

ANALYTICAL REPORT

Job Number: 160-21259-1

Job Description: HDP RFP-CBA-022 (21 DAY TAT)

For:

Westinghouse Electric Company LLC
3300 State Road P
Festus, MO 63028

Attention: Mr. Martin Swanson



Approved for release.
Ivan H Vania
Project Manager II
3/9/2017 9:15 AM

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03/09/2017

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Louisiana Lab Certification ID (Non-Potable, Solid/Haz. Material): 106151
Florida Lab Certification ID (Drinking Water): E87689.

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Definitions/Glossary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

CASE NARRATIVE

Client: Westinghouse Electric Company LLC

Project: HDP RFP-CBA-022 (21 DAY TAT)

Report Number: 160-21259-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 3/2/2017 1:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples TB-022817 (160-21259-1) and GW-BR09JC-022817 (160-21259-2) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 03/03/2017 and 03/07/2017.

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 295720: Acetone, 2- Butanone, n- Butanol, 4- Methyl- 2- pentanone, 2- Hexanone, 1,1,2,2- Tetrachloroethane and 1,2- Dibromo- 3- chloropropane. A low level CCV was analyzed at the reporting limit (1ug/L) and the affected analytes were detected. The associated sample had no detections above the reporting limit for the affected analytes.(CCVIS 160-295720/4)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 295720. An LCS/LCSD were performed to demonstrate accuracy and replicate precision.TB-022817 (160-21259-1)

The continuing calibration verification (CCV) associated with analytical batch 160-296328 recovered above the upper control limit for Vinyl acetate. The samples associated with this CCV had no detections for the affected analytes; therefore, the data have been reported. (CCVIS 160-296328/2).

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-296328: 2-Butanone, 4-Methyl-2-pentanone, n-Butanol, 2-Hexanone, and Acetone. A low level CCV was analyzed at the base reporting limit of 1ug/L and the affected analytes were detected. Affected target analytes recovering above the reporting limit in the associated samples will be qualified and reported. (CCVIS 160-296328/2)

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 160-296328 recovered outside control limits for the following analytes: Vinyl acetate. These analytes were biased high in the LCS and LCSD and were not detected in the associated samples; therefore, the data have been reported. (LCS 160-296328/3) and (LCSD 160-296328/4)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 160-296328. Laboratory control sample (LCS) and duplicate (LCSD) were analyzed in order to demonstrate accuracy and replicate-precision. (LCS 160-296328/3) and (LCSD 160-296328/4)

The following sample was analyzed in batch 160-296328 at reduced volume due to high concentrations of target analytes: GW-BR09JC-022817 (160-21259-2). The reporting limits have been elevated by the appropriate factor.

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

Client Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Client Sample ID: TB-022817

Lab Sample ID: 160-21259-1

Date Collected: 02/28/17 07:00

Matrix: Water

Date Received: 03/02/17 13:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			03/03/17 15:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			03/03/17 15:24	1
1,1,2-Trichloroethane	ND		1.0	0.13	ug/L			03/03/17 15:24	1
1,1-Dichloroethene	ND		1.0	0.10	ug/L			03/03/17 15:24	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			03/03/17 15:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.10	ug/L			03/03/17 15:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.41	ug/L			03/03/17 15:24	1
1,2-Dichloroethane	ND		1.0	0.22	ug/L			03/03/17 15:24	1
1,2-Dichloroethene, Total	ND		2.0	0.14	ug/L			03/03/17 15:24	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			03/03/17 15:24	1
2-Butanone	ND		5.0	0.47	ug/L			03/03/17 15:24	1
2-Hexanone	ND		5.0	0.25	ug/L			03/03/17 15:24	1
4-Methyl-2-pentanone	ND		5.0	0.22	ug/L			03/03/17 15:24	1
Acetone	ND		2.0	0.55	ug/L			03/03/17 15:24	1
Benzene	ND		1.0	0.10	ug/L			03/03/17 15:24	1
Bromoform	ND		1.0	0.17	ug/L			03/03/17 15:24	1
Methyl bromide	ND		2.0	0.25	ug/L			03/03/17 15:24	1
Carbon disulfide	ND		1.0	0.10	ug/L			03/03/17 15:24	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			03/03/17 15:24	1
Chlorobