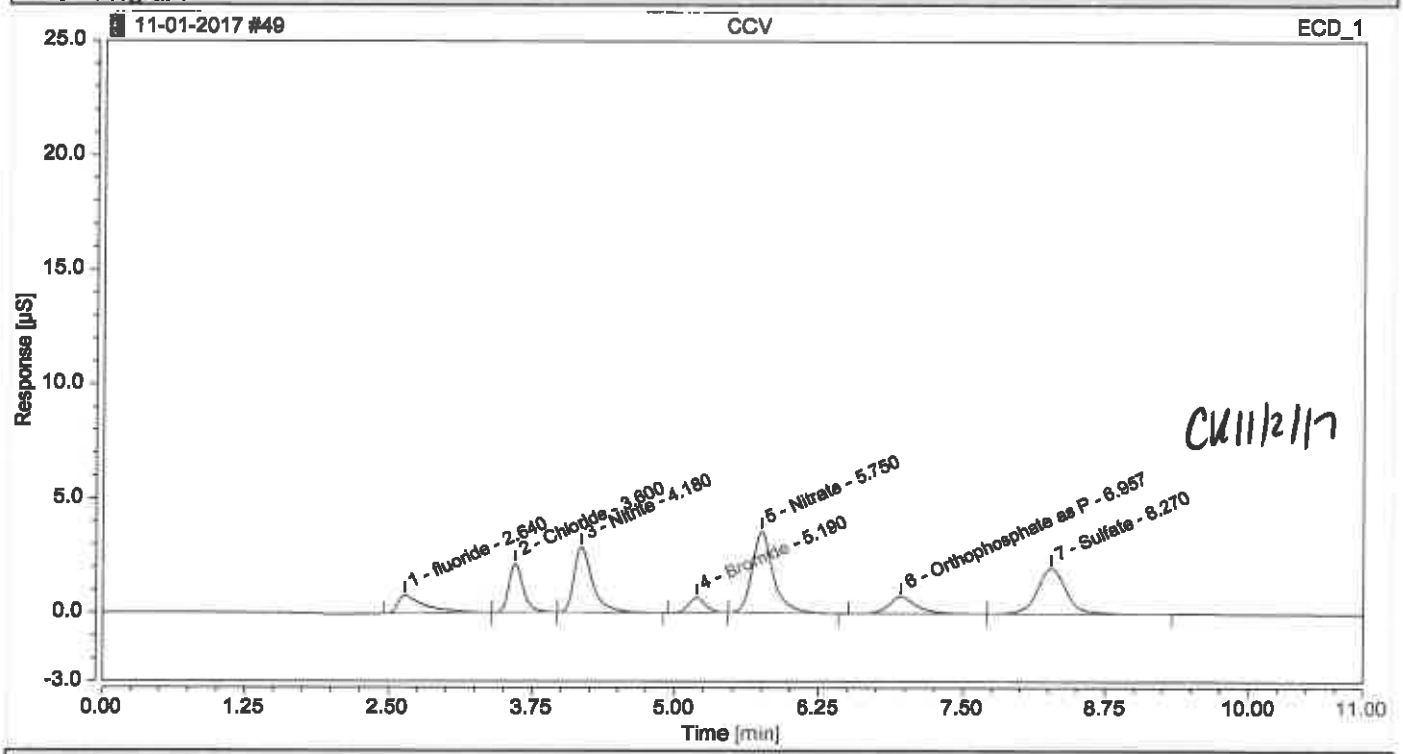
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.623	0.01208	0.104	0.10	0.21	0.2541
2		3.273	0.63319	2.138	5.21	4.25	n.a.
3	Chloride	3.597	1.58134	12.397	13.00	24.66	49.3620
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide AD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.243	9.93335	35.624	81.69	70.88	420.0340
Total:			**12.160**	**50.264**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**11.00**
Vial Number:	**RA7**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 20:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

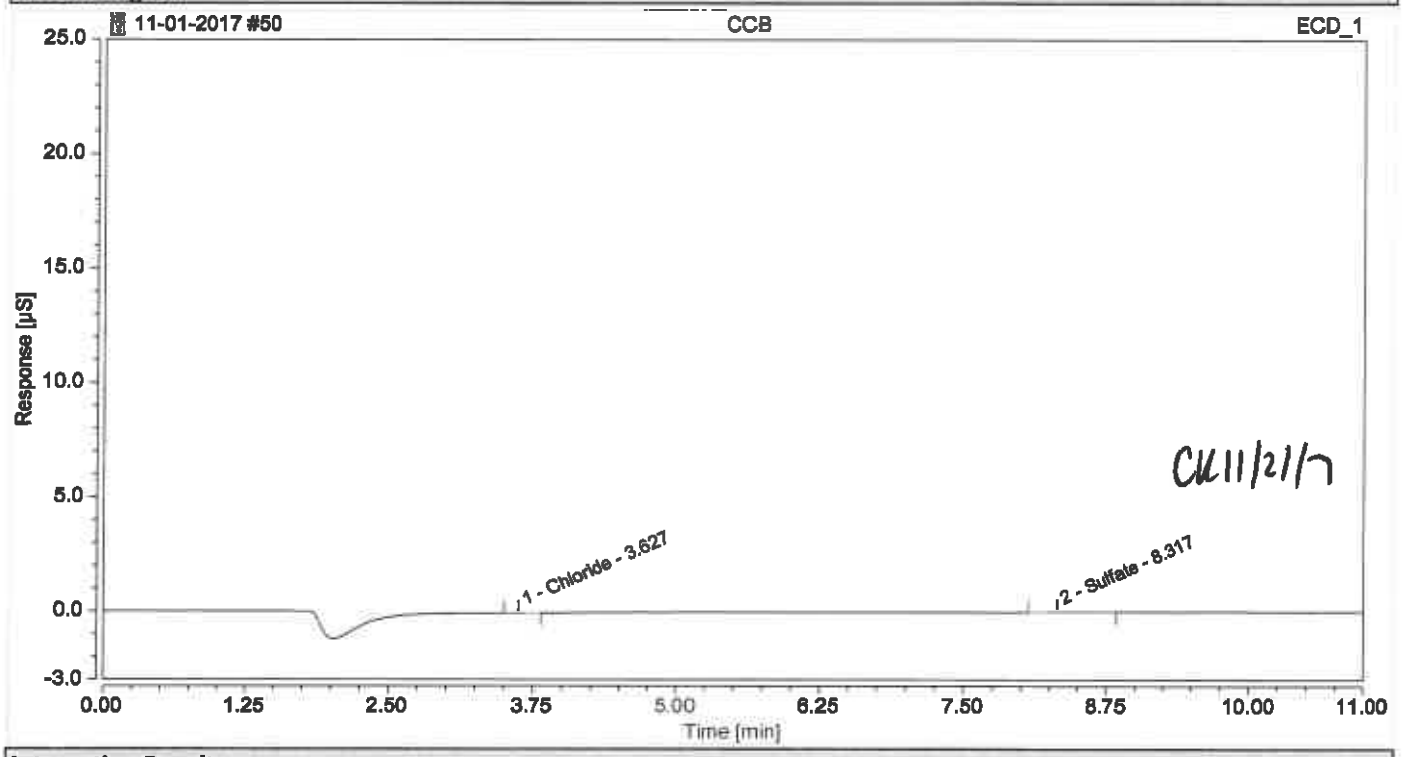
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.640	0.21285	0.785	7.85	6.16	0.5574
2	Chloride	3.600	0.29830	2.130	11.00	16.72	1.0030
3	Nitrite	4.180	0.53128	2.864	19.59	22.48	0.9651
4	Bromide	5.190	0.11554	0.666	4.26	5.22	0.9811
5	Nitrate	5.750	0.76064	3.563	28.05	27.97	0.9615
6	Orthophosphate as P	6.957	0.20919	0.739	7.71	5.80	0.9416
7	Sulfate	8.270	0.58431	1.993	21.54	15.64	2.4890
Total:			**2.712**	**12.740**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**11.00**
Vial Number:	**RA8**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 20:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

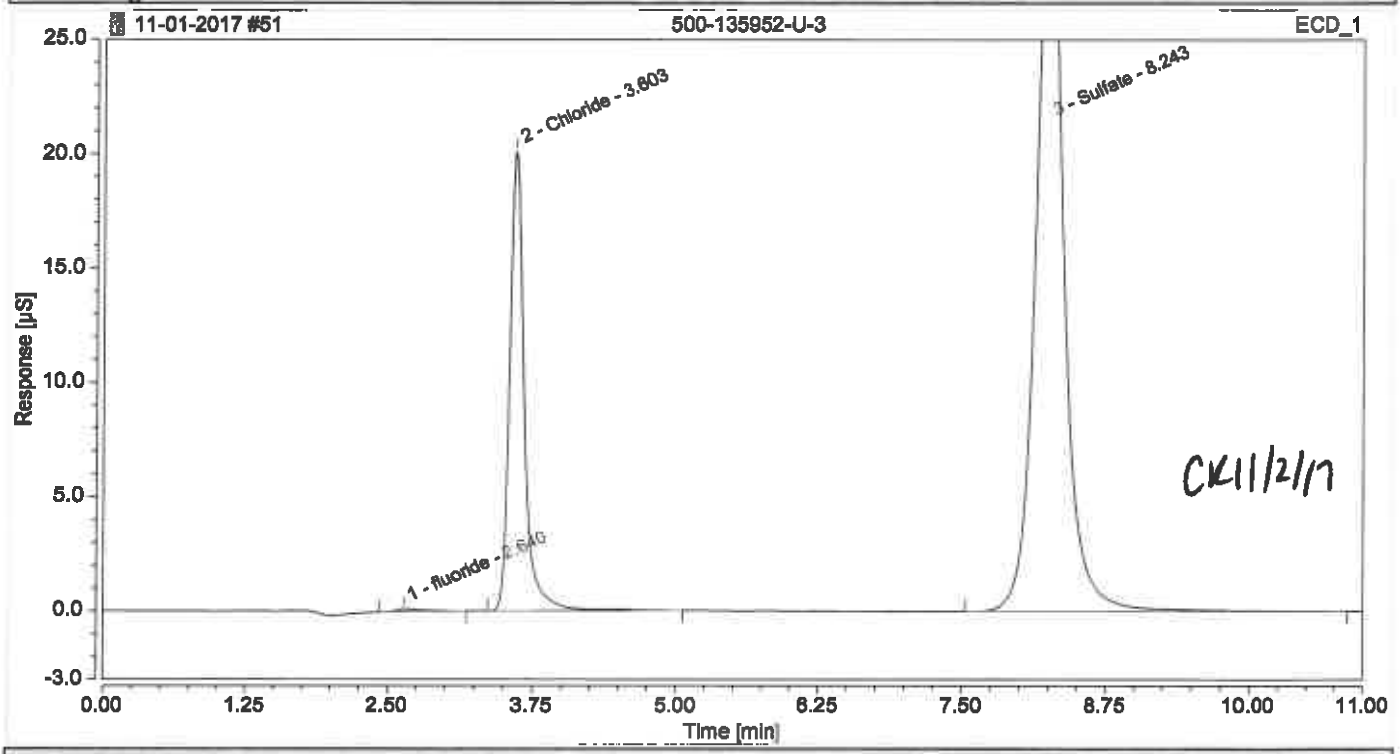
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.627	0.00094	0.007	18.88	35.21	0.0914
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Sulfate	8.317	0.00405	0.013	81.12	64.79	0.0365
Total:			**0.005**	**0.021**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135952-U-3**	*Run Time (min):*	**11.00**
Vial Number:	**GA7**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**BR**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Nov/17 20:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

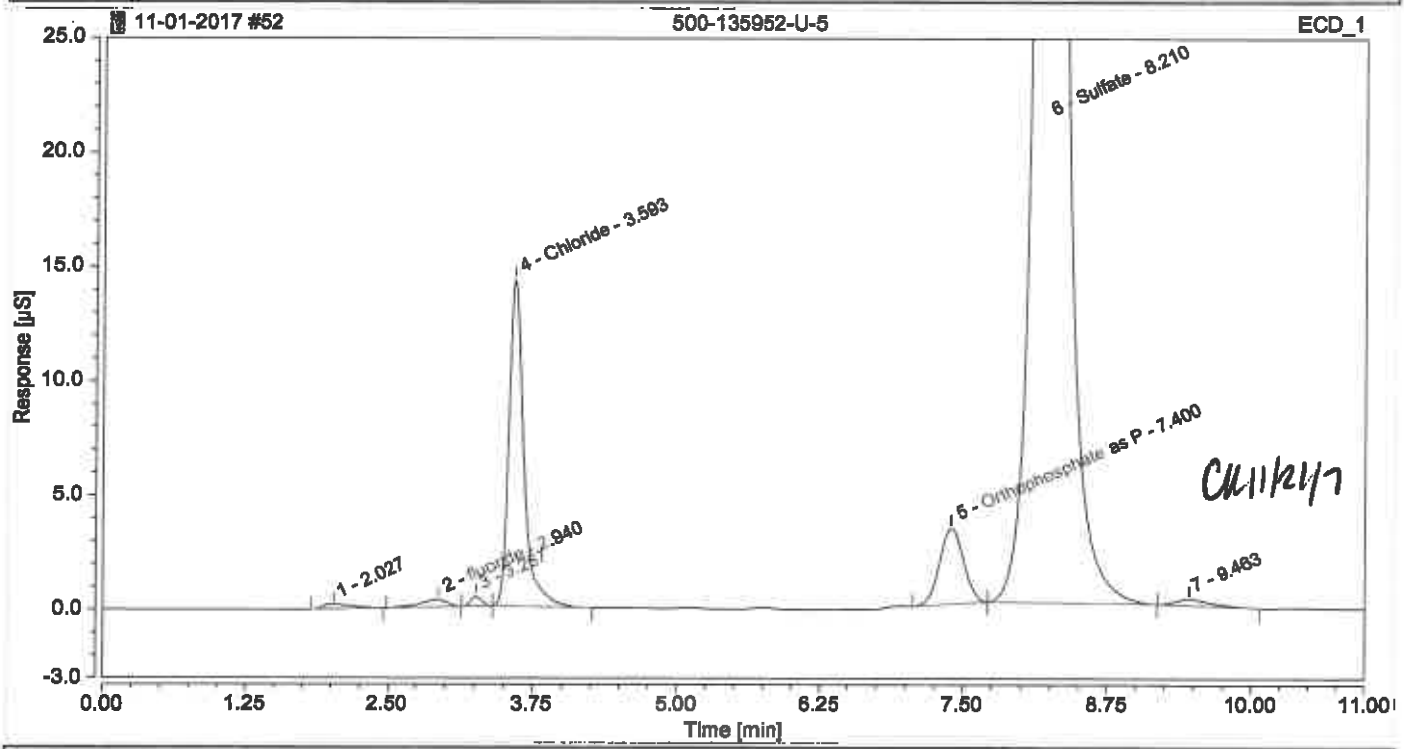
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.640	0.03504	0.125	0.29	0.24	0.8626
2	Chloride	3.603	2.82461	20.128	23.45	38.01	87.4750
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide AD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	8.243	9.18691	32.704	76.26	61.76	388.4852
Total:			**12.047**	**52.957**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-135952-U-5**	*Run Time (min):*	**11.00**
Vial Number:	**GA8**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**BR**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Nov/17 21:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

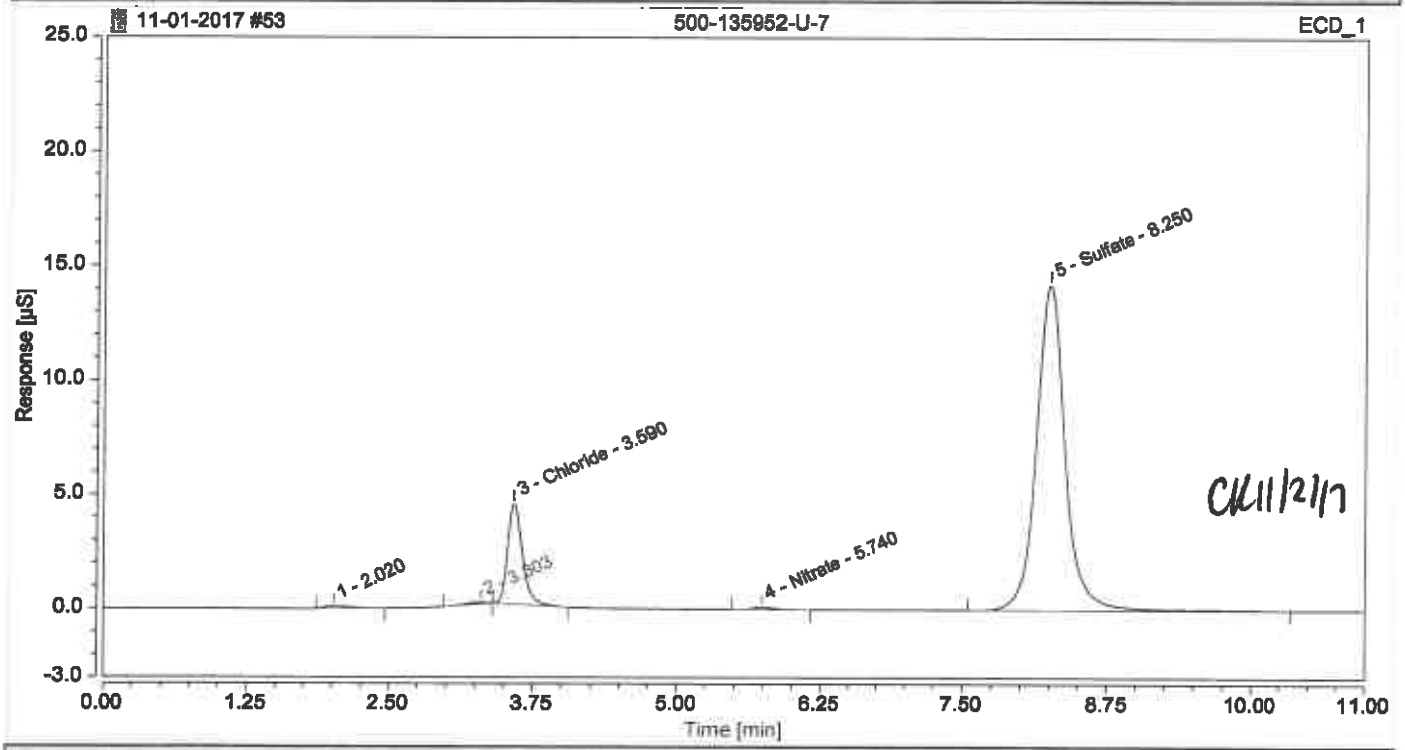
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.027	0.05952	0.195	0.25	0.21	n.a.
2	fluoride	2.940	0.08631	0.321	0.36	0.34	11.1053
3		3.267	0.04823	0.412	0.20	0.44	n.a.
4	Chloride	3.593	2.10441	14.291	8.81	15.34	326.9849
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide AD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Orthophosphate as P	7.400	0.80420	3.321	3.37	3.57	165.7794
6	Sulfate	8.210	20.67419	74.319	86.60	79.79	4370.0175
7		9.463	0.09666	0.285	0.40	0.31	n.a.
Total:			**23.874**	**93.145**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	500-135952-U-7	*Run Time (min):*	11.00
Vial Number:	GB1	*Injection Volume:*	25.00
Injection Type:	Unknown	*Channel:*	ECD_1
Calibration Level:		*Comments:*	BR
Instrument Method:	Seven Anion		n.a.
Processing Method:	Seven Anions	*Dilution Factor:*	1.0000
Injection Date/Time:	01/Nov/17 21:14	*Sample Weight:*	1.0000

Chromatogram



Integration Results

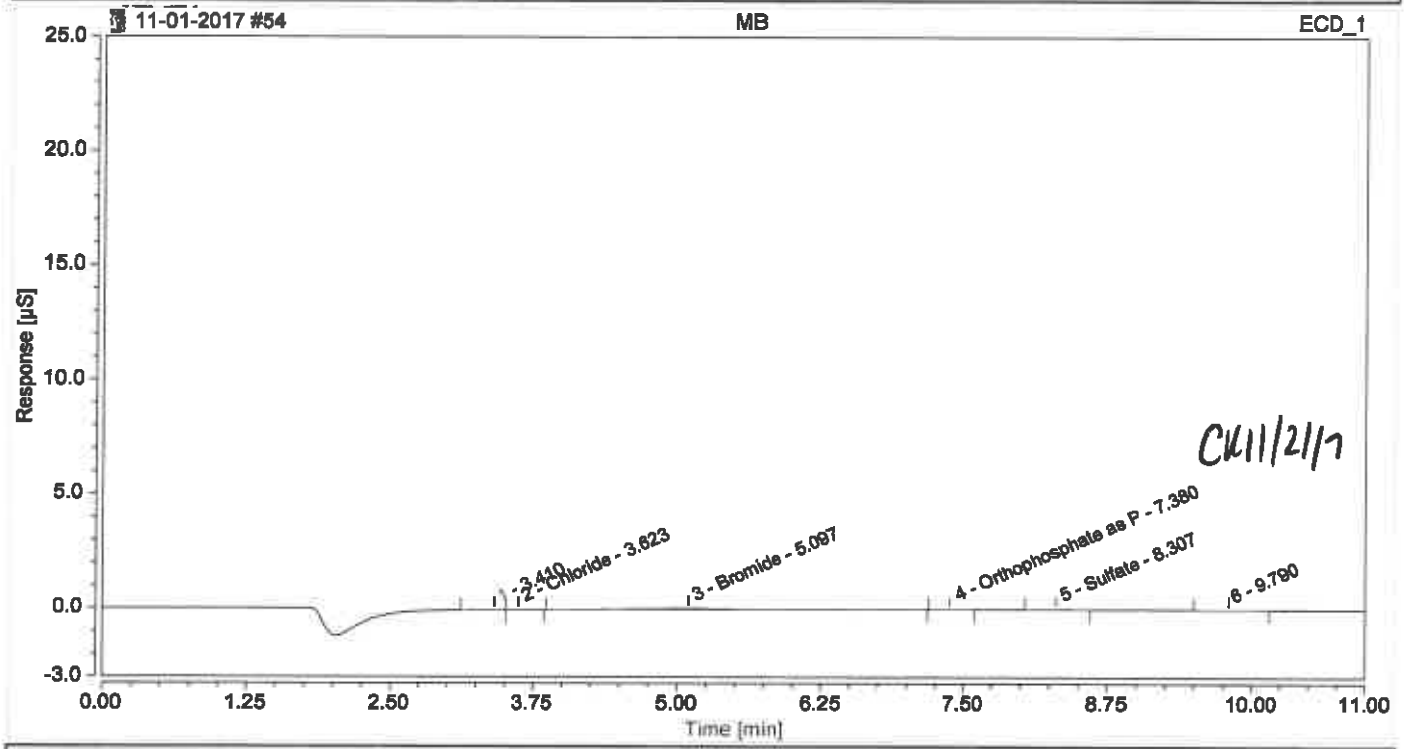
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.020	0.02516	0.084	0.52	0.44	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		3.303	0.01531	0.060	0.32	0.32	n.a.
3	Chloride	3.590	0.63487	4.404	13.24	23.28	2.0347
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Nitrate	5.740	0.02305	0.111	0.48	0.59	0.0875
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	8.250	4.09537	14.258	85.43	75.37	17.3288
Total:			**4.794**	**18.917**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**MB**	*Run Time (min):*	**11.00**
Vial Number:	**RA3**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 21:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

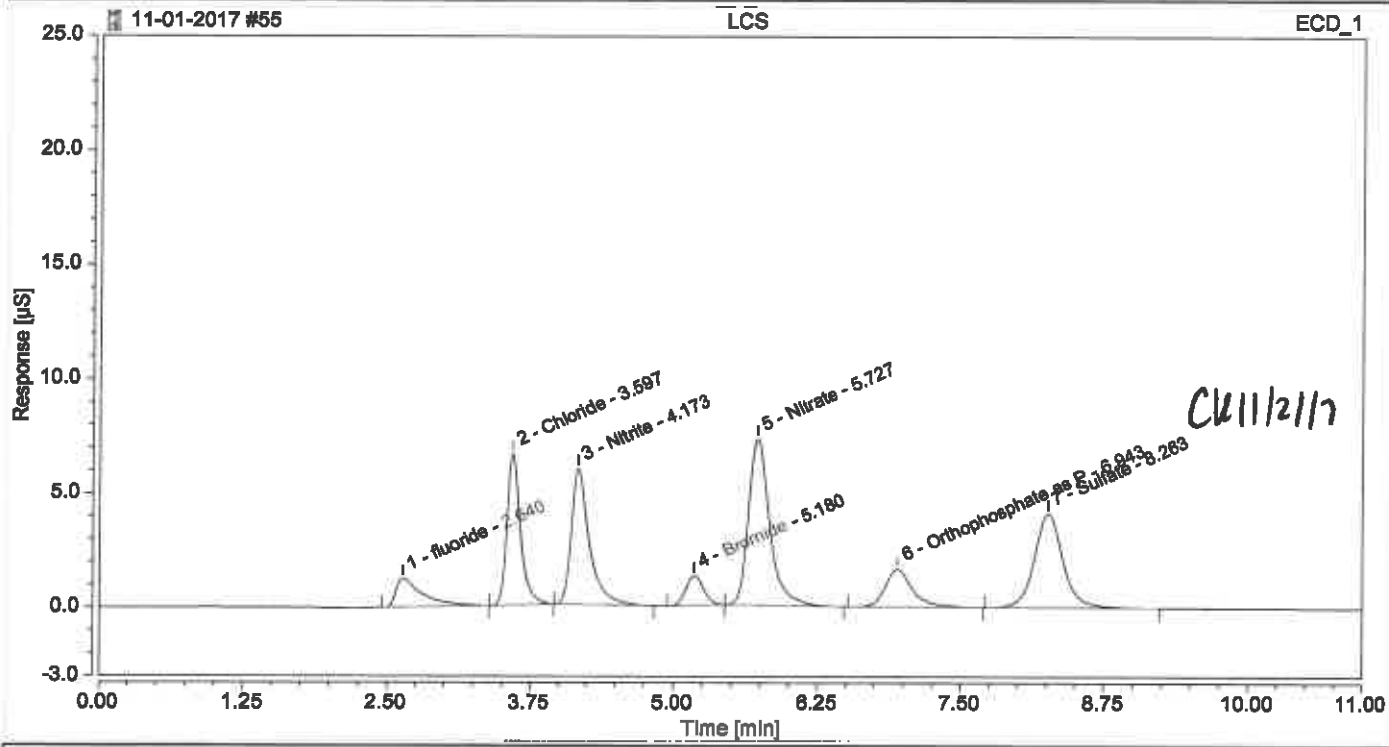
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		3.410	0.00143	0.005	1.92	5.66	n.a.
2	Chloride	3.623	0.00111	0.007	1.49	8.20	0.0919
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Bromide	5.097	0.06427	0.042	86.27	51.28	0.5600
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Orthophosphate as P	7.380	0.00122	0.006	1.63	7.01	0.1119
5	Sulfate	8.307	0.00386	0.015	5.19	18.56	0.0357
6		9.790	0.00261	0.008	3.50	9.29	n.a.
Total:			**0.074**	**0.082**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**11.00**
Vial Number:	**RA4**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**04**	*Comments:*	**IC Stock II**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 21:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

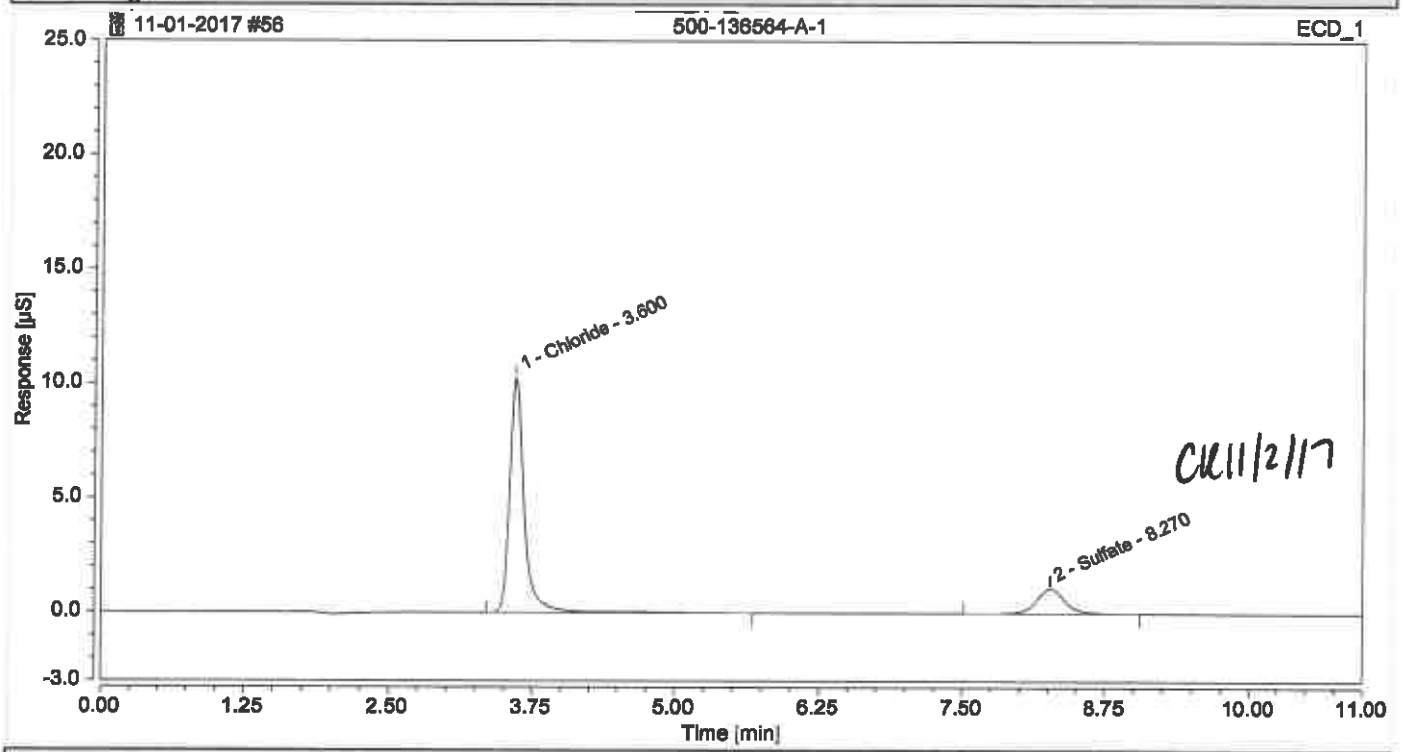
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.640	0.33995	1.276	5.89	4.51	0.8942
2	Chloride	3.597	0.91956	6.643	15.92	23.48	2.9075
3	Nitrite	4.173	1.10633	5.967	19.15	21.09	1.8900
4	Bromide	5.180	0.22670	1.316	3.92	4.65	1.8940
5	Nitrate	5.727	1.53049	7.302	26.50	25.81	1.8737
6	Orthophosphate as P	6.943	0.46228	1.658	8.00	5.86	1.9514
7	Sulfate	8.263	1.19114	4.131	20.62	14.60	5.0538
Total:			**5.776**	**28.294**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-1**	*Run Time (min):*	**11.00**
Vial Number:	**GC1**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 21:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

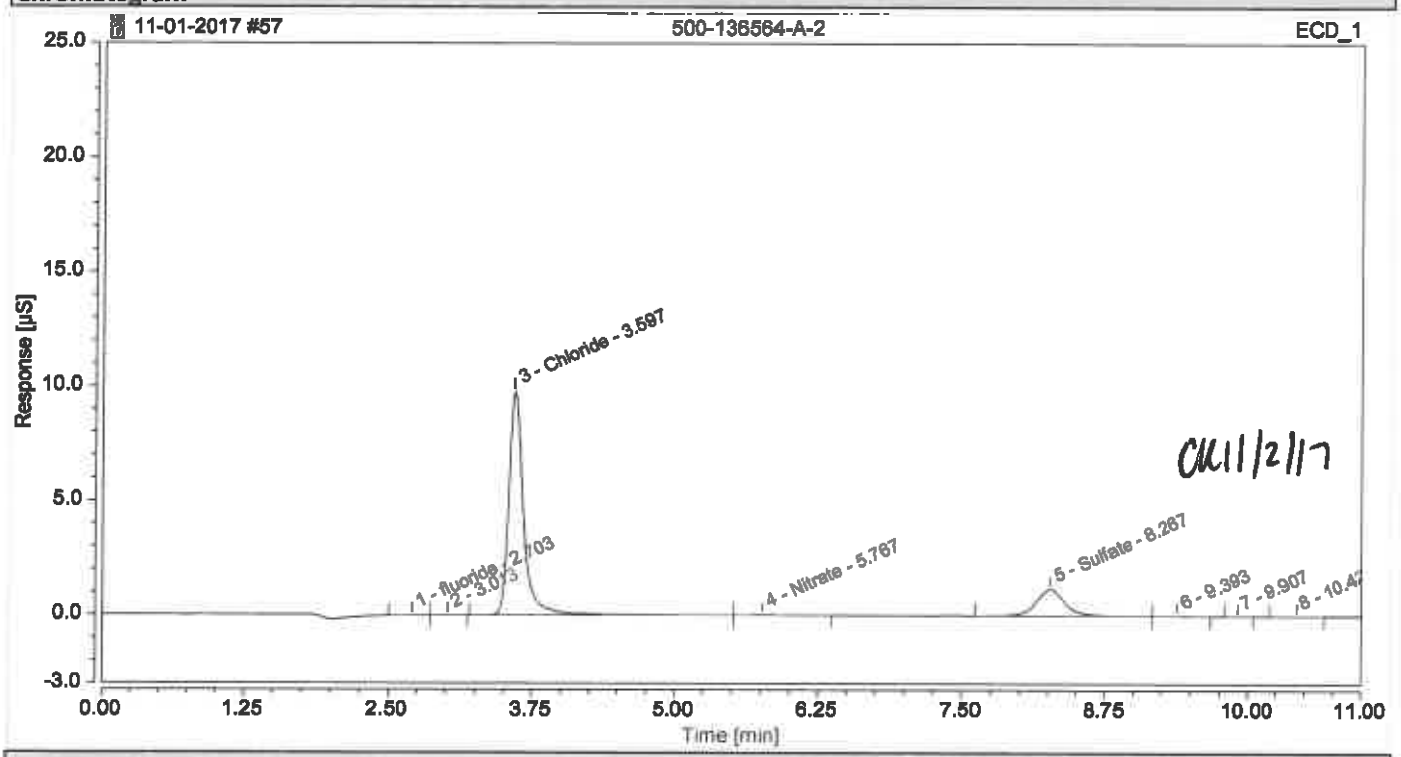
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.600	1.52407	10.276	82.26	90.28	476.0622
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Sulfate	8.270	0.32875	1.107	17.74	9.72	140.8864
Total:			**1.853**	**11.383**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-2**	*Run Time (min):*	**11.00**
Vial Number:	**GC2**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 22:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

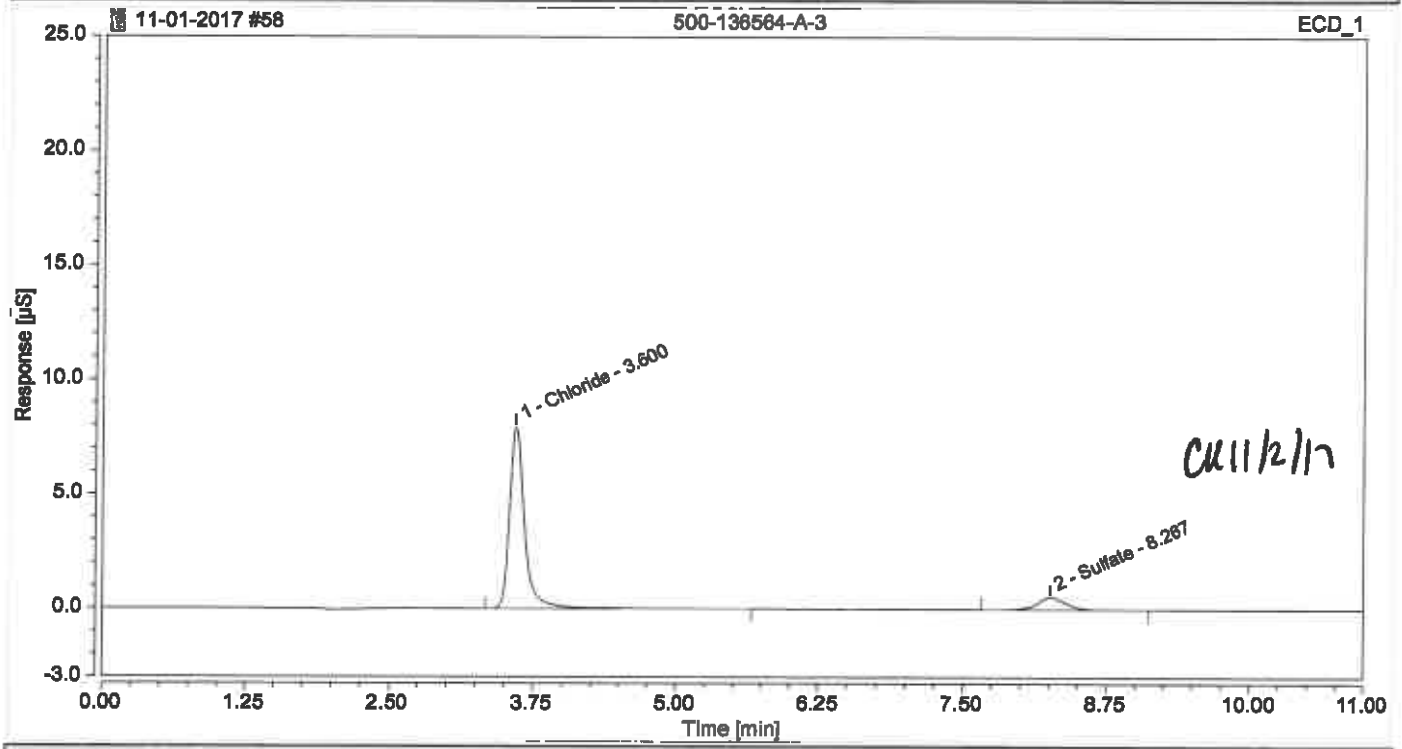
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.703	0.00279	0.013	0.16	0.12	0.0808
2		3.013	0.00072	0.005	0.04	0.04	n.a.
3	Chloride	3.597	1.43694	9.789	80.34	88.99	449.3511
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Nitrate	5.767	0.00556	0.024	0.31	0.22	6.6741
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	8.267	0.33914	1.154	18.96	10.49	145.2783
6		9.393	0.00177	0.007	0.10	0.07	n.a.
7		9.907	0.00062	0.004	0.03	0.04	n.a.
8		10.420	0.00100	0.005	0.06	0.04	n.a.
Total:			**1.789**	**11.001**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-3**	*Run Time (min):*	**11.00**
Vial Number:	**GC3**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**01/Nov/17 22:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

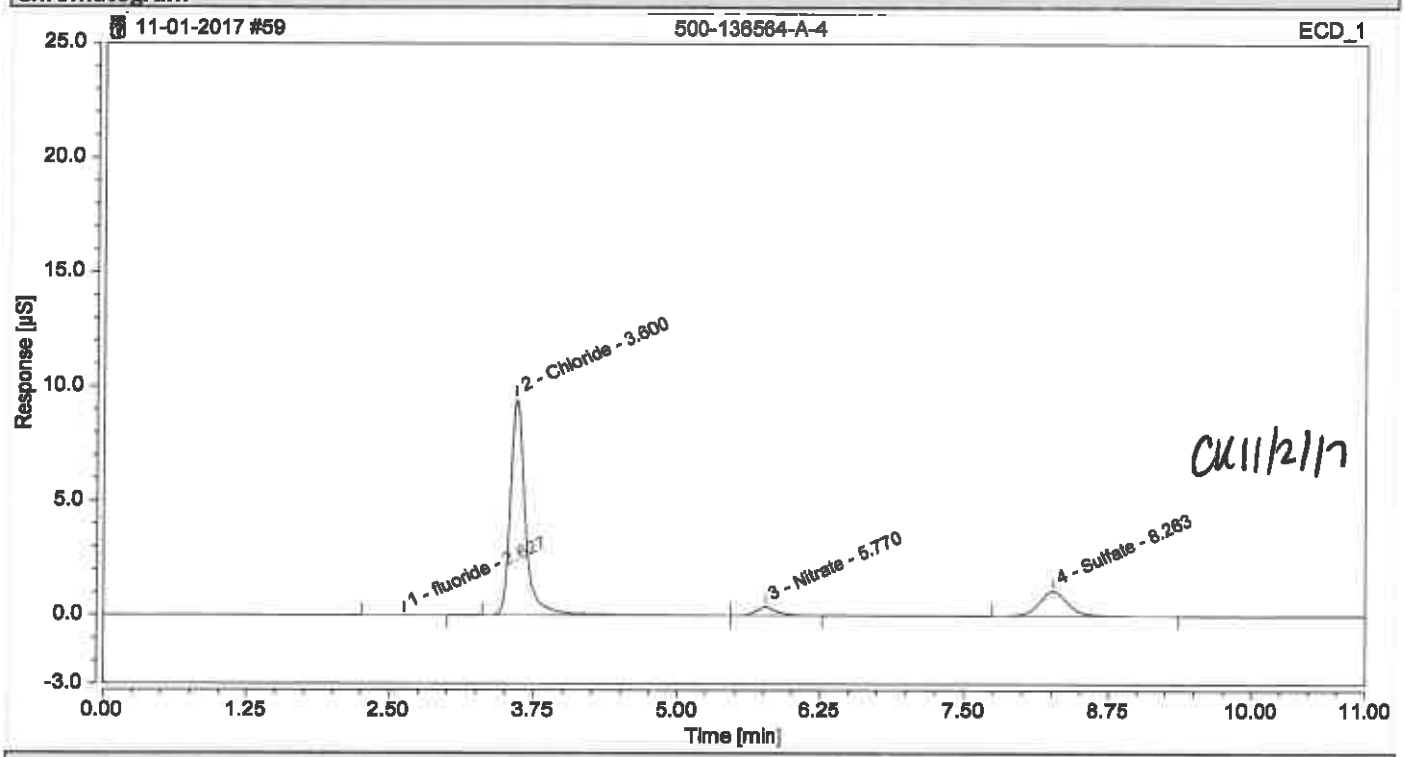
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.600	1.18487	7.968	87.98	93.64	744.1551
n.a	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Sulfate	8.267	0.16192	0.542	12.02	6.36	140.7551
Total:			**1.347**	**8.510**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-4**	*Run Time (min):*	**11.00**
Vial Number:	**GC4**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 22:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

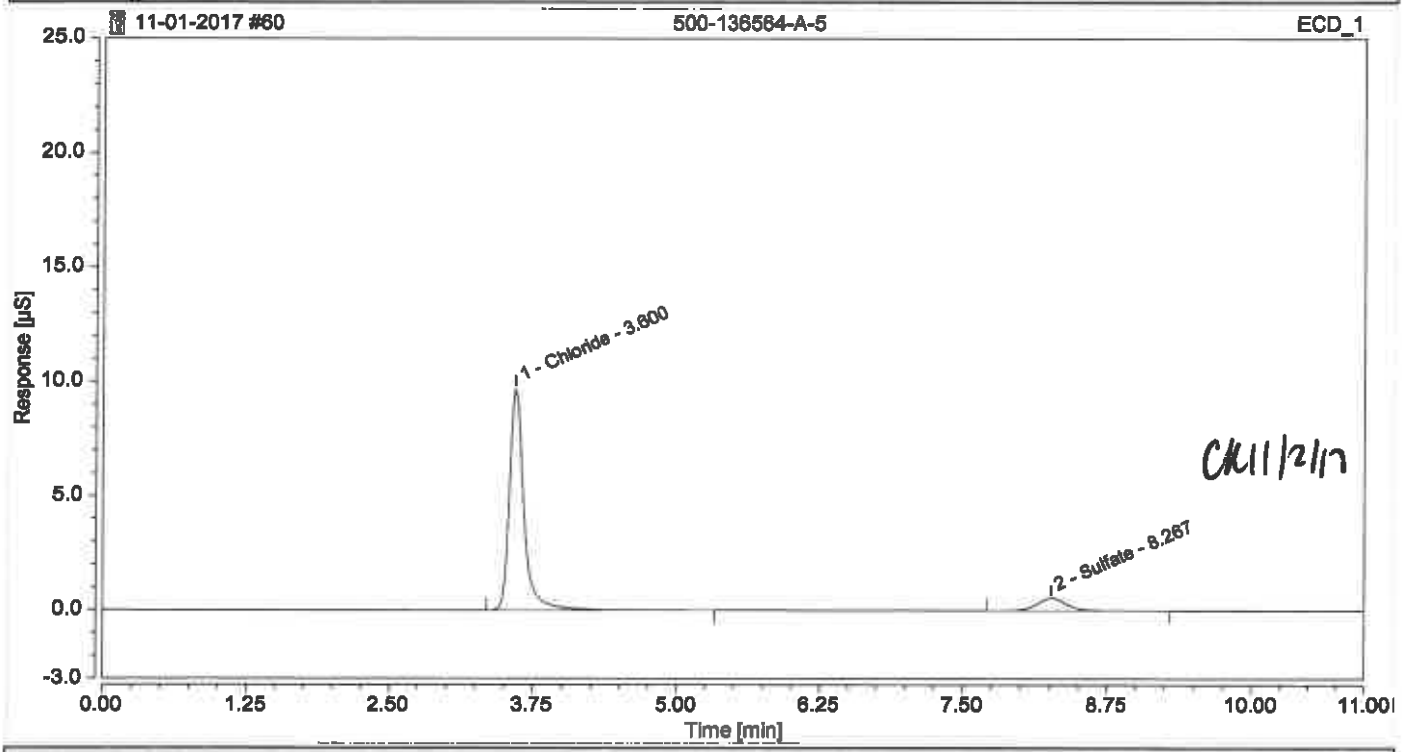
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.627	0.00377	0.012	0.21	0.11	0.3390
2	Chloride	3.600	1.39744	9.460	77.33	86.48	437.2429
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.770	0.08017	0.369	4.44	3.38	15.5150
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.263	0.32577	1.097	18.03	10.03	139.6290
Total:			**1.807**	**10.939**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-5**	*Run Time (min):*	**11.00**
Vial Number:	**GC5**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**01/Nov/17 22:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

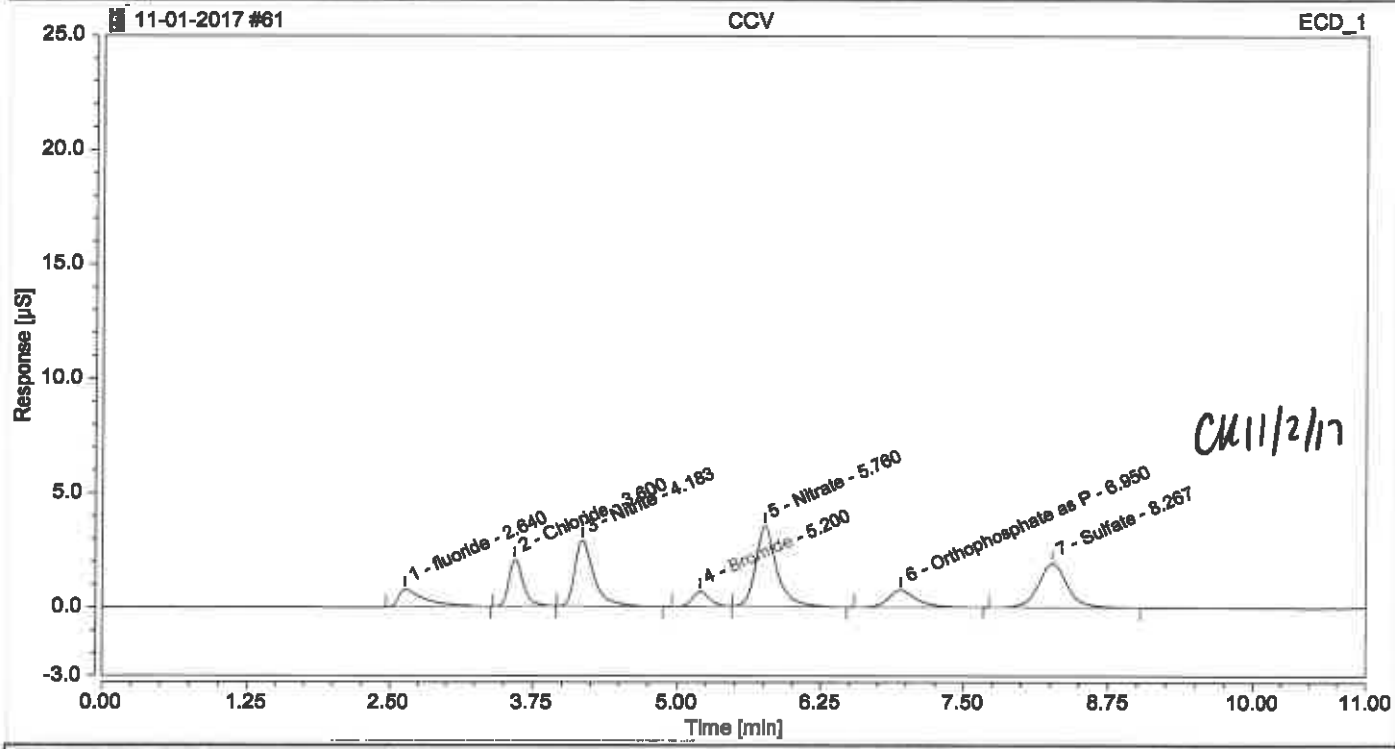
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.600	1.42677	9.704	89.41	94.50	892.4698
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Sulfate	8.267	0.16892	0.565	10.59	5.50	146.6726
Total:			**1.596**	**10.270**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**11.00**
Vial Number:	**RA5**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 22:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

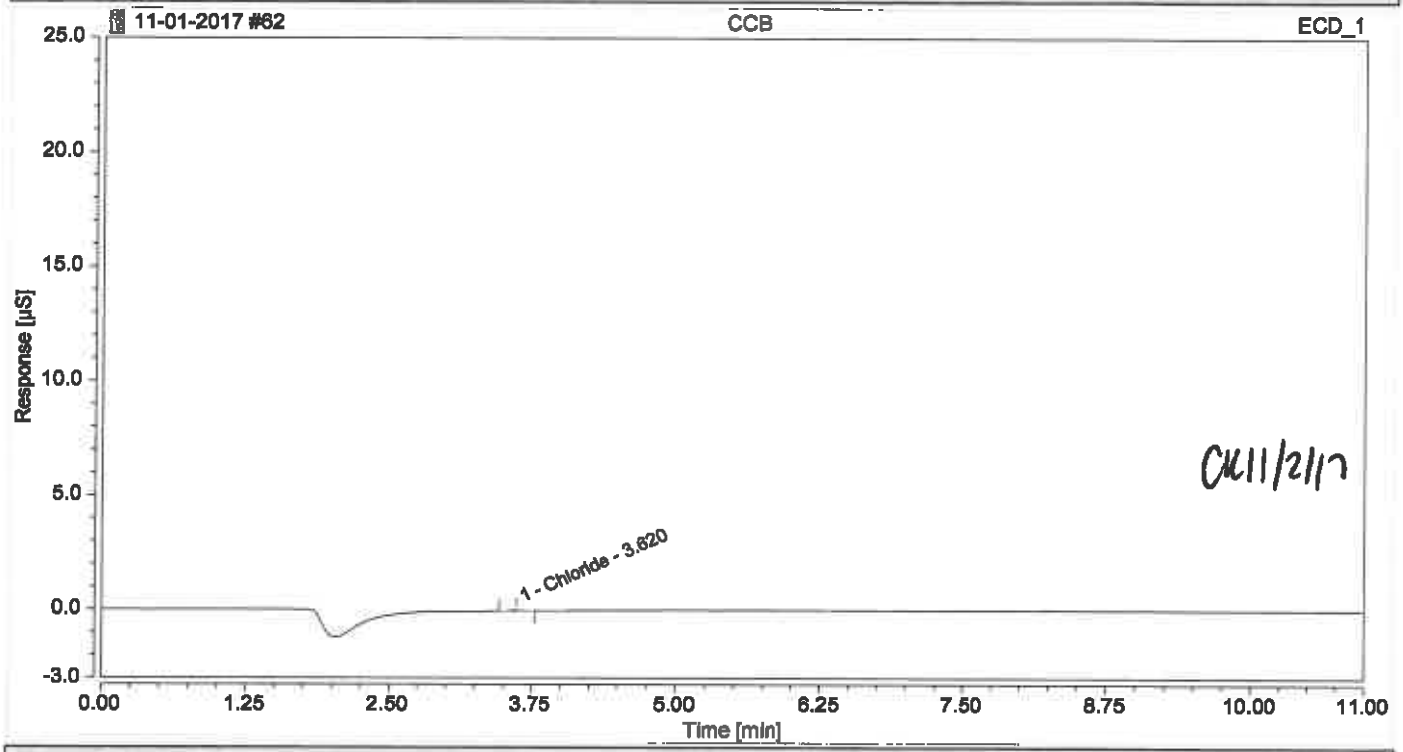
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.640	0.20813	0.779	7.78	6.20	0.5449
2	Chloride	3.600	0.28536	2.036	10.66	16.20	0.9633
3	Nitrite	4.183	0.53504	2.876	19.99	22.88	0.9712
4	Bromide	5.200	0.11659	0.665	4.36	5.29	0.9897
5	Nitrate	5.760	0.75531	3.526	28.22	28.06	0.9552
6	Orthophosphate as P	6.950	0.21298	0.751	7.96	5.98	0.9568
7	Sulfate	8.267	0.56265	1.935	21.03	15.40	2.3975
Total:			**2.676**	**12.568**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**11.00**
Vial Number:	**RA6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 23:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

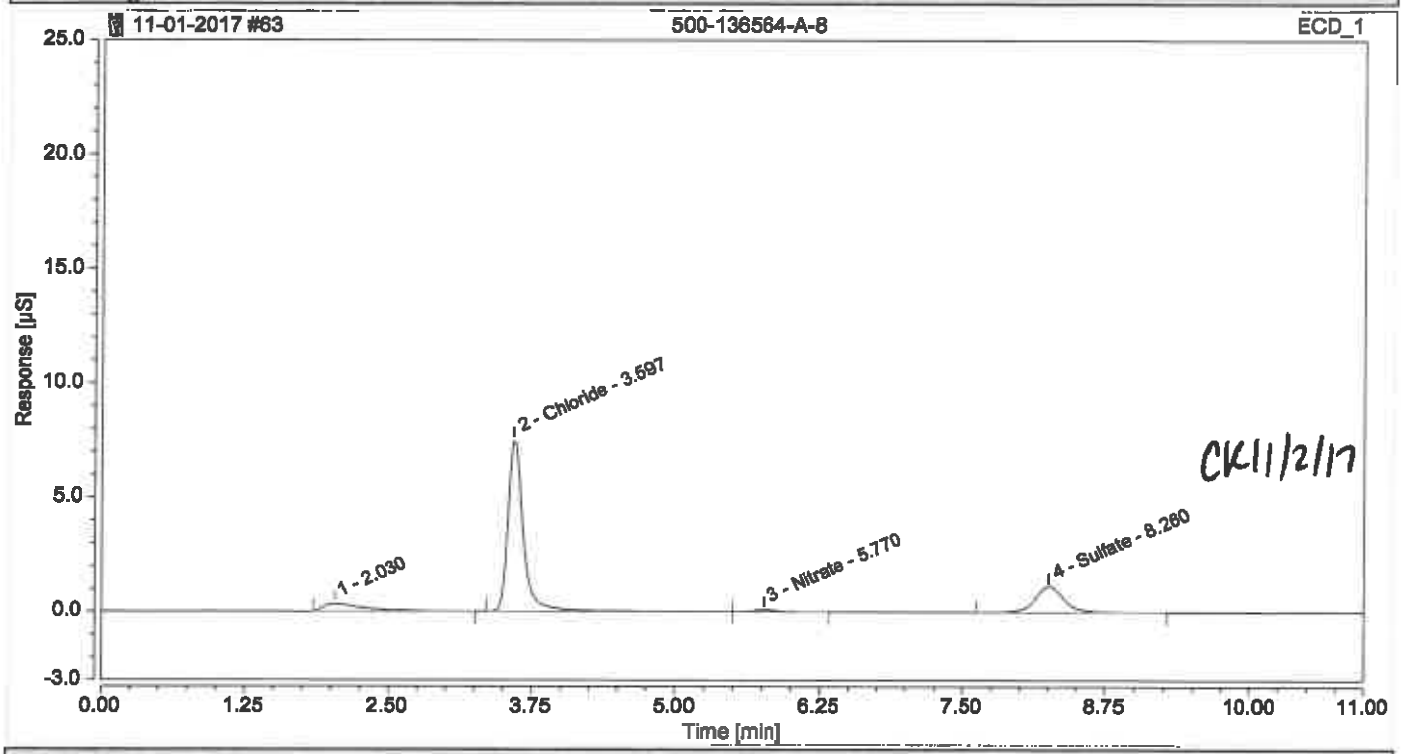
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.620	0.00536	0.045	100.00	100.00	0.1049
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.005**	**0.045**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-8**	*Run Time (min):*	**11.00**
Vial Number:	**GC6**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 23:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

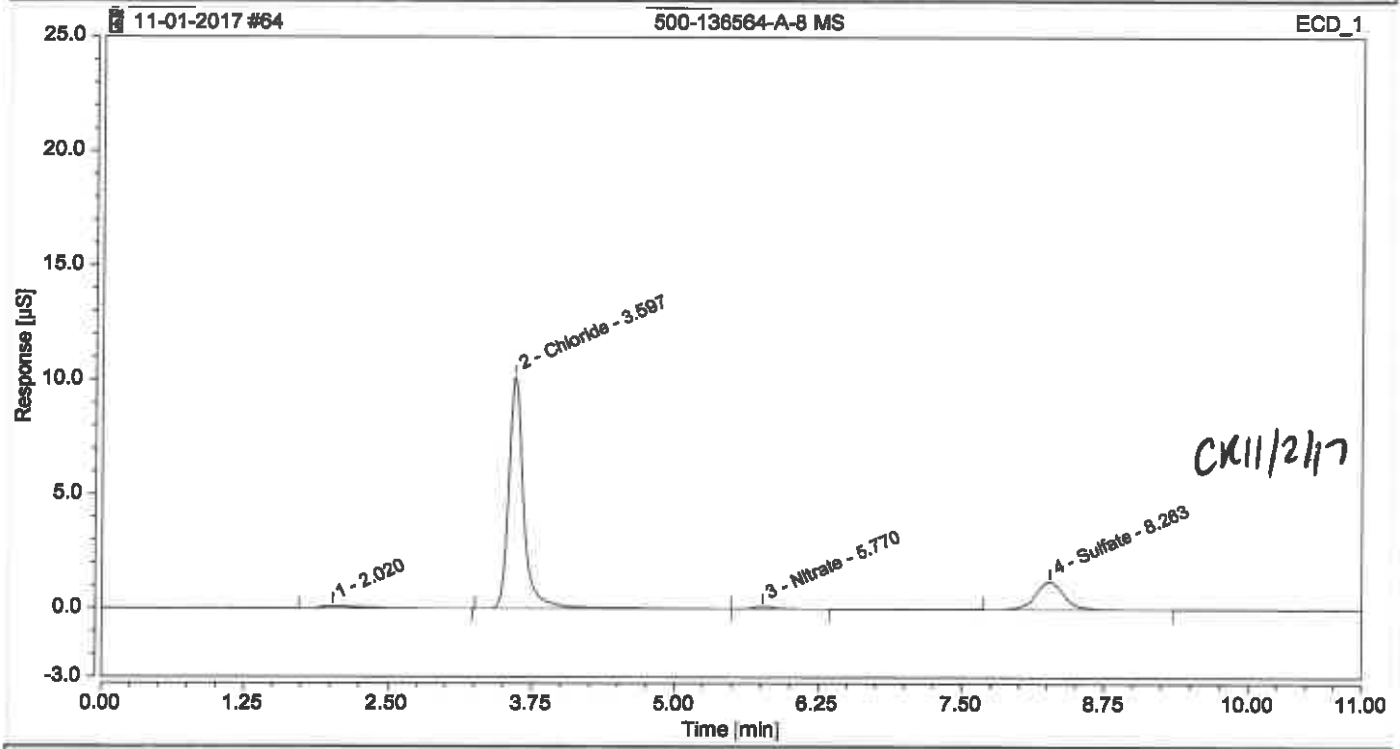
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.030	0.13486	0.325	8.19	3.58	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride KE	3.597	1.14846	7.518	69.75	82.74	360.9160
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.770	0.02275	0.104	1.38	1.14	8.7108
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.260	0.34043	1.140	20.68	12.54	145.8259
Total:			**1.647**	**9.087**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-8 MS**	*Run Time (min):*	**11.00**
Vial Number:	**GC7**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 23:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

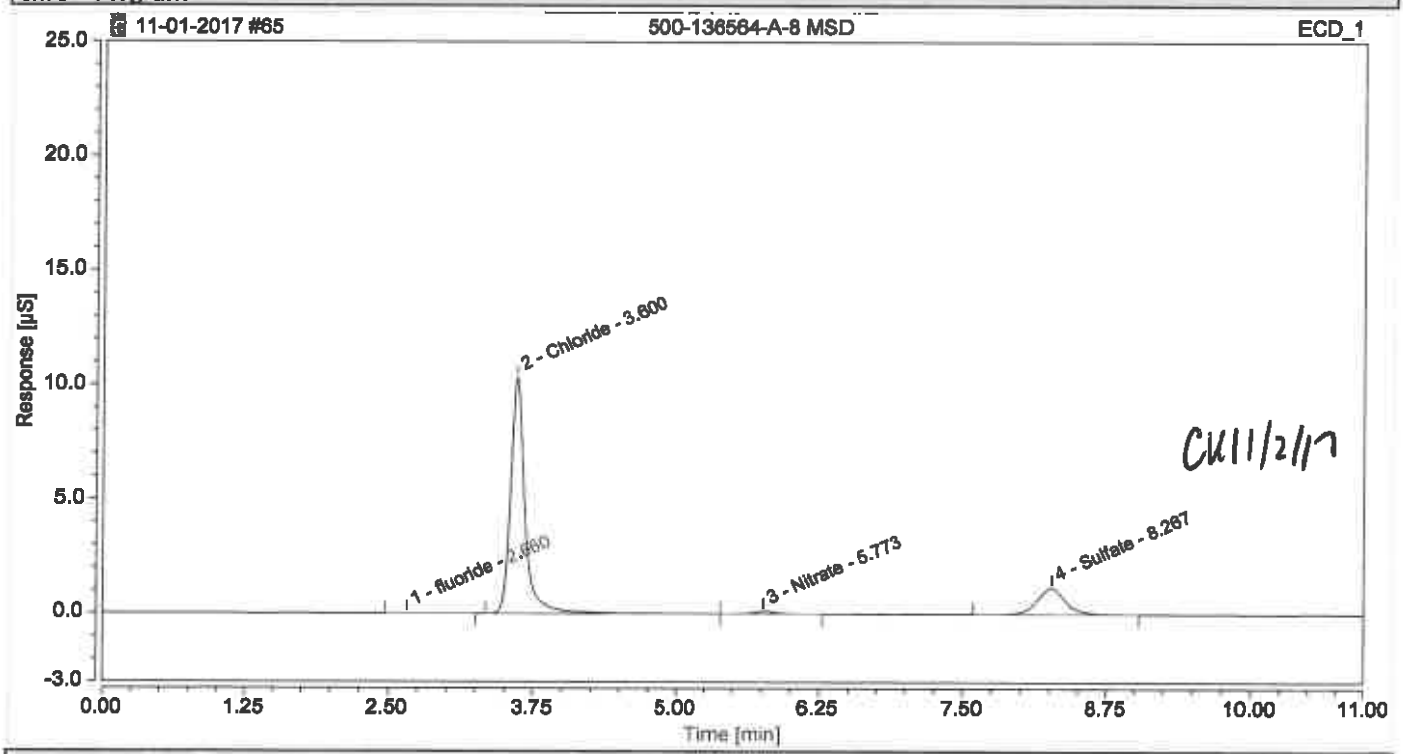
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1		2.020	0.04875	0.107	2.49	0.92	n.a.
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	3.597	1.51516	10.138	77.53	87.56	473.3306
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.770	0.02586	0.111	1.32	0.96	9.0799
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.263	0.36453	1.222	18.65	10.55	156.0127
Total:			**1.954**	**11.578**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**500-136564-A-8 MSD**	*Run Time (min):*	**11.00**
Vial Number:	**GC8**	*Injection Volume:*	**25.00**
Injection Type:	**Spiked**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**CL**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**100.0000**
Injection Date/Time:	**01/Nov/17 23:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

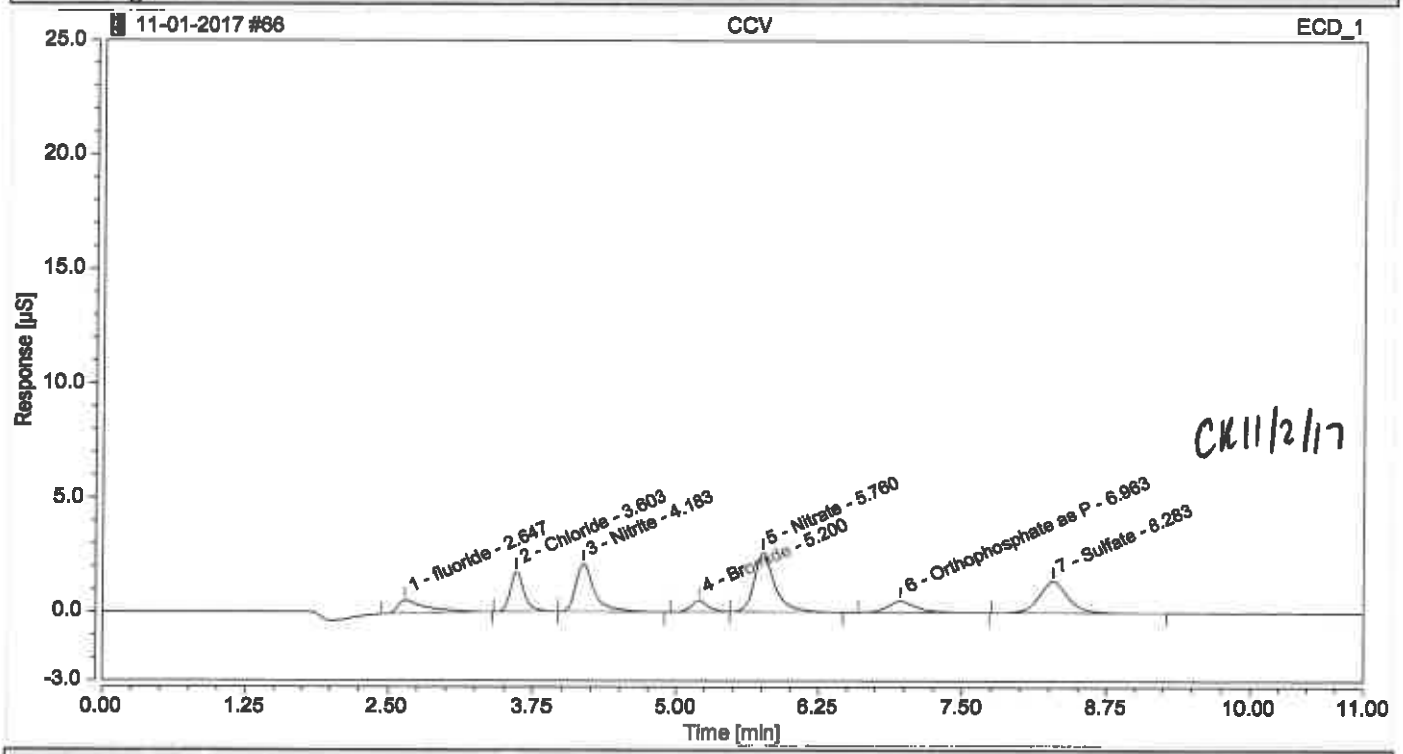
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.660	0.00332	0.008	0.18	0.07	0.2214
2	Chloride	3.600	1.51529	10.303	80.42	88.99	473.3718
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Nitrate	5.773	0.02578	0.112	1.37	0.96	9.0697
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	8.267	0.33983	1.156	18.04	9.98	145.5719
Total:			**1.884**	**11.578**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**11.00**
Vial Number:	**RA7**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Nov/17 23:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

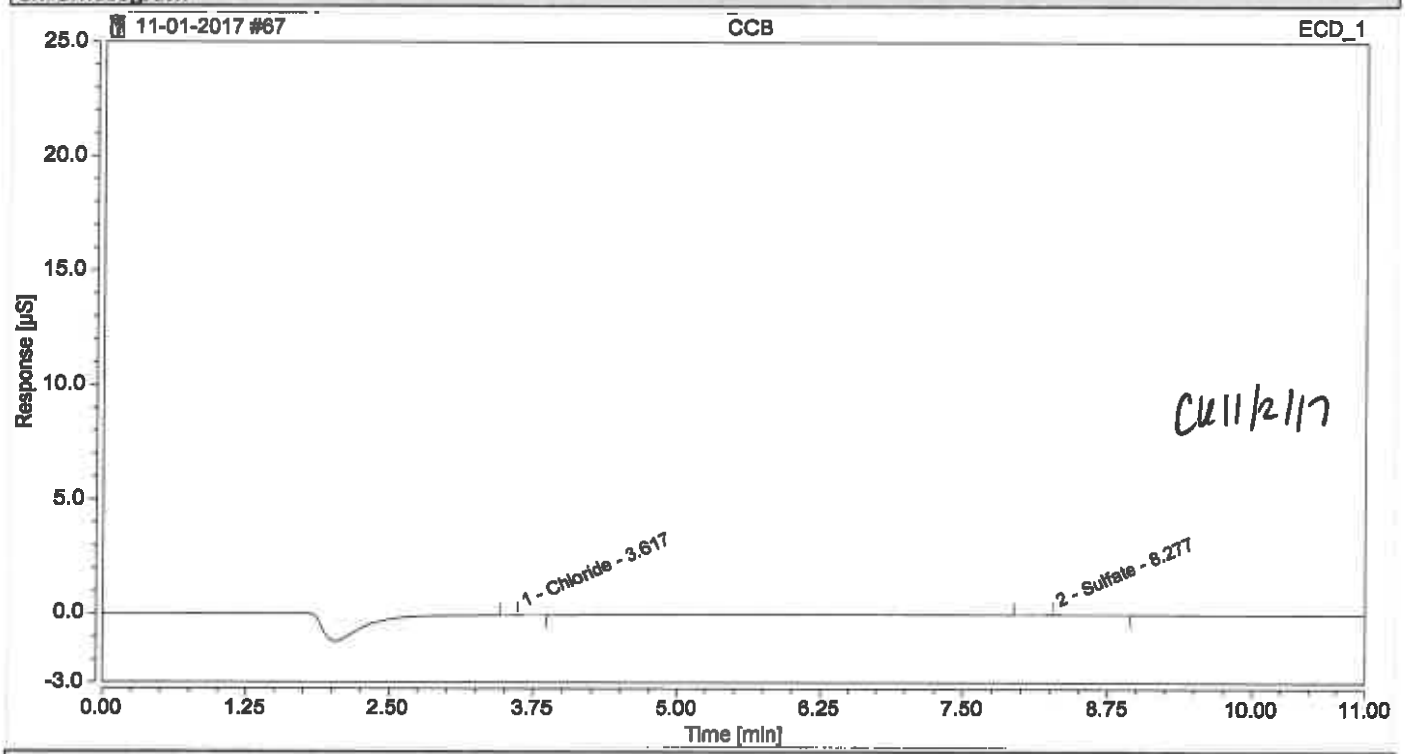
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.647	0.16949	0.587	8.56	6.27	0.4425
2	Chloride	3.603	0.23893	1.740	12.07	18.57	0.8210
3	Nitrite	4.183	0.38646	2.085	19.52	22.25	0.7322
4	Bromide	5.200	0.08578	0.493	4.33	5.26	0.7367
5	Nitrate	5.760	0.55413	2.583	27.99	27.57	0.7168
6	Orthophosphate as P	6.963	0.14074	0.494	7.11	5.27	0.6686
7	Sulfate	8.283	0.40430	1.389	20.42	14.82	1.7282
Total:			**1.980**	**9.372**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**11.00**
Vial Number:	**RA8**	*Injection Volume:*	**25.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Comments:*	
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Nov/17 00:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
n.a.	fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	3.617	0.00332	0.025	23.54	47.89	0.0987
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Orthophosphate as P	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Sulfate	8.277	0.01077	0.028	76.46	52.11	0.0649
Total:			**0.014**	**0.053**	**100.00**	**100.00**	

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	WSTICBR1_00008	WSTICBR2_00009	WSTICCL1_00016	WSTICCL2_00016
ICV~500-407999/1		9056A		100 mL	100 mL		200 uL		300 uL
ICB~500-407999/2		9056A							
500-136523-L-2	OMW3D-GW-103017	9056A	T						
500-136523-L-2	OMW3D-GW-103017	9056A	T						
500-136523-L-4	OMW4D-GW-103017	9056A	T						
500-136523-L-4	OMW4D-GW-103017	9056A	T						
MB~500-407999/7		9056A							
LCS~500-407999/8		9056A		100 mL	100 mL		200 uL		300 uL
500-136435-B-1	Primary	300	T						
500-136451-B-1	Primary	300	T						
500-136452-B-1	Primary	300	T						
500-126640-F-1	OC-T3-102617	300	T						
CCV~500-407999/1		9056A		100 mL	100 mL	100 uL		100 uL	
CCB~500-407999/1		9056A							
500-126640-F-1	OC-T3-102617	300	T						
500-135677-D-1	PNWL1710R21L	9056A	D						
500-135677-D-1	PNWL1710R21L	9056A	D						
500-136023-B-1	T-9-C	300	T						
500-135994-B-1	Hickory Creek C1	300	T						
500-135994-B-1	Hickory Creek C1	300	T						
500-135994-B-2	Hickory Creek C2	300	T						
500-135994-B-2	Hickory Creek C2	300	T						
500-135994-C-3	Hickory Creek C3	300	T						
500-135994-C-3	Hickory Creek C3	300	T						
CCV~500-407999/25		300		100 mL	100 mL	100 uL		100 uL	

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	WSTICN031_00007	WSTICNO32_00014	WSTICS1_00010	WSTICS2_00012
ICV~500-407999/1		9056A			200 uL		500 uL
ICB~500-407999/2		9056A					
500-136523-L-2	OMW3D-GW-103017	9056A	T				
500-136523-L-2	OMW3D-GW-103017	9056A	T				
500-136523-L-4	OMW4D-GW-103017	9056A	T				
500-136523-L-4	OMW4D-GW-103017	9056A	T				
MB~500-407999/7		9056A					
LCS~500-407999/8		9056A			200 uL		500 uL
500-136435-B-1	Primary	300	T				
500-136451-B-1	Primary	300	T				
500-136452-B-1	Primary	300	T				
500-126640-F-1	OC-T3-102617	300	T				
CCV~500-407999/1		9056A		100 uL		250 uL	
CCB~500-407999/1		9056A					
500-126640-F-1	OC-T3-102617	300	T				
500-135677-D-1	PNWL1710R21L	9056A	D				
500-135677-D-1	PNWL1710R21L	9056A	D				
500-136023-B-1	T-9-C	300	T				
500-135994-B-1	Hickory Creek C1	300	T				
500-135994-B-1	Hickory Creek C1	300	T				
500-135994-B-2	Hickory Creek C2	300	T				
500-135994-B-2	Hickory Creek C2	300	T				
500-135994-C-3	Hickory Creek C3	300	T				
500-135994-C-3	Hickory Creek C3	300	T				
CCV~500-407999/25		300		100 uL		250 uL	

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General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	WSTICBR1_00008	WSTICBR2_00009	WSTICCL1_00016	WSTICCL2_00016
CCB~500-407999/26		300							
500-136482-B-1	Primary	300	T						
480-126698-A-1	OC-T4-102717	300	T						
480-126811-F-1	OC-T5-103017	300	T						
500-136554-B-1	Primary	300	T						
480-126698-A-1	OC-T4-102717	300	T						
500-136554-B-1	Primary	300	T						
500-136523-L-2	OMW3D-GW-103017	9056A	T						
500-136523-L-2	OMW3D-GW-103017	9056A	T						
500-136523-L-4	OMW4D-GW-103017	9056A	T						
500-136523-L-4	OMW4D-GW-103017	9056A	T						
CCV~500-407999/3		300		100 mL	100 mL	100 uL		100 uL	
CCB~500-407999/3		300							
500-136523-L-4~MS		9056A	T	100 mL	100 mL				
500-136523-L-4~MSD		9056A	T	100 mL	100 mL				
500-136523-L-4~MS		9056A	T	100 mL	100 mL				
500-136523-L-4~MSD		9056A	T	100 mL	100 mL				
500-136523-L-4~MS		9056A	T	100 mL	100 mL				100 uL
500-136523-L-4~MSD		9056A	T	100 mL	100 mL				100 uL
500-135782-U-11	JL-JLM109B-WG-101717	300	T						
500-135782-U-11~MS		300	T	100 mL	100 mL		100 uL		
500-135782-U-11~MSD		300	T	100 mL	100 mL		100 uL		
500-135952-U-1	JL-JLM109A-WG-101917	300	T						
CCV~500-407999/49		9056A		100 mL	100 mL	100 uL		100 uL	
CCB~500-407999/50		9056A							

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	WSTICN031_00007	WSTICNO32_00014	WSTICS1_00010	WSTICS2_00012
CCB~500-407999/26		300					
500-136482-B-1	Primary	300	T				
480-126698-A-1	OC-T4-102717	300	T				
480-126811-F-1	OC-T5-103017	300	T				
500-136554-B-1	Primary	300	T				
480-126698-A-1	OC-T4-102717	300	T				
500-136554-B-1	Primary	300	T				
500-136523-L-2	OMW3D-GW-103017	9056A	T				
500-136523-L-2	OMW3D-GW-103017	9056A	T				
500-136523-L-4	OMW4D-GW-103017	9056A	T				
500-136523-L-4	OMW4D-GW-103017	9056A	T				
CCV~500-407999/3		300		100 uL		250 uL	
CCB~500-407999/3		300					
500-136523-L-4~MS		9056A	T		100 uL		
500-136523-L-4~MS		9056A	T		100 uL		
500-136523-L-4~MS		9056A	T				250 uL
500-136523-L-4~MSD		9056A	T				250 uL
500-136523-L-4~MS		9056A	T				
500-136523-L-4~MSD		9056A	T				
500-135782-U-11	JL-JLM109B-WG-101717	300	T				
500-135782-U-11~MS		300	T				
500-135782-U-11~MSD		300	T				
500-135952-U-1	JL-JLM109A-WG-101917	300	T				
CCV~500-407999/49		9056A		100 uL		250 uL	
CCB~500-407999/50		9056A					

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	WSTICBR1_00008	WSTICBR2_00009	WSTICCL1_00016	WSTICCL2_00016
500-135952-U-3	JL-JLM105A-WG-101917	300	T						
500-135952-U-5	JL-JLM105B-WG-101917	300	T						
500-135952-U-7	EB01-101917	300	T						
MB~500-407999/54		300							
LCS~500-407999/55		300		100 mL	100 mL				300 uL
500-136564-A-1	Regional Raw	300	T						
500-136564-A-2	Regional Final	300	T						
500-136564-A-3	West Raw	300	T						
500-136564-A-4	West Final	300	T						
500-136564-A-5	North Raw	300	T						
CCV~500-407999/6		300		100 mL	100 mL	100 uL		100 uL	
CCB~500-407999/6		300							
500-136564-A-8	North Final	300	T						
500-136564-A-8~MS		300	T	100 mL	100 mL				100 uL
500-136564-A-8~MSD		300	T	100 mL	100 mL				100 uL
CCV~500-407999/66		300		100 mL	100 mL			100 uL	
CCB~500-407999/67		300							

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	WSTICN031_00007	WSTICNO32_00014	WSTICS1_00010	WSTICS2_00012
500-135952-U-3	JL-JLM105A-WG-101917	300	T				
500-135952-U-5	JL-JLM105B-WG-101917	300	T				
500-135952-U-7	EB01-101917	300	T				
MB~500-407999/54		300					
LCS~500-407999/55		300					
500-136564-A-1	Regional Raw	300	T				
500-136564-A-2	Regional Final	300	T				
500-136564-A-3	West Raw	300	T				
500-136564-A-4	West Final	300	T				
500-136564-A-5	North Raw	300	T				
CCV~500-407999/6		300		100 uL		250 uL	
CCB~500-407999/6		300					
500-136564-A-8	North Final	300	T				
500-136564-A-8~MS		300	T				
500-136564-A-8~MS		300	T				
CCV~500-407999/66		300					
CCB~500-407999/67		300					

Filter ID: WHATMAN-9831372 / 9814904 -0.45
Balance ID: NA
Pipette ID: NA
Eluent 1 ID: ELUENTCONC00023
Regeneration Solution ID: NA
Ethylenediamine ID: NA

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Comments

Lab ID	Client ID	Method Chain	Basis	Analysis comment
ICV~500-407999/1		9056A		
ICB~500-407999/2		9056A		
500-136523-L-2	OMW3D-GW-103017	9056A	T	
500-136523-L-2	OMW3D-GW-103017	9056A	T	
500-136523-L-4	OMW4D-GW-103017	9056A	T	
500-136523-L-4	OMW4D-GW-103017	9056A	T	
MB~500-407999/7		9056A		
LCS~500-407999/8		9056A		
500-136435-B-1	Primary	300	T	
500-136451-B-1	Primary	300	T	
500-136452-B-1	Primary	300	T	
480-126640-F-1	OC-T3-102617	300	T	
CCV~500-407999/13		9056A		
CCB~500-407999/14		9056A		
480-126640-F-1	OC-T3-102617	300	T	
500-135677-D-1	PNWL1710R21L	9056A	D	
500-135677-D-1	PNWL1710R21L	9056A	D	
500-136023-B-1	T-9-C	300	T	
500-135994-B-1	Hickory Creek C1	300	T	
500-135994-B-1	Hickory Creek C1	300	T	
500-135994-B-2	Hickory Creek C2	300	T	
500-135994-B-2	Hickory Creek C2	300	T	
500-135994-C-3	Hickory Creek C3	300	T	
500-135994-C-3	Hickory Creek C3	300	T	
CCV~500-407999/25		300		

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Analysis comment	Comments
CCB~500-407999/26		300			
500-136482-B-1	Primary	300	T		
480-126698-A-1	OC-T4-102717	300	T		
480-126811-F-1	OC-T5-103017	300	T		
500-136554-B-1	Primary	300	T		
480-126698-A-1	OC-T4-102717	300	T		
500-136554-B-1	Primary	300	T		
500-136523-L-2	OMW3D-GW-103017	9056A	T		
500-136523-L-2	OMW3D-GW-103017	9056A	T		
500-136523-L-4	OMW4D-GW-103017	9056A	T		
500-136523-L-4	OMW4D-GW-103017	9056A	T		
CCV~500-407999/37		300			
CCB~500-407999/38		300			
500-136523-L-4~MS		9056A	T		
500-136523-L-4~MSD		9056A	T		
500-136523-L-4~MS		9056A	T		
500-136523-L-4~MSD		9056A	T		
500-136523-L-4~MS		9056A	T		
500-136523-L-4~MSD		9056A	T		
500-135782-U-11	JL-JLM109B-WG-101717	300	T		
500-135782-U-11~MS		300	T		
500-135782-U-11~MSD		300	T		
500-135952-U-1	JL-JLM109A-WG-101917	300	T		
CCV~500-407999/49		9056A			
CCB~500-407999/50		9056A			

General Chemistry Worksheet

Batch Number: 500-407999
Method: 300.0
Analyst: Krupa, Colleen C

Date Open: Nov 01 2017 9:16AM
Batch End:

Comments

Lab ID	Client ID	Method Chain	Basis	Analysis comment
500-135952-U-3	JL-JLM105A-WG-101917	300	T	
500-135952-U-5	JL-JLM105B-WG-101917	300	T	
500-135952-U-7	EB01-101917	300	T	
MB~500-407999/54		300		
LCS~500-407999/55		300		
500-136564-A-1	Regional Raw	300	T	
500-136564-A-2	Regional Final	300	T	
500-136564-A-3	West Raw	300	T	
500-136564-A-4	West Final	300	T	
500-136564-A-5	North Raw	300	T	
CCV~500-407999/61		300		
CCB~500-407999/62		300		
500-136564-A-8	North Final	300	T	
500-136564-A-8~MS		300	T	
500-136564-A-8~MSD		300	T	
CCV~500-407999/66		300		
CCB~500-407999/67		300		

Page 50 of 58

Batch Comment: AG14A-5UM/AS14A-5UM

Book# 5067

TestAmerica Chicago

Sulfide / Reactive Sulfide

Page #: **0305**

Method:

SM4500S2-F-00 ___ ✓ SW-846 9034 ___ ✓

SW-846 9030B/9034 ___ ✓ SW-846 7.3.4.2/9034 ___

NCM #: ___

Analytical Batch #: 408045

Prep Batch #: 408044

Normality of I_2:

Trial 1 = 5.03 mLs

Trial 2 = 5.02 mLs

Trial 3 = 4.99 mLs

Avg. = 5.01 mLs

Titration Dispener ID: C-3030

(5.01 avg. X N $Na_2S_2O_3$) / 5 = 0.0253 N I_2

N of $Na_2S_2O_3$ = 0.0252

N Check: Date: 10/20/17 Book No.: 5067 Page No.: 289

Result (mg/L or mg/kg) = (mLs I_2)(N I_2) - (mLs $Na_2S_2O_3$) (N $Na_2S_2O_3$) x 16,000 / Sample Size (mLs or grams)

Sample #	mL Sample Size	mLs I_2	mLs $Na_2S_2O_3$	% Rec. (RPD)	Comments
MB	250	5	5.05		
LCS			3.12	94%	
500-136458-2		20	2.08		
TM 310-117646-2		10	5.14		
500-136522-1		5	5.10		
-1MS			3.23	88%	
-1MSD			3.17	91%	3RPD
-4			5.08		
-6			5.41		
-9			4.93		
500-136523-2			5.54		
-4			5.50		
500-136584-2			5.16		
-3			5.23		
-8			5.27		
500-136606-1			2.79		
-2			5.20		

CB 11/02/17

Comments:

Standards Traceability

Stock Soln. I ID # (LCS/MS): WSTSF1-00070 Standardization: Book 5067 Page 282

Note: Working standards are prepared daily from noted Stock Solution.

Spiking Levels (mg/L): LCS: 3.277 MS (Water): 3.277 ~~MS (Soil):~~

Preparation (Circle): a. Filtered ~~b. Bubbled c. Bubbled with Heat~~

Prep Analyst: ___ Date/Time: ___

Analyst: [signature] Date/Time: 11/2/17 06:35-07:23

Reviewer: [signature] Date: 11/2/17

HI-22-045/I-05/14

TestAmerica Chicago

STANDARDIZATION OF SULFIDE STOCK SOLUTION

Book #5067

Sulfide / Reactive Sulfide Page #: 0282

Method:

SM4500S2-F-00 _____ SW-846 9034 _____ NCM #: _____

SW-846 9030B/9034 _____ SW-846 7.3.4.2/9034 _____ Analytical Batch #: _____

Normality of I_2: Prep Batch #: _____

Trial 1 = 5.05 mLs

Trial 2 = 5.08 mLs Titration Dispener ID: C-3030

Trial 3 = 5.07 mLs

Avg. = 5.07 mLs (5.07 avg. X N $Na_2S_2O_3$) / 5 = 0.0224 N I_2

N of $Na_2S_2O_3$ = 0.0221

N Check: Date: 10/6/17 Book No.: 5067 Page No.: 272

Result (mg/L or mg/kg) = (mLs I_2)(N I_2) - (mLs $Na_2S_2O_3$) (N $Na_2S_2O_3$) x 16,000 / Sample Size (mLs or grams)

Sample #	Sample Size	mLs I_2	mLs $Na_2S_2O_3$	% Rec. (RPD)	Comments
TRIAL 1			2.73		
2			2.77		
3			2.74		
		Avg. =	2.75		
(5.00	x 0.0224)		- (2.75	x 0.0221)	
(0.1120	)		- (0.0608	)	= 0.0512
SOIL = (0.0512)	x 16,000/5		= 163.84		
WATER = (0.0512)	x 16,000/250		= 3.277		

Comments:

Standards Traceability

Stock Soln. I ID # (LCS/MS): WSTSF1_00070 Standardization: Book 5067 Page 282

Note: Working standards are prepared daily from noted Stock Solution.

Spiking Levels (mg/L): LCS: _____ MS (Water): 3.277 MS (Soil): 163.84

Preparation (Circle): a. Filtered b. Bubbled c. Bubbled with Heat

Prep Analyst: _____ Date/Time: _____

Analyst: Cheryl L Boyd Date/Time: 10/13/17

Reviewer: _____ Date: 10/15/17

CHI-22-045/I-05/14

TestAmerica Chicago
Sulfide / Reactive Sulfide

STANDARDIZATION OF SODIUM THIOSULFATE

Book #5067

Page #: **0289**

Method:
SM4500S2-F-00 _____ SW-846 9034 _____
SW-846 9030B/9034 _____ SW-846 7.3.4.2/9034 _____

NCM #: _____
Analytical Batch #: _____
Prep Batch #: _____

Normality of I_2:

Trial 1 = _____ mLs
Trial 2 = _____ mLs
Trial 3 = _____ mLs
Avg. = _____ mLs

Titration Dispenser ID: C-3030

(_____ X N $Na_2S_2O_3$) / 5 = _____
avg. N I_2

N of $Na_2S_2O_3$ = 0.0252
N Check: Date: 10/20/17 Book No.: 5067 Page No.: 289

Result (mg/L or mg/kg) = (mLs I_2)(N I_2) - (mLs $Na_2S_2O_3$) (N $Na_2S_2O_3$) x 16,000 / Sample Size (mLs or grams)

Sample #	Sample Size	mLs I_2	mLs $Na_2S_2O_3$	% Rec. (RPD)	Comments
TRIAL 1			9.89		
2			9.95		
3			9.93		
		Avg. =	9.92		

(9.92 x N) = (0.025 x 10)

(9.92 x N) = (0.250)

N = 0.250 / 9.92

N = 0.0252

Comments:

Standards Traceability

Stock Soln. I ID # (LCS/MS): _____ Standardization: Book _____ Page _____
Note: Working standards are prepared daily from noted Stock Solution.
Spiking Levels (mg/L): LCS: _____ MS (Water): _____ MS (Soil): _____

Preparation (Circle): a. Filtered b. Bubbled c. Bubbled with Heat

Prep Analyst: _____ Date/Time: _____
Analyst: Cheryl L Boyd Date/Time: 10/20/17
Reviewer: Colleen Kuyk Date: 11/7/17

HI-22-045/I-05/14

9030B Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 500-408044

Analyst: Boyd, Cheryl L

Batch Open: 11/1/2017 6:00:00PM

Batch End: 11/1/2017 6:30:00PM

Sulfide, Distillation (Acid Soluble and Insoluble)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~500-408044/1 N/A	N/A		250 mL	250 mL	N/A	N/A	N/A		MB 500-408044/1-A
2	LCS~500-408044/2 N/A	N/A		250 mL	250 mL	N/A	N/A	N/A		LCS 500-408044/2-A
3	500-136458-J-2 (9034_Calc)	N/A (500-136458-1)	Water	250 mL	250 mL	11/3/17	4_Day_RUSH	2		500-136458-J-2-A

9030B Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 500-408044

Analyst: Boyd, Cheryl L

Batch Open: 11/1/2017 6:00:00PM

Batch End: 11/1/2017 6:30:00PM

Batch Notes

Blank Matrix ID	
Formaldehyde ID	
Zinc Acetate Buffer ID	
Sodium Hydroxide ID	
Sulfuric Acid Reagent ID Number	
Pipette ID	
pH Strip ID	
Uncorrected Temperature	
Oven, Bath or Block Temperature 1	
Uncorrected Temperature 2	
Oven, Bath or Block Temperature 2	
Thermometer ID	
Zinc Acetate Dispenser ID	
DI Water Dispenser ID	
Sulfuric Acid Dispenser ID	
Lead Acetate Paper Lot #	
Batch Comment	

9030B Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 500-408044

Analyst: Boyd, Cheryl L

Batch Open: 11/1/2017 6:00:00PM

Batch End: 11/1/2017 6:30:00PM

Comments

9030B Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 500-408044

Analyst: Boyd, Cheryl L

Batch Open: 11/1/2017 6:00:00PM

Batch End: 11/1/2017 6:30:00PM

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

General Chemistry Worksheet

Batch Number: 500-408045
Method: SM 4500 S2 F
Analyst: Boyd, Cheryl L

Date Open: Nov 02 2017 6:35AM
Batch End: Nov 02 2017 7:23AM

Lab ID	Client ID	Method Chain	Basis	Amount of Iodine	Volume of Titrant One Added	Initial weight/volume of sample	Final weight/volume of sample	Calculation Message	WSTSF1_00070
MB~500-408045/1		9034_Calc		5 mL	5.05 mL	250 mL	250 mL	OK	
LCS~500-408045/2		9034_Calc		5 mL	3.12 mL	250 mL	250 mL	OK	5 mL
500-136458-J-2-A		9034_Calc	T	20 mL	2.08 mL	250 mL	250 mL	OK	
310-117646-B-2-A		9034_Calc	Y	10 mL	5.14 mL	250 mL	250 mL	OK	
500-136522-P-1	W2 20171030	9034_Calc	T	5 mL	5.10 mL	250 mL	250 mL	OK	
500-136522-P-1~MS		9034_Calc	T	5 mL	3.23 mL	250 mL	250 mL	OK	5 mL
500-136522-P-1~MSD		9034_Calc	T	5 mL	3.17 mL	250 mL	250 mL	OK	5 mL
500-136522-P-4	WSW-4 20171030	9034_Calc	T	5 mL	5.08 mL	250 mL	250 mL	OK	
500-136522-J-6	EB-101 20171030	9034_Calc	T	5 mL	5.41 mL	250 mL	250 mL	OK	
500-136522-P-9	WSW-2 20171030	9034_Calc	T	5 mL	4.93 mL	250 mL	250 mL	OK	
500-136523-M-2	OMW3D-GW-103017	SM4500_S2_F	T	5 mL	5.54 mL	250 mL	250 mL	OK	
500-136523-M-4	OMW4D-GW-103017	SM4500_S2_F	T	5 mL	5.50 mL	250 mL	250 mL	OK	
500-136584-P-2	DUP-301 20171031	9034_Calc	T	5 mL	5.16 mL	250 mL	250 mL	OK	
500-136584-P-3	U-20171031	9034_Calc	T	5 mL	5.23 mL	250 mL	250 mL	OK	
500-136584-P-8	CSW-6 20171031	9034_Calc	T	5 mL	5.27 mL	250 mL	250 mL	OK	
500-136606-D-1	Anaerobic Influent	SM4500_S2_F	T	5 mL	2.79 mL	250 mL	250 mL	OK	
500-136606-D-2	Anaerobic Effluent	SM4500_S2_F	T	5 mL	5.20 mL	250 mL	250 mL	OK	

Normality of First Titrant:	0.0252 N	DI Water Dispenser ID:	N/A
Normality of Iodine Solution:	0.0253 N	Sulfuric Acid Dispenser ID:	N/A
First Start time:	06:35	Iodine Dispenser ID:	N/A
First End time:	07:23	Sodium Thiosulfate Dispenser ID:	C-3030
Nominal Amount Used:	250 mL		
Perform Calculation (0=No, 1=Yes):	1		
Sodium Thiosulfate Vendor:	JTBAKER		
Sodium Thiosulfate ID:	0.025NA2S2O300040		
Sulfuric Acid Reagent ID Number:	N/A		
Iodine Vendor:	EMD		
Iodine Lot Number:	0.25NIODINE00051		
Pipette ID:	N/A		
Zinc Acetate Buffer ID:	N/A		
Hydrochloric Acid ID:	6NHCL00032		
Sodium Hydroxide ID:	N/A		
Starch Lot Number:	STARCHIND00020		
Filter ID:	WHATMANGLASSFIBERFILTER		
Zinc Acetate Dispenser ID:	N/A		

TestAmerica Chicago

Total Organic/Inorganic Carbon

Method:

SM5310C-00 ✓
SW846 9060 ✓ 9060A ✓ Diss

Analytical Batch #: 409001
Analytical Batch #: 409011
Prep Batch #: 408906
NCM #:

Instrument: Fusion – TOC5 ___
Phoenix – TOC3 ✓

Calibration Range: 1.0 – 40.0 mg/L
Reporting Limit: 1.0 mg/L

Standard Curve: Date of Curve 10/9/17

Calculations:
Waters: mg/L = mg/L X dilution

Standards Traceability:

Stock I: Calibration and Curve; CCV: HLCS — WCSTTC1_00122
Stock II: LCS, ICV, Matrix spikes MRL — WCSTTC2_00132
Stock II: TIC sparger check — WSTTIC2_00087

Spiking Levels:

		ICAL Standards mg/L	Stock I Spike Amount uLs	DI Amount mL
LCS	10 mg/L	0	0	200
ICV	20 mg/L	1.0	100	200
CCV	10 mg/L	5.0	500	200
		10	1000	200
MS/MSD	10 mg/L	15	1500	Dilute to 200 mL
TIC check	10 mg/L	20	2000	"
MRL	1.0 mg/L	30	3000	"
HLCS	30 mg/L	40	4000	"

Comments:

Analyst: Heather M. Wrona — Date of analysis: 11/7/17
Reviewer: Colleen Kuypa — Date: 11/8/17

CHI-22-12-105/J-03/15

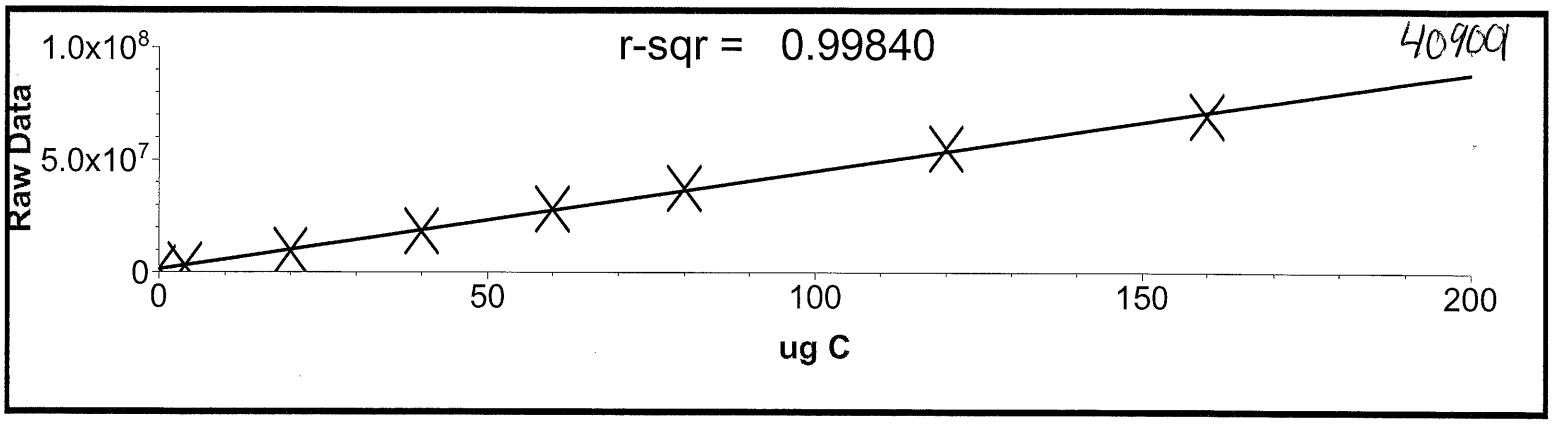
(016-001)

409001

Calibration Report Print Date/Time: 2017/11/08 11:09:17

Cal. Curve ID: TOCCURVE
Created: 10/09/2017 02:06
Calibration Factor (m): 4.363e+05
Y Intercept (b): 1303840
r-squared: 0.99840

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
0	1339675	0.000	0.082		10/09/2017 00:21
1	2837321	4.000	3.515		10/09/2017 00:30
5	9425100	20.000	18.613		10/09/2017 00:38
10	18063794	40.000	38.413		10/09/2017 00:48
15	27991500	60.000	61.167	Max Integrati	10/09/2017 00:58
20	37275764	80.000	82.446	Max Integrati	10/09/2017 01:08
30	55132044	120.000	123.371	Over-range	10/09/2017 01:18
40	69540120	160.000	156.394	Over-range	10/09/2017 02:05


r-sqr = 0.99840
40909
Raw Data
1.0x10^8
5.0x10^7
0
0
50
100
150
200
ug C

409001

Multiple Analysis Report Print Date/Time: 2017/11/08 11:11:18

Sample ID	Result	Std. Dev.	RSD	Mode	ALT	Method ID	Sample Type	Vial	Timestamp	Message
TIC-STD	0.4218			TOC		TOC Range 0.1 - 20 p	Sample	2	11/07/2017 17:19	
ICV	20.3494			TOC		TOC Range 0.1 - 20 p	Sample	3	11/07/2017 17:29	Max Integration
Time Reached										
ICB	0.2618			TOC		TOC Range 0.1 - 20 p	Sample	4	11/07/2017 17:38	
MB	0.1621			TOC		TOC Range 0.1 - 20 p	Sample	5	11/07/2017 17:46	
MB	0.1754			TOC		TOC Range 0.1 - 20 p	Sample	5	11/07/2017 17:54	
LCS	9.5882			TOC		TOC Range 0.1 - 20 p	Sample	6	11/07/2017 18:04	
LCS	9.6296			TOC		TOC Range 0.1 - 20 p	Sample	6	11/07/2017 18:14	
720-82705-a-1	0.4716			TOC		TOC Range 0.1 - 20 p	Sample	7	11/07/2017 18:24	Max Integration
Time Reached										
720-82705-a-1	0.3435			TOC		TOC Range 0.1 - 20 p	Sample	7	11/07/2017 18:34	Max Integration
Time Reached										
720-82705-a-1 MS	8.3516			TOC		TOC Range 0.1 - 20 p	Sample	8	11/07/2017 18:44	Max Integration
Time Reached										
720-82705-a-1 MSD	8.3329			TOC		TOC Range 0.1 - 20 p	Sample	8	11/07/2017 18:55	Max Integration
Time Reached										
720-82809-h-1	94.2638			TOC		TOC Range 0.1 - 20 p	Sample	9	11/07/2017 19:05	Over-range
720-82809-h-1 1/20	29.5793			TOC		TOC Range 0.1 - 20 p	Sample	9	11/07/2017 19:37	Over-range
720-82809-h-1 1/20	29.2203			TOC		TOC Range 0.1 - 20 p	Sample	9	11/07/2017 19:50	Max Integration
Time Reached										
720-82809-h-2	1.6611			TOC		TOC Range 0.1 - 20 p	Sample	10	11/07/2017 19:59	
720-82809-h-2	1.4085			TOC		TOC Range 0.1 - 20 p	Sample	10	11/07/2017 20:08	
720-82809-h-3	1.0378			TOC		TOC Range 0.1 - 20 p	Sample	11	11/07/2017 20:16	
720-82809-h-3	0.9730			TOC		TOC Range 0.1 - 20 p	Sample	11	11/07/2017 20:25	
CCV	9.5220			TOC		TOC Range 0.1 - 20 p	Sample	12	11/07/2017 20:34	
CCB	0.3707			TOC		TOC Range 0.1 - 20 p	Sample	13	11/07/2017 20:43	
500-135887-f-1 1/800	4.1244			TOC		TOC Range 0.1 - 20 p	Sample	14	11/07/2017 20:53	Max Integration
Time Reached										
500-135887-f-1 1/40	9.6034			TOC		TOC Range 0.1 - 20 p	Sample	15	11/07/2017 21:05	Max Integration
Time Reached										
500-135887-f-1 1/400	9.4326			TOC		TOC Range 0.1 - 20 p	Sample	15	11/07/2017 21:15	Max Integration
Time Reached										
500-135887-f-2 1/200	4.3068			TOC		TOC Range 0.1 - 20 p	Sample	16	11/07/2017 21:25	Max Integration
Time Reached										
500-135887-f-2 1/20	4.1954			TOC		TOC Range 0.1 - 20 p	Sample	16	11/07/2017 21:36	Max Integration
Time Reached										
500-135887-f-3 1/10	1.7202			TOC		TOC Range 0.1 - 20 p	Sample	17	11/07/2017 21:44	
500-135887-f-3 1/10	1.6358			TOC		TOC Range 0.1 - 20 p	Sample	17	11/07/2017 21:52	
500-135887-f-3	13.7989			TOC		TOC Range 0.1 - 20 p	Sample	18	11/07/2017 22:02	Max Integration
Time Reached										
500-135887-f-3	14.3703			TOC		TOC Range 0.1 - 20 p	Sample	18	11/07/2017 22:12	Max Integration
Time Reached										
500-135887-f-4 1/100	14.3284			TOC		TOC Range 0.1 - 20 p	Sample	19	11/07/2017 22:23	Max Integration
Time Reached										
500-135887-f-4 1/10	14.1871			TOC		TOC Range 0.1 - 20 p	Sample	19	11/07/2017 22:33	Max Integration
Time Reached										
500-135887-f-5	132.1298			TOC		TOC Range 0.1 - 20 p	Sample	20	11/07/2017 22:43	Over-range
500-135887-f-5 1/10	42.6439			TOC		TOC Range 0.1 - 20 p	Sample	20	11/07/2017 23:02	Max Integration
Time Reached										
500-135887-e-5 1/20	23.7459			TOC		TOC Range 0.1 - 20 p	Sample	21	11/07/2017 23:13	
500-135887-e-5 1/20	22.4184			TOC		TOC Range 0.1 - 20 p	Sample	21	11/07/2017 23:23	Max Integration
Time Reached										

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500-136523-j-2	2.6362			TOC		TOC Range 0.1 - 20 p	Sample		22	11/07/2017 23:34	Max Integration	→
→ Time Reached												
500-136523-j-2.....	2.2549...	..	...	TOC	..	TOC Range 0.1 - 20 p...	Sample	..	22..	11/07/2017 23:44.	Max Integration	→
→ Time Reached												
CCV	10.6495			TOC		TOC Range 0.1 - 20 p	Sample		23	11/07/2017 23:53		
CCB	1.0202			TOC		TOC Range 0.1 - 20 p	Sample		24	11/08/2017 00:02		
CCV.....	10.1698...	..	...	TOC	..	TOC Range 0.1 - 20 p...	Sample	..	23..	11/08/2017 00:12.		
CCB	0.5369			TOC		TOC Range 0.1 - 20 p	Sample		24	11/08/2017 00:21		
500-136523-j-4	1.4069			TOC		TOC Range 0.1 - 20 p	Sample		25	11/08/2017 00:31	Max Integration	→
→ Time Reached												
500-136523-j-4.....	1.4468...	..	...	TOC	..	TOC Range 0.1 - 20 p...	Sample	..	25..	11/08/2017 00:41.	Max Integration	→
→ Time Reached												
500-135887-a-1 1/400	7.2654			TOC		TOC Range 0.1 - 20 p	Sample		26	11/08/2017 00:51	Max Integration	→
→ Time Reached												
500-135887-a-1 1/400	7.6085			TOC		TOC Range 0.1 - 20 p	Sample		26	11/08/2017 01:01	Max Integration	→
→ Time Reached												
500-135887-a-2 1/40.....	8.4711...	..	...	TOC	..	TOC Range 0.1 - 20 p...	Sample	..	27..	11/08/2017 01:10.		
500-135887-a-2 1/40	8.6388			TOC		TOC Range 0.1 - 20 p	Sample		27	11/08/2017 01:19		
500-135887-a-3	2.3847			TOC		TOC Range 0.1 - 20 p	Sample		28	11/08/2017 01:28		
500-135887-a-3.....	2.2788...	..	...	TOC	..	TOC Range 0.1 - 20 p...	Sample	..	28..	11/08/2017 01:37.		
500-135887-a-3 MS	11.7596			TOC		TOC Range 0.1 - 20 p	Sample		29	11/08/2017 01:47		
500-135887-a-3 MSD	11.7804			TOC		TOC Range 0.1 - 20 p	Sample		29	11/08/2017 01:57		
500-135887-a-4 1/80.....	14.1590...	..	...	TOC	..	TOC Range 0.1 - 20 p...	Sample	..	30..	11/08/2017 02:07.	Max Integration	→
→ Time Reached												
500-135887-a-4 1/80	14.8755			TOC		TOC Range 0.1 - 20 p	Sample		30	11/08/2017 02:17	Max Integration	→
→ Time Reached												
500-135887-a-5 1/20	17.1110			TOC		TOC Range 0.1 - 20 p	Sample		31	11/08/2017 02:26		
500-135887-a-5 1/20.....	16.5886...	..	...	TOC	..	TOC Range 0.1 - 20 p...	Sample	..	31..	11/08/2017 02:36.		
CCV	10.0622			TOC		TOC Range 0.1 - 20 p	Sample		32	11/08/2017 02:45		
CCB	0.4781			TOC		TOC Range 0.1 - 20 p	Sample		33	11/08/2017 02:53		

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Detailed Analysis Report Print Date/Time: 2017/11/08 11:11:13

Sample ID: TIC-STD
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 17:19
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.4218	1.6874	1812418	31.901	32.899	138

Sample ID: ICV
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 17:29
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	20.3494	81.3977	36590944	31.256	32.570	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: ICB
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 17:38
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2618	1.0474	1533185	31.106	32.101	134

Sample ID: MB
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 17:46
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1621	0.6484	1359106	30.858	31.857	127

Sample ID: MB
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 17:54
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1754	0.7017	1382370	30.752	31.750	131

Sample ID: LCS
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 18:04
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	9.5882	38.3528	17809956	30.532	31.531	217

Sample ID: LCS
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 18:14
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time

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1	9.6296	38.5184	17882204	30.600	31.597	216

Sample ID: 720-82705-a-1
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 18:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.4716	1.8863	1899221	30.550	35.996	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 720-82705-a-1
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 18:34
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.3435	1.3740	1675715	30.572	35.422	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 720-82705-a-1 MS
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 18:44
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.3516	33.4063	15651738	30.526	45.601	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 720-82705-a-1 MSD
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 18:55
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.3329	33.3315	15619124	30.484	45.812	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 720-82809-h-1 1/4
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11071701
Timestamp: 11/07/2017 19:05
Sample Type: Sample

HW HW 11/8/17 over range

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	94.2638	377.0553	165589632	30.405	61.688	240

Last Message: Over-range

Sample ID: 720-82809-h-1 1/20
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11071927
Timestamp: 11/07/2017 19:37
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	29.5793	118.3172	52699328	30.690	32.189	240

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~~Last Message: Over-range~~ HW 11/8/17

Sample ID: 720-82809-h-1 1/20 Mode: TOC
Method: TOC Range 0.1 - 20 ppm C Filename: 11071941
Cal. Curve: TOCCURVE Timestamp: 11/07/2017 19:50
Operator ID: HEATHER Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	29.2203	116.8813	52072804	30.512	32.408	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 720-82809-h-2 Mode: TOC
Method: TOC Range 0.1 - 20 ppm C Filename: 11071941
Cal. Curve: TOCCURVE Timestamp: 11/07/2017 19:59
Operator ID: HEATHER Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.6611	6.6442	3975159	30.534	31.533	157

Sample ID: 720-82809-h-2 Mode: TOC
Method: TOC Range 0.1 - 20 ppm C Filename: 11071941
Cal. Curve: TOCCURVE Timestamp: 11/07/2017 20:08
Operator ID: HEATHER Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.4085	5.6339	3534344	30.454	31.454	155

Sample ID: 720-82809-h-3 Mode: TOC
Method: TOC Range 0.1 - 20 ppm C Filename: 11071941
Cal. Curve: TOCCURVE Timestamp: 11/07/2017 20:16
Operator ID: HEATHER Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.0378	4.1512	2887403	30.435	31.433	137

Sample ID: 720-82809-h-3 Mode: TOC
Method: TOC Range 0.1 - 20 ppm C Filename: 11071941
Cal. Curve: TOCCURVE Timestamp: 11/07/2017 20:25
Operator ID: HEATHER Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.9730	3.8921	2774354	30.323	31.320	140

Sample ID: CCV Mode: TOC
Method: TOC Range 0.1 - 20 ppm C Filename: 11071941
Cal. Curve: TOCCURVE Timestamp: 11/07/2017 20:34
Operator ID: HEATHER Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	9.5220	38.0879	17694364	30.335	31.333	200

Sample ID: CCB Mode: TOC
Method: TOC Range 0.1 - 20 ppm C Filename: 11071941
Cal. Curve: TOCCURVE Timestamp: 11/07/2017 20:43
Operator ID: HEATHER Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning	Ending	Integration

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				Baseline	Baseline	Time
1	0.3707	1.4828	1723145	30.204	31.202	136

Sample ID: 500-135887-f-1 1/800
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11071941
Timestamp: 11/07/2017 20:53
Sample Type: Sample

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Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.1244	16.4975	8274244	30.254	36.571	240

Last Message: Max Integration Time Reached

Sample ID: 500-135887-f-1 1/400
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 21:05
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	9.6034	38.4136	17836476	31.412	48.206	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-1 1/400
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 21:15
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	9.4326	37.7304	17538392	33.055	49.109	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-2 1/200
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 21:25
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.3068	17.2271	8592574	34.116	40.256	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-2 1/200
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 21:36
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.1954	16.7817	8398257	33.402	41.133	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-3 1/10
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 21:44
Sample Type: Sample

HW 11/8/17 over diluted

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.7202	6.8808	4078353	33.766	34.762	121

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Sample ID: 500-135887-f-3 1/10
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 21:52
Sample Type: Sample

HW 11/8/17 over diluted

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.6358	6.5430	3930998	32.638	33.625	125

Sample ID: 500-135887-f-3
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 22:02
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	13.7989	55.1957	25158720	32.035	36.062	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-3
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 22:12
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14.3703	57.4813	26155942	32.230	36.718	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-4 1/100
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 22:23
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14.3284	57.3137	26082814	31.936	51.974	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-4 1/100
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 22:33
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14.1871	56.7484	25836158	34.997	52.971	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-f-5
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11072055
Timestamp: 11/07/2017 22:43
Sample Type: Sample

HW 11/8/17 over range

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	132.1298	528.5192	231675024	35.318	1139.740	240

Last Message: Over-range

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Sample ID: 500-135887-f-5 1/10
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11072252
Timestamp: 11/07/2017 23:02
Sample Type: Sample

HW 11/8/17 over range

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	42.6439	170.5758	75500312	35.668	38.054	240

Last Message: Max Integration Time Reached

Sample ID: 500-135887-e-5 1/20
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11072304
Timestamp: 11/07/2017 23:13
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	23.7459	94.9835	42518568	34.626	35.625	209

Sample ID: 500-135887-e-5 1/20
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11072304
Timestamp: 11/07/2017 23:23
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	22.4184	89.6737	40201824	32.928	34.634	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-136523-j-2
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11072304
Timestamp: 11/07/2017 23:34
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.6362	10.5450	5677085	32.761	35.003	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-136523-j-2
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11072304
Timestamp: 11/07/2017 23:44
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.2549	9.0196	5011575	32.062	34.539	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: CCV
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER

Mode: TOC
Filename: 11072304
Timestamp: 11/07/2017 23:53
Sample Type: Sample

HW 11/8/17

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.6495	42.5979	19662136	31.789	32.788	201

QC failed; CCB

Sample ID: CCB
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE

Mode: TOC
Filename: 11072304
Timestamp: 11/08/2017 00:02

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Operator ID: HEATHER Sample Type: Sample

HW 11/8/17 QC failed; CCB

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.0202	4.0809	2856764	31.842	32.840	134

Sample ID: CCV
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 00:12
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.1698	40.6790	18824924	32.252	33.248	183

Sample ID: CCB
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 00:21
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.5369	2.1477	2013287	31.437	32.431	132

Sample ID: 500-136523-j-4
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 00:31
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.4069	5.6276	3531576	31.290	33.734	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-136523-j-4
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 00:41
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.4468	5.7873	3601257	31.290	33.897	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-a-1 1/400
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 00:51
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.2654	29.0614	13756017	31.197	48.233	240

Last Message: Max Integration Time Reached AD HW 11/8/17

DOC

Sample ID: 500-135887-a-1 1/400
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 01:01
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.6085	30.4342	14354978	35.386	49.931	240

409001

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-a-2 1/40
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 01:10
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.4711	33.8843	15860304	36.671	37.661	141

Sample ID: 500-135887-a-2 1/40
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 01:19
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.6388	34.5550	16152947	34.105	35.105	152

Sample ID: 500-135887-a-3
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 01:28
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.3847	9.5390	5238172	33.331	34.330	182

DOC

Sample ID: 500-135887-a-3
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 01:37
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.2788	9.1150	5053190	33.168	34.162	181

Sample ID: 500-135887-a-3 MS
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 01:47
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	11.7596	47.0386	21599664	32.607	33.601	226

Sample ID: 500-135887-a-3 MSD
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 01:57
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	11.7804	47.1217	21635940	32.530	33.525	229

Sample ID: 500-135887-a-4 1/80
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 02:07
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14.1590	56.6359	25787092	32.415	49.068	240

409001

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-a-4 1/80
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 02:17
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14.8755	59.5021	27037628	35.047	51.203	240

Last Message: Max Integration Time Reached AD HW 11/8/17

Sample ID: 500-135887-a-5 1/20
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 02:26
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	17.1110	68.4442	30939152	35.845	36.837	173

Sample ID: 500-135887-a-5 1/20
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 02:36
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16.5886	66.3543	30027328	33.900	34.897	185

DOC

Sample ID: CCV
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 02:45
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.0622	40.2489	18637260	33.203	34.195	173

Sample ID: CCB
Method: TOC Range 0.1 - 20 ppm C
Cal. Curve: TOCCURVE
Operator ID: HEATHER
Mode: TOC
Filename: 11080004
Timestamp: 11/08/2017 02:53
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.4781	1.9123	1910581	32.770	33.767	123

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 500-408906

Analyst: Wontor, Heather M

Batch Open: 11/7/2017 4:50:00PM

Batch End: 11/7/2017 5:00:00PM

Sample Filtration

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	500-135887-A-1 (9060A_Diss)	N/A (500-135887-1)	Water			10/31/17	8_Days	2		500-135887-A-1-A
2	500-135887-A-2 (9060A_Diss)	N/A (500-135887-1)	Water			10/31/17	8_Days	2		500-135887-A-2-A
3	500-135887-A-3 (9060A_Diss)	N/A (500-135887-1)	Water			10/31/17	8_Days	2		500-135887-A-3-A
4	500-135887-A-3~MS (9060A_Diss)	N/A (500-135887-1)	Water			10/31/17	8_Days	2		500-135887-A-3-B MS
5	500-135887-A-3~MSD (9060A_Diss)	N/A (500-135887-1)	Water			10/31/17	8_Days	2		500-135887-A-3-C MSD
6	500-135887-A-4 (9060A_Diss)	N/A (500-135887-1)	Water			10/31/17	8_Days	2		500-135887-A-4-A
7	500-135887-A-5 (9060A_Diss)	N/A (500-135887-1)	Water			10/31/17	8_Days	2		500-135887-A-5-A

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 500-408906

Analyst: Wontor, Heather M

Batch Open: 11/7/2017 4:50:00PM

Batch End: 11/7/2017 5:00:00PM

Batch Notes

Filter ID	Whatman 0.45um Filter Lot #9741718
Lot # of Nitric Acid	NA
Batch Comment	Syringe Lot #7156707

Comments

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 500-408906

Analyst: Wontor, Heather M

Batch Open: 11/7/2017 4:50:00PM

Batch End: 11/7/2017 5:00:00PM

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

HW 11/8/17

General Chemistry Worksheet

Batch Number: 500-409001
Method: SM 5310C
Analyst: Wontor, Heather M

Date Open: Nov 07 2017 5:19PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	RPD from Results 1 and 2	Did RPD Pass?	WCSTTC1_00122	WCSTTC2_00132
TIC-STD						0 %	TOC Pass		
ICV~500-409001/2		5310C		200 mL	200 mL	0 %	TOC Pass		2000 uL
ICB~500-409001/3		5310C				0 %	TOC Pass		
MB~500-409001/4		5310C				8 %	TOC Pass		
LCS~500-409001/5		5310C		200 mL	200 mL	1 %	TOC Pass		1000 uL
720-82705-A-1	17-3817 NANOPURE WATER	5310C	T			31 %	TOC Fail		
720-82705-A-1~MS		5310C	T	40 mL	40 mL	0 %	TOC Pass		200 uL
720-82705-A-1~MSD		5310C	T	40 mL	40 mL	0 %	TOC Pass		200 uL
720-82809-H-1	Seperator	5310C	T						
720-82809-H-1	Seperator	5310C	T			1 %	TOC Pass		
720-82809-H-2	Vessel #1	5310C	T			16 %	TOC Fail		
720-82809-H-3	Final	5310C	T			6 %	TOC Pass		
CCV~500-409001/13		5310C		200 mL	200 mL	0 %	TOC Pass	1 mL	
CCB~500-409001/14		5310C				0 %	TOC Pass		
500-135887-F-1	TK 401	9060A	T						
500-135887-F-1	TK 401	9060A	T			2 %	TOC Pass		
500-135887-F-2	TK 402	9060A	T			3 %	TOC Pass		
500-135887-F-3	EFFLUENT	9060A	T			5 %	TOC Pass		
500-135887-F-3	EFFLUENT	9060A	T			4 %	TOC Pass		
500-135887-F-4	DAF	9060A	T			1 %	TOC Pass		
500-135887-F-5	DAF 2	9060A	T						
500-135887-F-5	DAF 2	9060A	T						
500-135887-F-5	DAF 2	9060A	T			6 %	TOC Pass		
500-136523-J-2	OMW3D-GW-103017	9060A	T			16 %	TOC Fail		
/CCV~500-409001/25						0 %	TOC Pass		

General Chemistry Worksheet

Batch Number: 500-409001
Method: SM 5310C
Analyst: Wontor, Heather M

Date Open: Nov 07 2017 5:19PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	RPD from Results 1 and 2	Did RPD Pass?	WCSTTC1_00122	WCSTTC2_00132
/CCB~500-409001/26						0 %	TOC Pass		
CCV~500-409001/27				200 mL	200 mL	0 %	TOC Pass	1 mL	
CCB~500-409001/28						0 %	TOC Pass		
500-136523-J-4	OMW4D-GW-103017	9060A	T			3 %	TOC Pass		
CCV~500-409001/30		9060A		200 mL	200 mL	0 %	TOC Pass	1 mL	
CCB~500-409001/31		9060A				0 %	TOC Pass		

First Start time: See Start Date/Time
First End time: See End Date/Time
Phosphoric Acid ID: 21% H3PO4_00059
Sodium Persulfate ID: Na_Persulfate_00096
Pipette ID: NA

General Chemistry Worksheet

Batch Number: 500-409001
Method: SM 5310C
Analyst: Wontor, Heather M

Date Open: Nov 07 2017 5:19PM
Batch End:

Comments

Lab ID	Client ID	Method Chain	Basis	Analysis comment
TIC-STD				
ICV~500-409001/2		5310C		
ICB~500-409001/3		5310C		
MB~500-409001/4		5310C		
LCS~500-409001/5		5310C		
720-82705-A-1	17-3817 NANOPURE WATER	5310C	T	
720-82705-A-1~MS		5310C	T	
720-82705-A-1~MSD		5310C	T	
720-82809-H-1	Seperator	5310C	T	
720-82809-H-1	Seperator	5310C	T	
720-82809-H-2	Vessel #1	5310C	T	
720-82809-H-3	Final	5310C	T	
CCV~500-409001/13		5310C		
CCB~500-409001/14		5310C		
500-135887-F-1	TK 401	9060A	T	
500-135887-F-1	TK 401	9060A	T	
500-135887-F-2	TK 402	9060A	T	
500-135887-F-3	EFFLUENT	9060A	T	
500-135887-F-3	EFFLUENT	9060A	T	
500-135887-F-4	DAF	9060A	T	
500-135887-F-5	DAF 2	9060A	T	
500-135887-F-5	DAF 2	9060A	T	
500-135887-F-5	DAF 2	9060A	T	
500-136523-J-2	OMW3D-GW-103017	9060A	T	
/CCV~500-409001/25				

General Chemistry Worksheet

Batch Number: 500-409001
Method: SM 5310C
Analyst: Wontor, Heather M

Date Open: Nov 07 2017 5:19PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Analysis comment	Comments
/CCB~500-409001/26					
CCV~500-409001/27					
CCB~500-409001/28					
500-136523-J-4	OMW4D-GW-103017	9060A	T		
CCV~500-409001/30		9060A			
CCB~500-409001/31		9060A			

Batch Comment: NA

General Chemistry Worksheet

Batch Number: 500-409011
Method: 9060A
Analyst: Wontor, Heather M

Date Open: Nov 07 2017 5:19PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	WCSTTC1_00122	WCSTTC2_00132
TIC-STD							
ICV~500-409011/2		9060A_Diss		200 mL	200 mL		2000 uL
ICB~500-409011/3		9060A_Diss					
MB~500-409011/4		9060A_Diss					
LCS~500-409011/5		9060A_Diss		200 mL	200 mL		1000 uL
CCV~500-409011/6		9060A_Diss		200 mL	200 mL	1 mL	
CCB~500-409011/7		9060A_Diss					
CCV~500-409011/8		9060A_Diss		200 mL	200 mL	1 mL	
CCB~500-409011/9		9060A_Diss					
500-135887-A-1-A		9060A_Diss	D				
500-135887-A-2-A		9060A_Diss	D				
500-135887-A-3-A		9060A_Diss	D				
500-135887-A-3-B~MS		9060A_Diss	D	40 mL	40 mL		200 uL
500-135887-A-3-C~MSD		9060A_Diss	D	40 mL	40 mL		200 uL
500-135887-A-4-A		9060A_Diss	D				
500-135887-A-5-A		9060A_Diss	D				
CCV~500-409011/17		9060A_Diss		200 mL	200 mL	1 mL	
CCB~500-409011/18		9060A_Diss					

HCl Vendor:	NA
Lot # of hydrochloric acid:	NA
Phosphoric Acid ID:	21% H3PO4_00059
Sodium Persulfate ID:	Na_Persulfate_00096
Pipette ID:	NA
Sulfuric Acid ID:	NA

General Chemistry Worksheet

Batch Number: 500-409011
Method: 9060A
Analyst: Wontor, Heather M

Date Open: Nov 07 2017 5:19PM
Batch End:

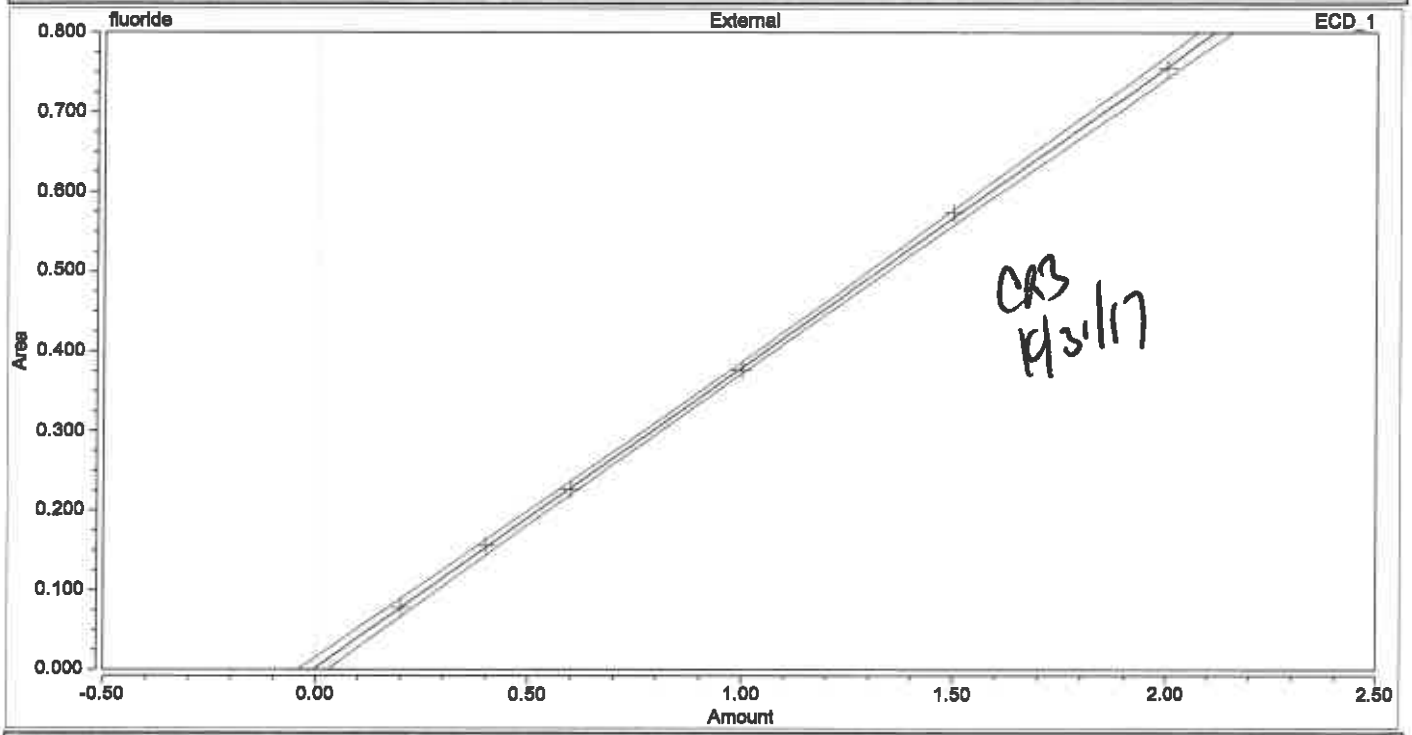
Lab ID	Client ID	Method Chain	Basis	Analysis comment	Comments
TIC-STD					
ICV~500-409011/2		9060A_Diss			
ICB~500-409011/3		9060A_Diss			
MB~500-409011/4		9060A_Diss			
LCS~500-409011/5		9060A_Diss			
CCV~500-409011/6		9060A_Diss			
CCB~500-409011/7		9060A_Diss			
CCV~500-409011/8		9060A_Diss			
CCB~500-409011/9		9060A_Diss			
500-135887-A-1-A		9060A_Diss	D		
500-135887-A-2-A		9060A_Diss	D		
500-135887-A-3-A		9060A_Diss	D		
500-135887-A-3-B~MS		9060A_Diss	D		
500-135887-A-3-C~MSD		9060A_Diss	D		
500-135887-A-4-A		9060A_Diss	D		
500-135887-A-5-A		9060A_Diss	D		
CCV~500-409011/17		9060A_Diss			
CCB~500-409011/18		9060A_Diss			

Batch Comment: NA

Calibration

Calibration Details	n.a.		
Calibration Type	LIn, WithOffset	*Offset (C0)*	0.0025
Evaluation Type	Area	*Slope (C1)*	0.3774
Number of Calibration Points	6	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9998

Calibration Plot **fluoride**



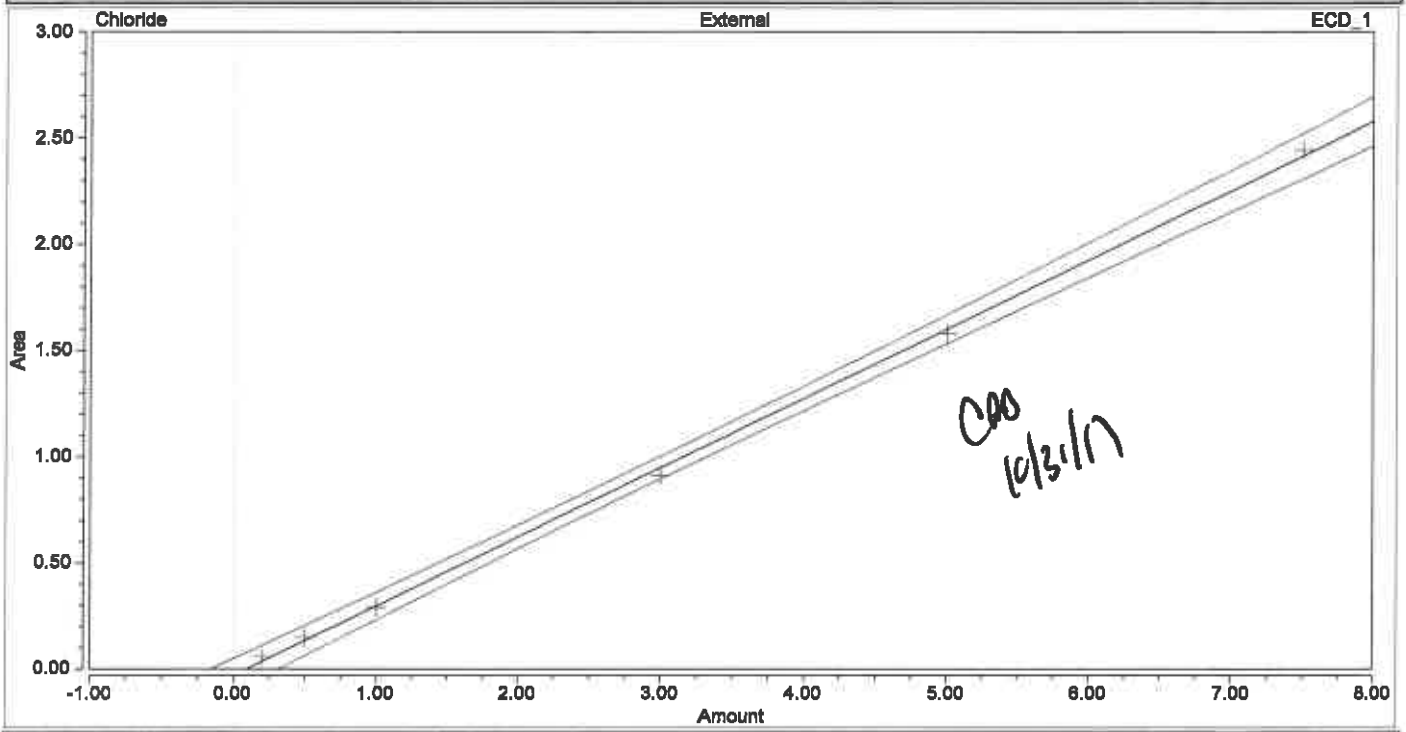
Calibration Results **fluoride**

No.	Injection Name	Calibration Level	X Value fluoride ECD_1	Y Value fluoride ECD_1	Y Value fluoride ECD_1	Height µS fluoride ECD_1	Height µS fluoride ECD_1
1	CURVE 1	01	0.2000	0.07788	0.0779	0.248	0.248
2	CURVE 2	02	0.4000	0.15618	0.1562	0.538	0.538
3	CURVE 3	03	0.6000	0.22658	0.2266	0.846	0.846
4	CURVE 4	04	1.0000	0.37624	0.3762	1.445	1.445
5	CURVE 5	05	1.5000	0.57401	0.5740	2.246	2.246
6	CURVE 6	06	2.0000	0.75521	0.7552	3.008	3.008

Calibration

Calibration Details	n.a.		
Calibration Type	Lin, WithOffset	*Offset (C0)*	-0.0289
Evaluation Type	Area	*Slope (C1)*	0.3262
Number of Calibration Points	6	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9993

Calibration Plot **Chloride**



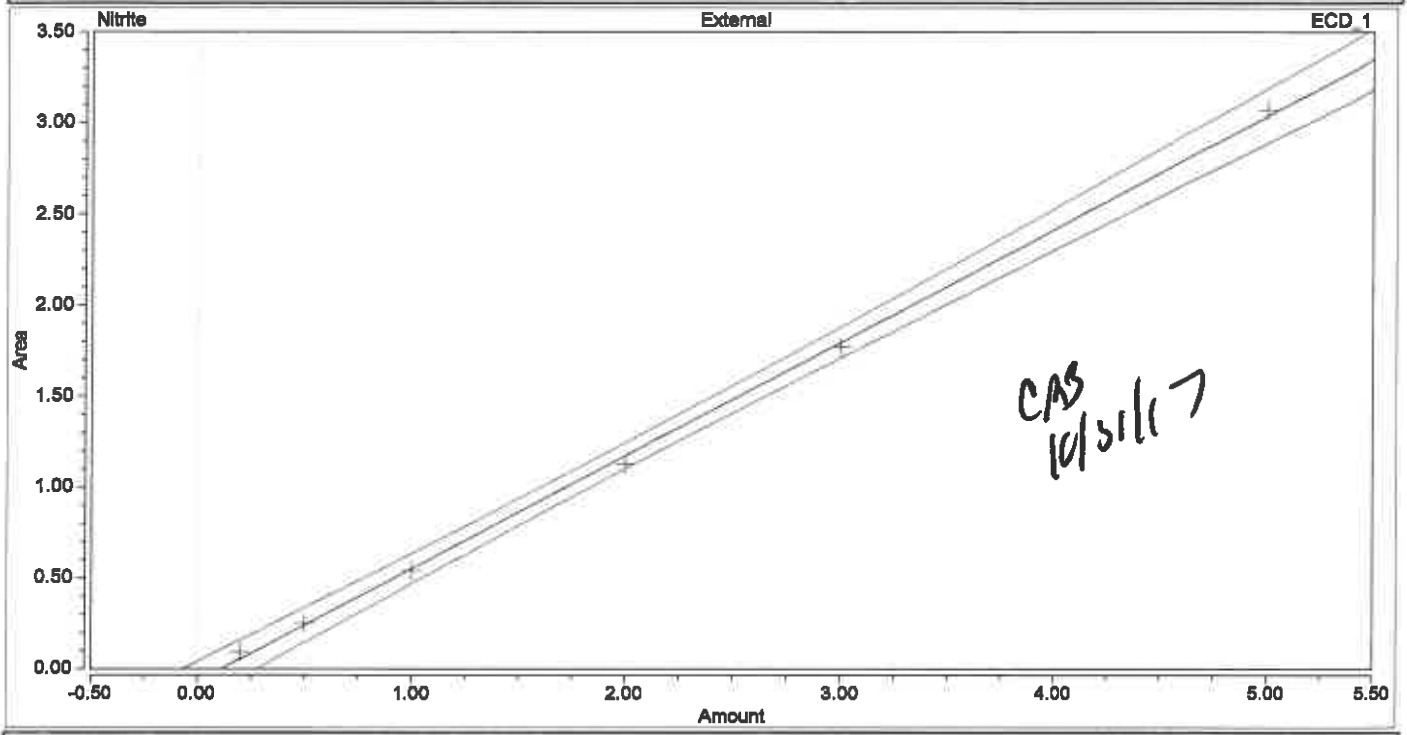
Calibration Results Chloride

No.	Injection Name	Calibration Level	X Value Chloride ECD_1	Y Value Chloride ECD_1	Y Value Chloride ECD_1	Height µS Chloride ECD_1	Height µS Chloride ECD_1
1	CURVE 1	01	0.2000	0.05790	0.0579	0.424	0.424
2	CURVE 2	02	0.5000	0.14790	0.1479	1.071	1.071
3	CURVE 3	03	1.0000	0.29164	0.2916	2.118	2.118
4	CURVE 4	04	3.0000	0.91288	0.9129	6.748	6.748
5	CURVE 5	05	5.0000	1.58217	1.5822	11.782	11.782
6	CURVE 6	06	7.5000	2.44501	2.4450	18.547	18.547

Calibration

Calibration Details	n.a.		
Calibration Type	Lin, WithOffset	*Offset (C0)*	-0.0688
Evaluation Type	Area	*Slope (C1)*	0.6218
Number of Calibration Points	6	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9991

Calibration Plot **Nitrite**



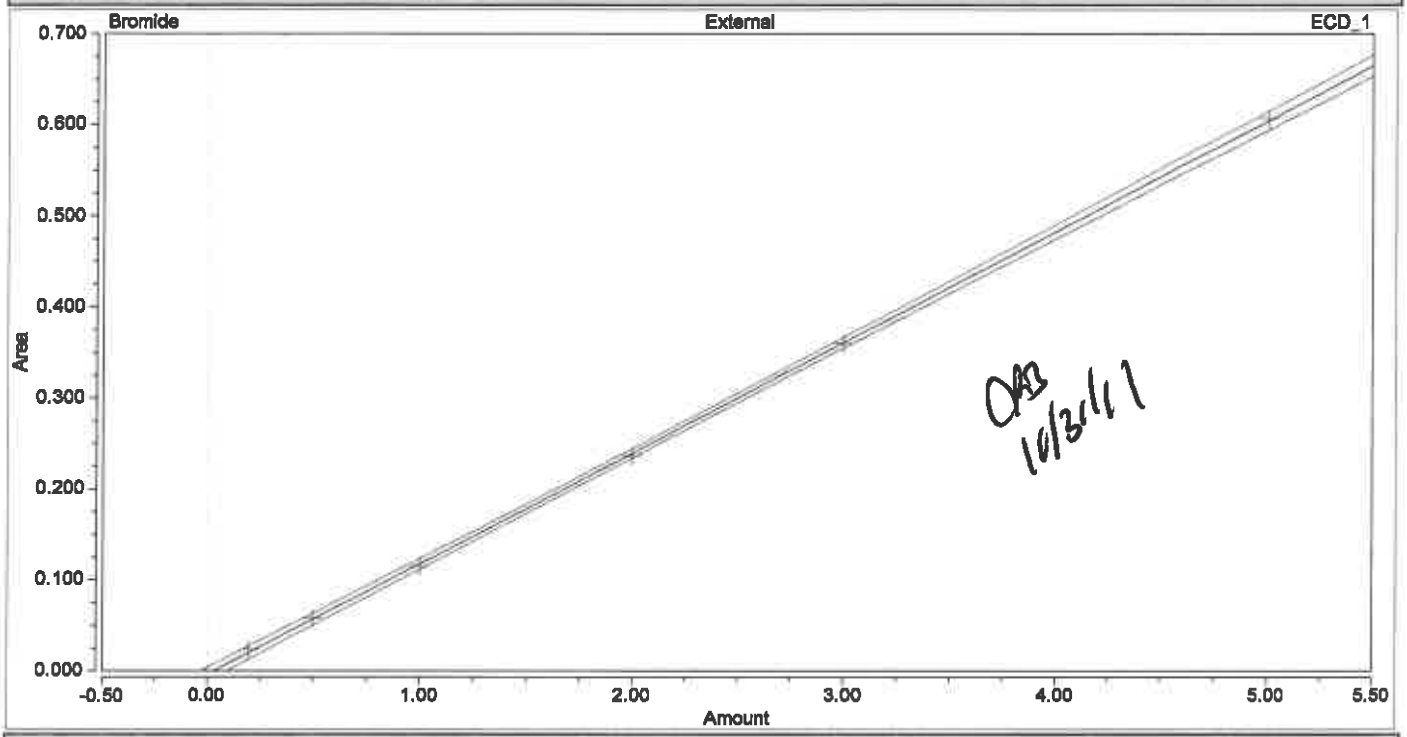
Calibration Results **Nitrite**

No.	Injection Name	Calibration Level	X Value Nitrite ECD_1	Y Value Nitrite ECD_1	Y Value Nitrite ECD_1	Height µS Nitrite ECD_1	Height µS Nitrite ECD_1
1	CURVE 1	01	0.2000	0.09523	0.0952	0.514	0.514
2	CURVE 2	02	0.5000	0.25352	0.2535	1.384	1.384
3	CURVE 3	03	1.0000	0.54020	0.5402	2.924	2.924
4	CURVE 4	04	2.0000	1.12755	1.1275	6.135	6.135
5	CURVE 5	05	3.0000	1.77177	1.7718	9.562	9.562
6	CURVE 6	06	5.0000	3.07372	3.0737	16.411	16.411

Calibration

Calibration Details	n.a.		
Calibration Type	Lin, WithOffset	*Offset (C0)*	-0.0039
Evaluation Type	Area	*Slope (C1)*	0.1218
Number of Calibration Points	6	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9999

Calibration Plot **Bromide**



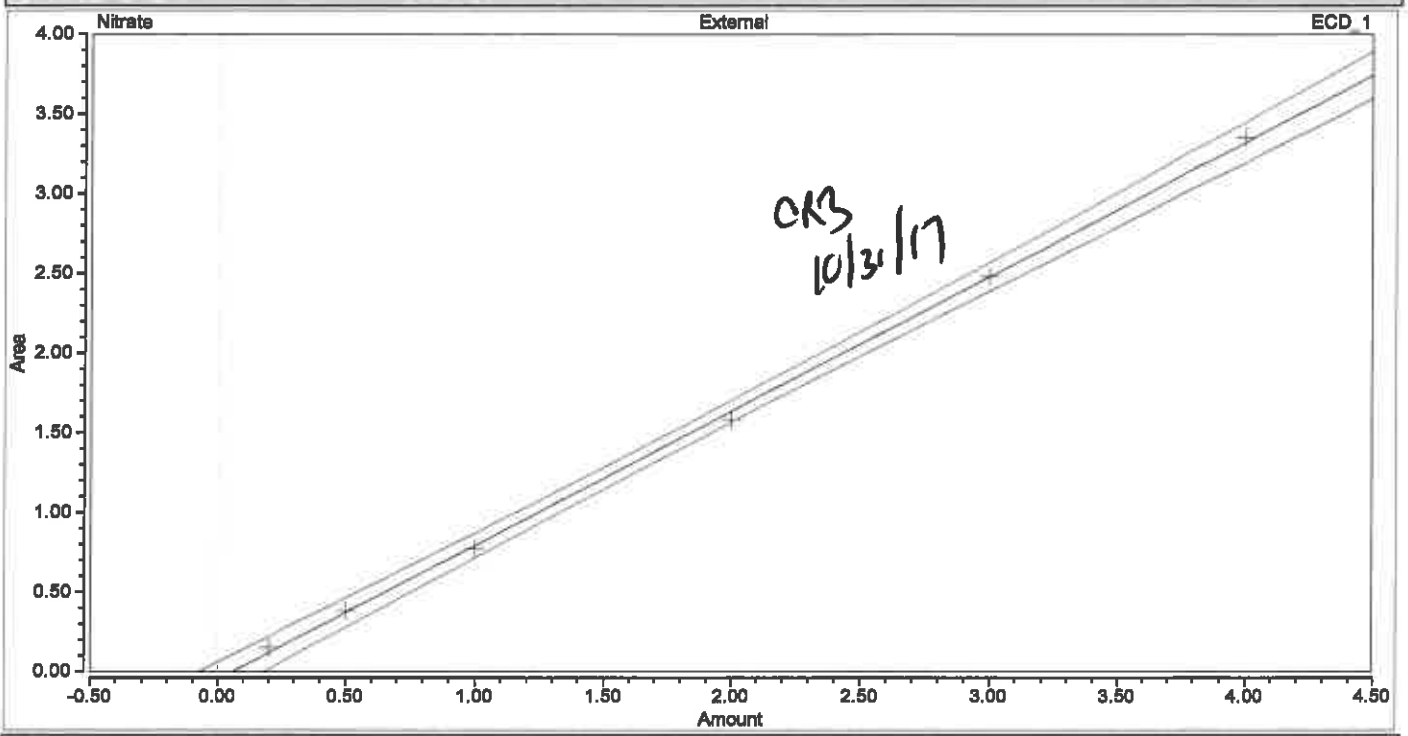
Calibration Results Bromide

No.	Injection Name	Calibration Level	X Value Bromide ECD_1	Y Value Bromide ECD_1	Y Value Bromide ECD_1	Height µS Bromide ECD_1	Height µS Bromide ECD_1
1	CURVE 1	01	0.2000	0.02361	0.0236	0.134	0.134
2	CURVE 2	02	0.5000	0.05763	0.0576	0.334	0.334
3	CURVE 3	03	1.0000	0.11607	0.1161	0.679	0.679
4	CURVE 4	04	2.0000	0.23662	0.2366	1.389	1.389
5	CURVE 5	05	3.0000	0.36025	0.3603	2.122	2.122
6	CURVE 6	06	5.0000	0.60692	0.6069	3.618	3.618

Calibration

Calibration Details	n.a.		
Calibration Type	Lin, WithOffset	*Offset (C0)*	-0.0046
Evaluation Type	Area	*Slope (C1)*	0.2366
Number of Calibration Points	6	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9994

Calibration Plot **Nitrate**



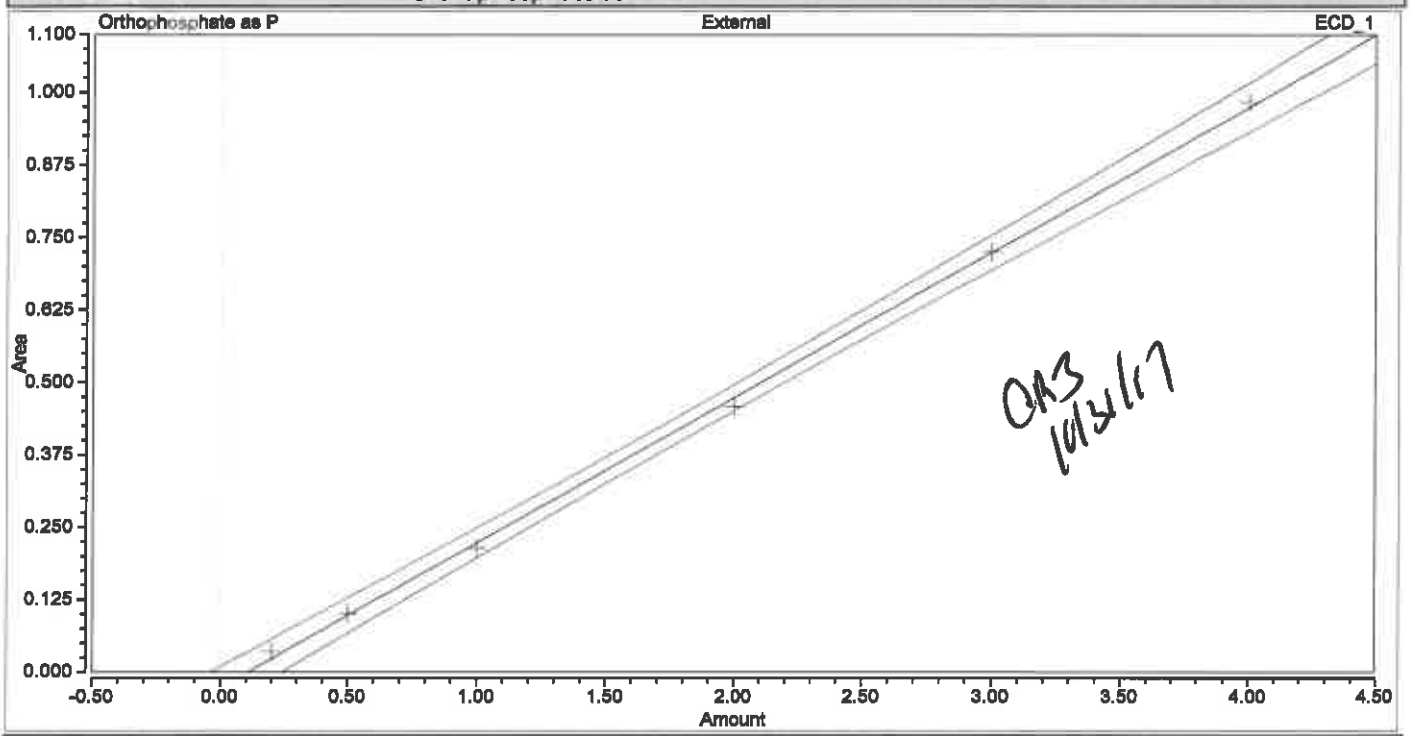
Calibration Results Nitrate

No.	Injection Name	Calibration Level	X Value Nitrate ECD_1	Y Value Nitrate ECD_1	Y Value Nitrate ECD_1	Height µS Nitrate ECD_1	Height µS Nitrate ECD_1
1	CURVE 1	01	0.2000	0.15133	0.1513	0.689	0.689
2	CURVE 2	02	0.5000	0.38149	0.3815	1.764	1.764
3	CURVE 3	03	1.0000	0.77395	0.7739	3.637	3.637
4	CURVE 4	04	2.0000	1.58484	1.5848	7.616	7.616
5	CURVE 5	05	3.0000	2.48054	2.4805	11.974	11.974
6	CURVE 6	06	4.0000	3.35327	3.3533	16.493	16.493

Calibration

Calibration Details	n.a.		
Calibration Type	Lin, WithOffset	*Offset (C0)*	-0.0268
Evaluation Type	Area	*Slope (C1)*	0.2506
Number of Calibration Points	6	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9992

Calibration Plot **Orthophosphate as P**



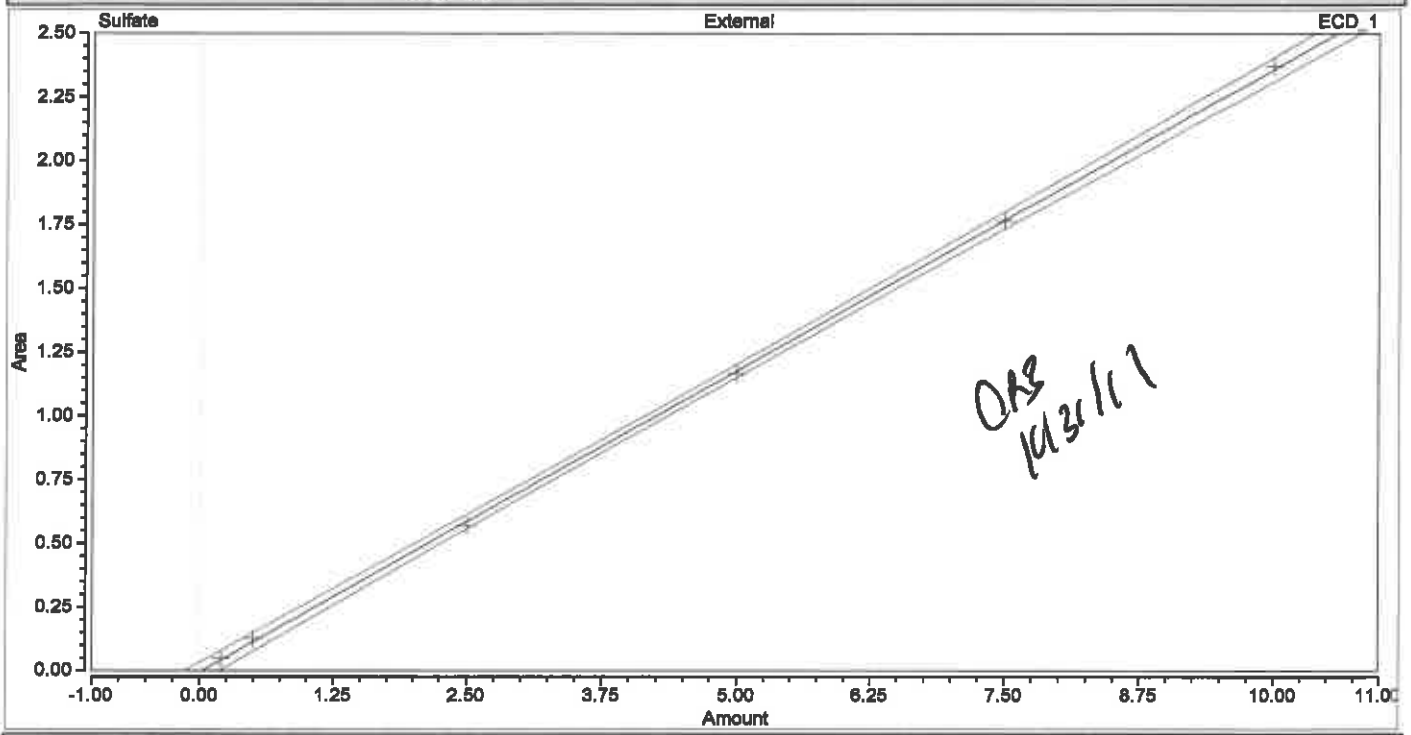
Calibration Results **Orthophosphate as P**

No.	Injection Name	Calibration Level	X Value rthophosphate as ECD_1	Y Value rthophosphate as ECD_1	Y Value hophosphate a ECD_1	Height µS rthophosphate as ECD_1	Height µS hophosphate as ECD_1
1	CURVE 1	01	0.2000	0.03587	0.0359	0.103	0.103
2	CURVE 2	02	0.5000	0.10151	0.1015	0.328	0.328
3	CURVE 3	03	1.0000	0.21443	0.2144	0.746	0.746
4	CURVE 4	04	2.0000	0.45911	0.4591	1.669	1.669
5	CURVE 5	05	3.0000	0.72562	0.7256	2.662	2.662
6	CURVE 6	06	4.0000	0.98437	0.9844	3.669	3.669

Calibration

Calibration Details	n.a.		
Calibration Type	Lin, WithOffset	*Offset (C0)*	-0.0046
Evaluation Type	Area	*Slope (C1)*	0.2366
Number of Calibration Points	6	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9998

Calibration Plot Sulfate



Calibration Results Sulfate

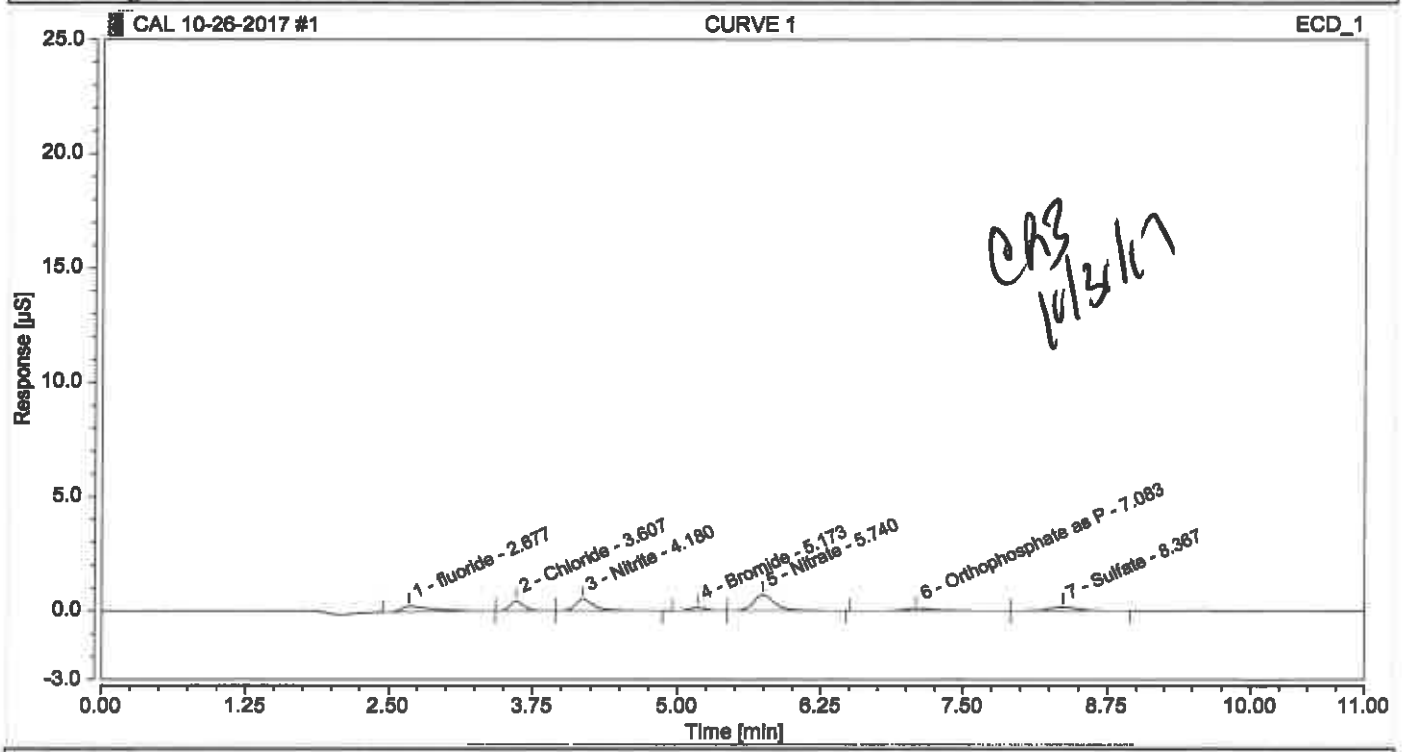
No.	Injection Name	Calibration Level	X Value Sulfate ECD_1	Y Value Sulfate ECD_1	Y Value Sulfate ECD_1	Height µS Sulfate ECD_1	Height µS Sulfate ECD_1
1	CURVE 1	01	0.2000	0.04735	0.0473	0.164	0.164
2	CURVE 2	02	0.5000	0.12772	0.1277	0.430	0.430
3	CURVE 3	03	2.5000	0.57187	0.5719	1.970	1.970
4	CURVE 4	04	5.0000	1.16717	1.1672	4.071	4.071
5	CURVE 5	05	7.5000	1.76613	1.7661	6.180	6.180
6	CURVE 6	06	10.0000	2.37281	2.3728	8.369	8.369

Chromatogram and Results

Injection Details

Injection Name:	**CURVE 1**	*Run Time (min):*	**11.00**
Vial Number:	**RE1**	*Injection Volume:*	**25.00**
Injection Type:	**Calibration Standard**	*Channel:*	**ECD_1**
Calibration Level:	**01**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**26/Oct/17 11:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

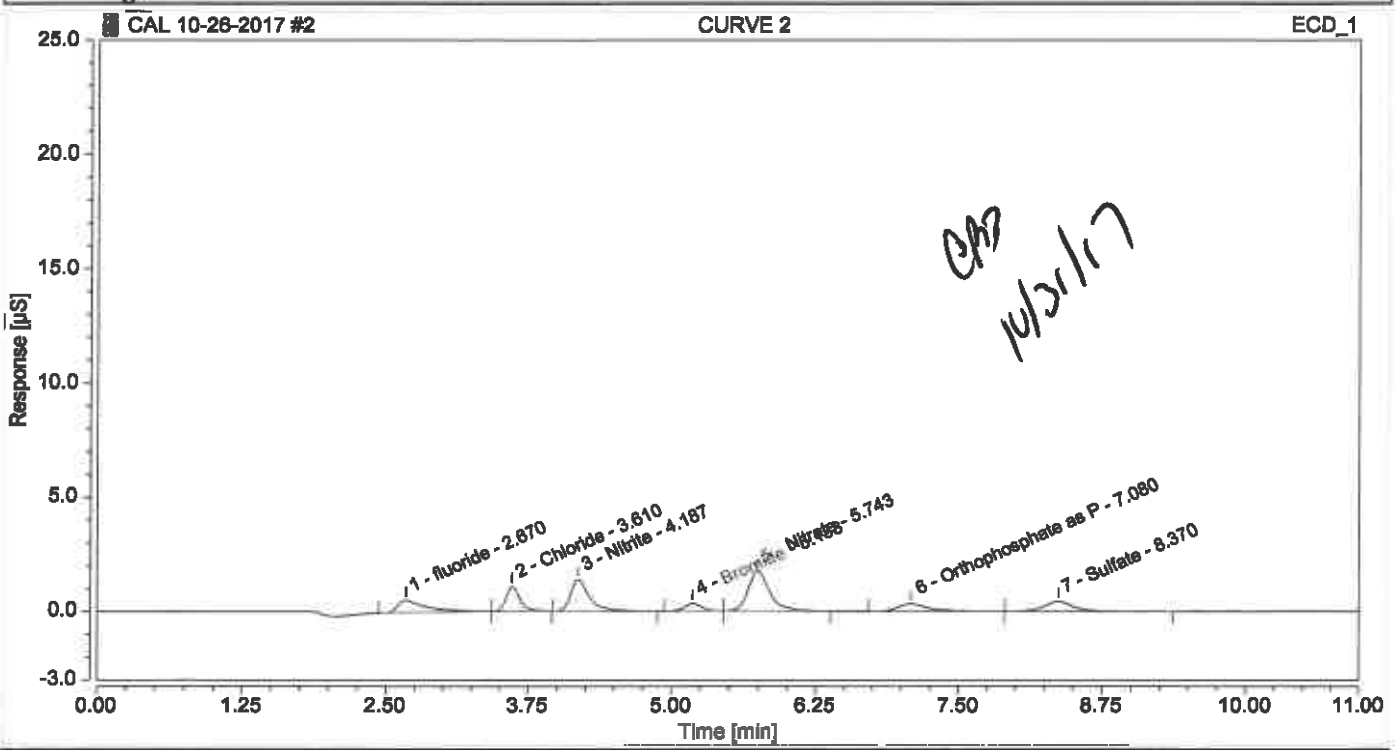
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.677	0.07788	0.248	15.92	10.90	0.1998
2	Chloride	3.607	0.05790	0.424	11.84	18.62	0.2660
3	Nitrite	4.180	0.09523	0.514	19.47	22.58	0.2639
4	Bromide	5.173	0.02361	0.134	4.83	5.88	0.2261
5	Nitrate	5.740	0.15133	0.689	30.94	30.28	0.2395
6	Orthophosphate as P	7.083	0.03587	0.103	7.33	4.53	0.2502
7	Sulfate	8.367	0.04735	0.164	9.68	7.21	0.2195
Total:			**0.489**	**2.275**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CURVE 2**	*Run Time (min):*	**11.00**
Vial Number:	**RE2**	*Injection Volume:*	**25.00**
Injection Type:	**Calibration Standard**	*Channel:*	**ECD_1**
Calibration Level:	**02**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**26/Oct/17 12:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

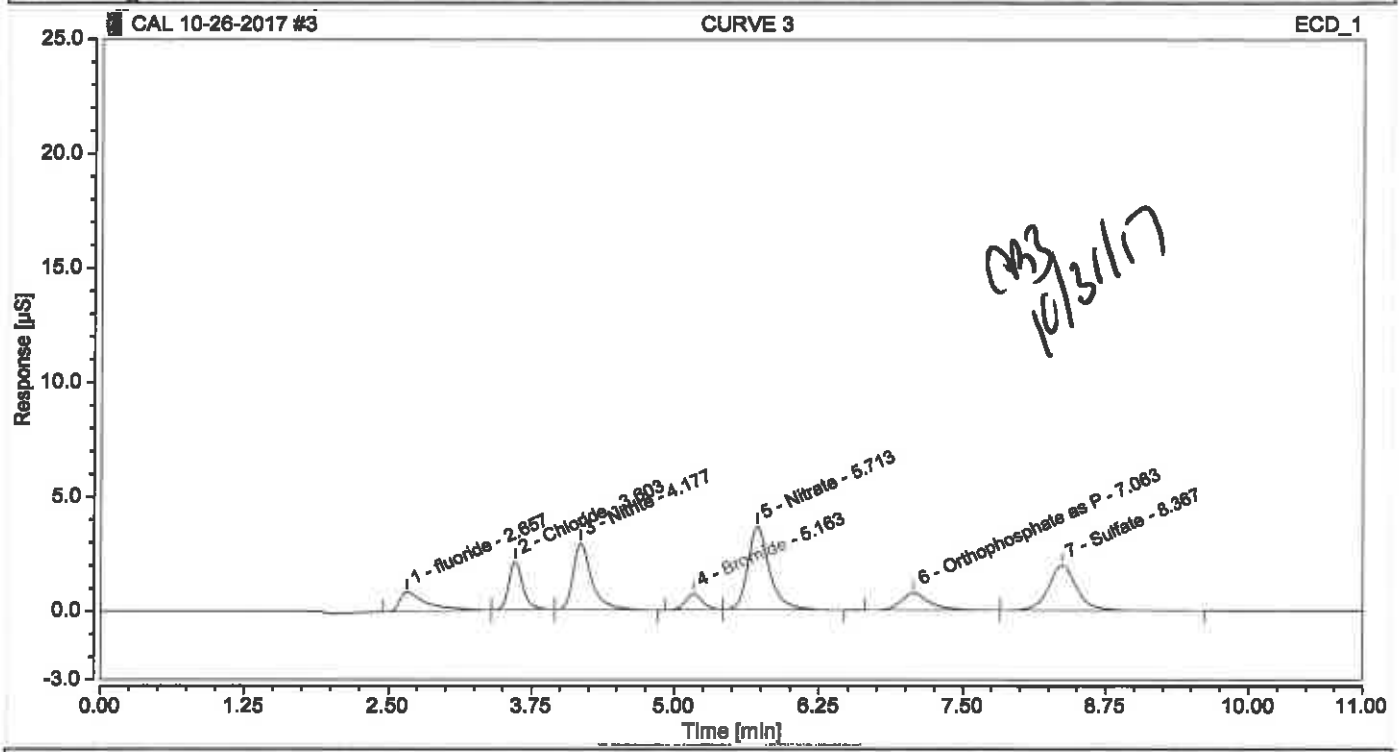
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.670	0.15618	0.538	12.74	9.20	0.4072
2	Chloride	3.610	0.14790	1.071	12.06	18.31	0.5419
3	Nitrite	4.187	0.25352	1.384	20.68	23.66	0.5184
4	Bromide	5.183	0.05763	0.334	4.70	5.71	0.5055
5	Nitrate	5.743	0.38149	1.764	31.12	30.15	0.5122
6	Orthophosphate as P	7.080	0.10151	0.328	8.28	5.61	0.5120
7	Sulfate	8.370	0.12772	0.430	10.42	7.35	0.5592
Total:			**1.226**	**5.849**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CURVE 3**	*Run Time (min):*	**11.00**
Vial Number:	**RE3**	*Injection Volume:*	**25.00**
Injection Type:	**Calibration Standard**	*Channel:*	**ECD_1**
Calibration Level:	**03**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**26/Oct/17 12:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

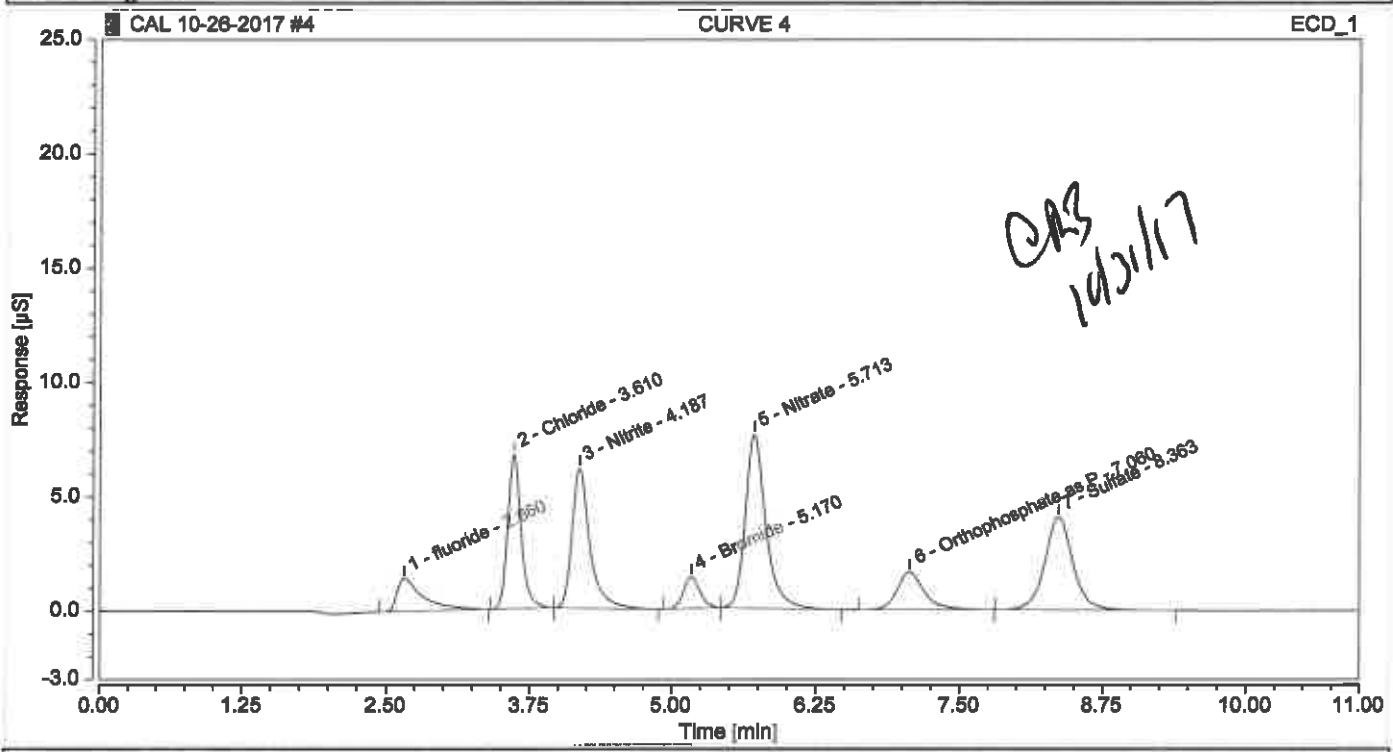
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.657	0.22658	0.846	8.29	6.55	0.5938
2	Chloride	3.603	0.29164	2.118	10.66	16.39	0.9825
3	Nitrite	4.177	0.54020	2.924	19.75	22.63	0.9795
4	Bromide	5.163	0.11607	0.679	4.24	5.25	0.9854
5	Nitrate	5.713	0.77395	3.637	28.30	28.15	0.9772
6	Orthophosphate as P	7.063	0.21443	0.746	7.84	5.77	0.9626
7	Sulfate	8.367	0.57187	1.970	20.91	15.25	2.4364
Total:			**2.735**	**12.919**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CURVE 4**	*Run Time (min):*	**11.00**
Vial Number:	**RE4**	*Injection Volume:*	**25.00**
Injection Type:	**Calibration Standard**	*Channel:*	**ECD_1**
Calibration Level:	**04**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**26/Oct/17 12:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

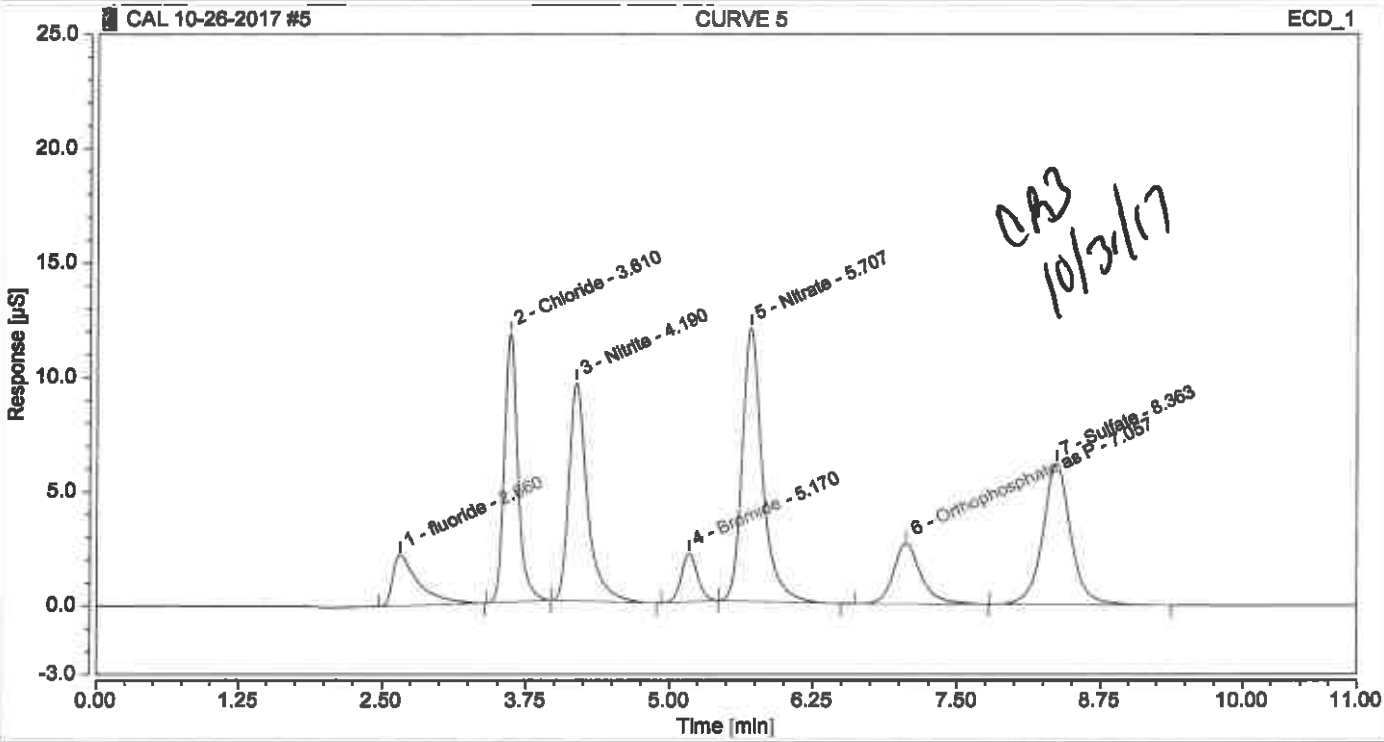
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.660	0.37624	1.445	6.42	4.97	0.9903
2	Chloride	3.610	0.91288	6.748	15.57	23.21	2.8870
3	Nitrite	4.187	1.12755	6.135	19.23	21.10	1.9241
4	Bromide	5.170	0.23662	1.389	4.03	4.78	1.9755
5	Nitrate	5.713	1.58484	7.616	27.02	26.20	1.9381
6	Orthophosphate as P	7.060	0.45911	1.669	7.83	5.74	1.9388
7	Sulfate	8.363	1.16717	4.071	19.90	14.00	4.9525
Total:			**5.864**	**29.072**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CURVE 5**	*Run Time (min):*	**11.00**
Vial Number:	**RE5**	*Injection Volume:*	**25.00**
Injection Type:	**Calibration Standard**	*Channel:*	**ECD_1**
Calibration Level:	**05**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**26/Oct/17 12:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

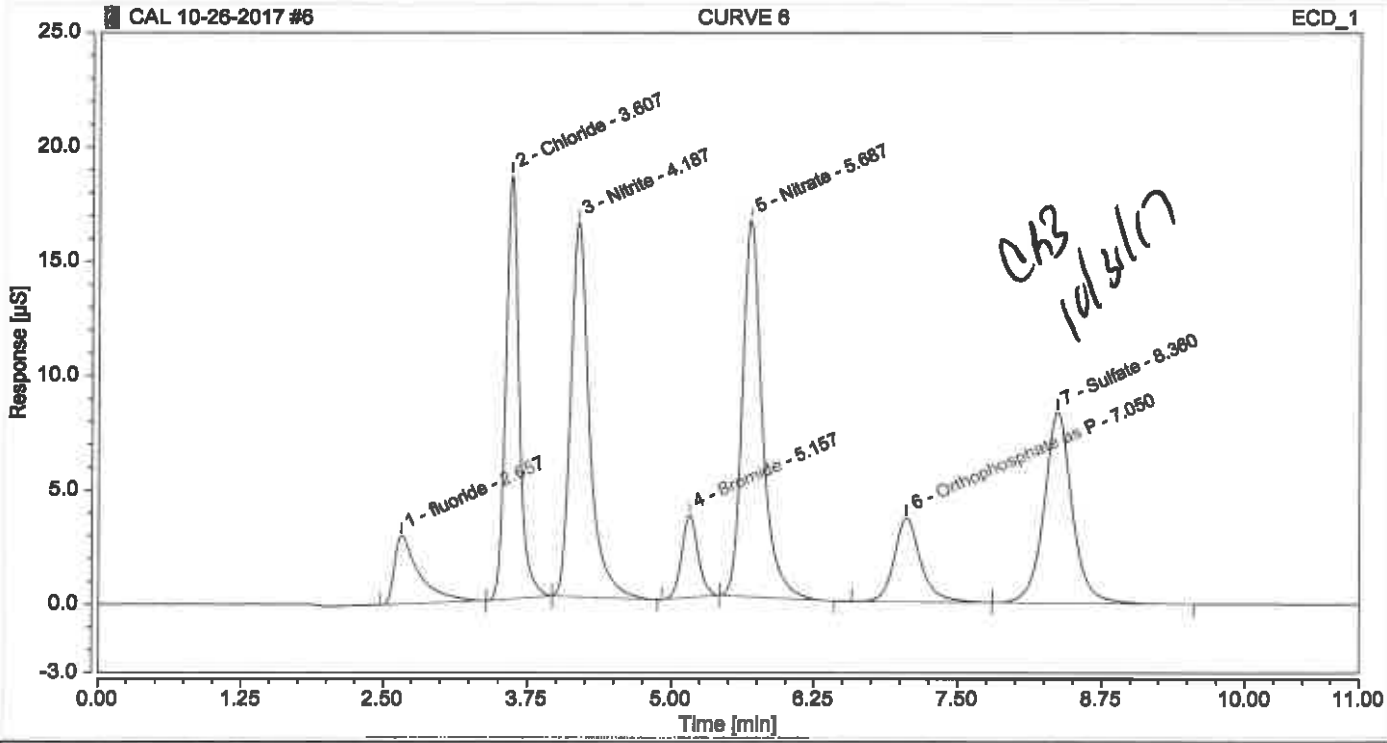
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.660	0.57401	2.246	6.20	4.83	1.5144
2	Chloride	3.610	1.58217	11.782	17.09	25.32	4.9387
3	Nitrite	4.190	1.77177	9.562	19.13	20.55	2.9601
4	Bromide	5.170	0.36025	2.122	3.89	4.56	2.9908
5	Nitrate	5.707	2.48054	11.974	26.79	25.73	2.9994
6	Orthophosphate as P	7.057	0.72562	2.662	7.84	5.72	3.0021
7	Sulfate	8.363	1.76613	6.180	19.07	13.28	7.4841
Total:			**9.260**	**46.528**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	CURVE 6	*Run Time (min):*	**11.00**
Vial Number:	**RE6**	*Injection Volume:*	**25.00**
Injection Type:	**Calibration Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Comments:*	**IC Stock I**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**26/Oct/17 12:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

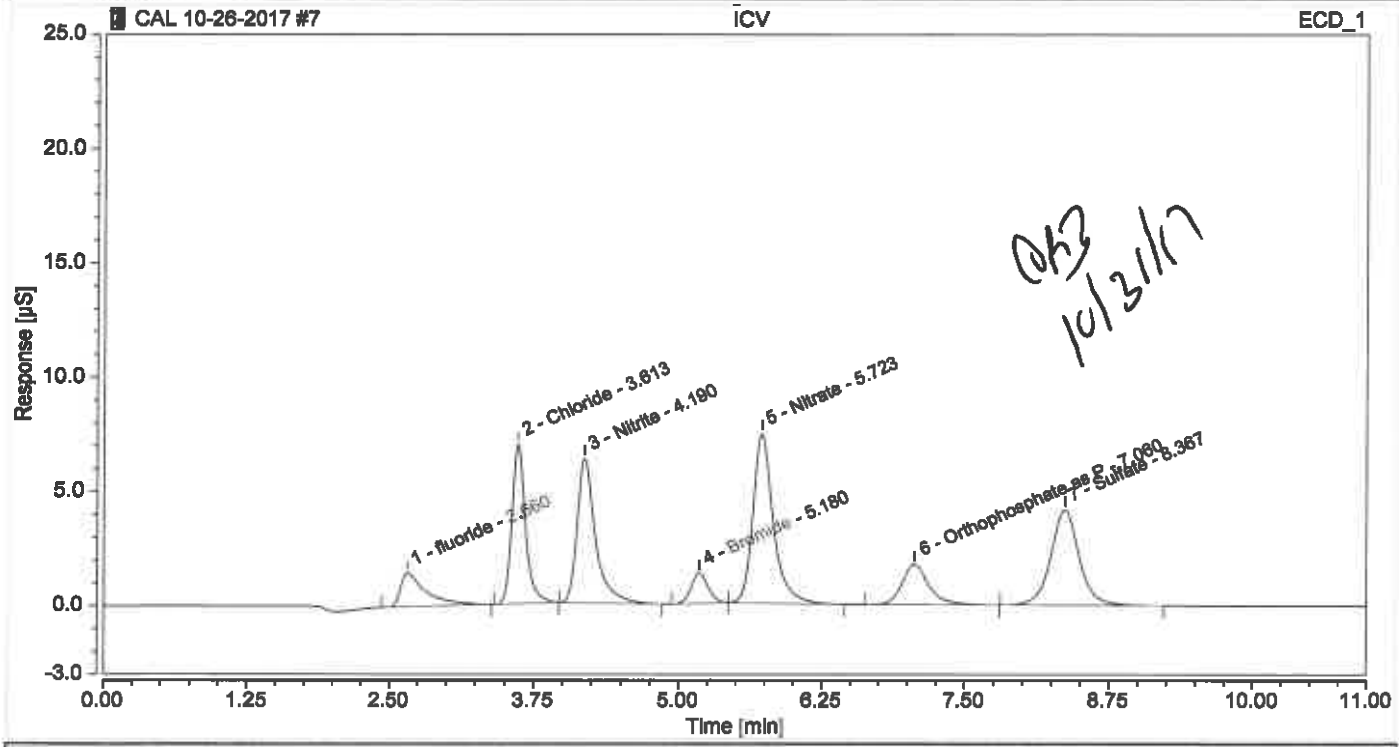
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.657	0.75521	3.008	5.56	4.29	1.9945
2	Chloride	3.607	2.44501	18.547	17.99	26.45	7.5838
3	Nitrite	4.187	3.07372	16.411	22.62	23.41	5.0540
4	Bromide	5.157	0.60692	3.618	4.47	5.16	5.0166
5	Nitrate	5.687	3.35327	16.493	24.67	23.52	4.0336
6	Orthophosphate as P	7.050	0.98437	3.669	7.24	5.23	4.0344
7	Sulfate	8.360	2.37281	8.369	17.46	11.94	10.0482
Total:			**13.591**	**70.115**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICV**	*Run Time (min):*	**11.00**
Vial Number:	**RA4**	*Injection Volume:*	**25.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**04**	*Comments:*	**IC Stock II**
Instrument Method:	**Seven Anion**		**n.a.**
Processing Method:	**Seven Anions**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**26/Oct/17 13:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount
1	fluoride	2.660	0.37873	1.474	6.38	4.99	0.9969
2	Chloride	3.613	0.94161	6.972	15.86	23.62	2.9751
3	Nitrite	4.190	1.15744	6.326	19.50	21.43	1.9722
4	Bromide	5.180	0.23069	1.353	3.89	4.58	1.9268
5	Nitrate	5.723	1.55136	7.430	26.13	25.17	1.8984
6	Orthophosphate as P	7.060	0.48454	1.779	8.16	6.02	2.0402
7	Sulfate	8.367	1.19254	4.187	20.09	14.18	5.0597
Total:			**5.937**	**29.521**	**100.00**	**100.00**	

TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ben Chow	Lab PM: Knapp, Jim D	Carrier Tracking No(s):	COC No: 500-56143-27461.1
Client Contact: Ms. Cynthia Bonczkiewicz	Phone: 312-283-3850	E-Mail: jim.knapp@testamericainc.com		Page: Page 1 ~~of 4~~
Company: Ramboll Environ US Corporation				Job #: 500-136523
Address: 333 W Wacker Drive Suite 2700	Due Date Requested:			
City: Chicago	TAT Requested (days): Rush 5 Day			
State, Zip: IL, 60606				
Phone: 312-288-3800(Tel)	PO #: Purchase Order not required			
Email: cbonczkiewicz@environcorp.com	WO #:			
Project Name: Ellsworth Industrial Park	Project #: 50013395			
Site:	SSOW#:			

500-136523 COC

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs (Target Compound list)	8260B_SIM - 1,4-Dioxane (to Canton)	RSK_175 - Diss Gases - MEE Only	9056A - Anions, PL	SM4500_S2_F - Sulfide	9060A - TOC	3500_F+2_B_Calc - Ferrous Iron - 48Hr HT	8082A - PCBs	6010B - RCRA Metals	8260B - VOCs	6010B, 8082A, 8270D			Total Number of containers	Special Instructions/Note:
					Preservation Code:			A	A	A	N	CB	S	N	N	D		N				
1	EIP-TB09-103017	10/30/17	—	G	Water			X													2	Trip blank
2	OMW3D-GW-103017	10/30/17	945	G	Water			X	X	X	X	X	X								13	
3	EIP-EB-103017	10/30/17	1130	G	Water			X													3	
4	OMW4D-GW-103017	10/30/17	1220	G	Water			X	X	X	X	X	X								13	
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	
					Water																	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	10/30/2017 1405	Ramboll Env.	Received by:	10/30/17 14:15	TA
Relinquished by:	10/31/17 1150	TA	Received by:	10/31/17 1150	TA-CHI
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.2

TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

0.6/C0.6

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Knapp, Jim D	Carrier Tracking No(s):	COC No: 500-95120.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jim.knapp@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-136523-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 11/6/2017			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Ellsworth Industrial Park	Project #: 50013395			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

RSK/MS

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175/ MEE Only	8260B_SIM/5030B (MOD) Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
OMW3D-GW-13017 (500-136523-2)	10/30/17	09:45 Central		Water			X	X	6	
OMW4D-GW-103017 (500-136523-4)	10/30/17	12:20 Central		Water			X	X	6	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/31/17 @ 1400	TA	[signature]	11-1-17 945	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA CHICAGO Site Name —
Cooler Received on 11-1-17 Opened on 11-1-17
Cooler unpacked by: POP
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ 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 °C) Observed Cooler Temp. 0.6 °C Corrected Cooler Temp. 0.6 °C
   IR GUN #36 (CF +0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN # 627 (CF -1.3°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 11-15 have been checked at the originating laboratory.
11. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
15. 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 _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

_____
_____
_____
_____
_____

17. 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)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Login Sample Receipt Checklist

Client: Ramboll Environ US Corporation

Job Number: 500-136523-1

Login Number: 136523
List Number: 1
Creator: Scott, Sherri L

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	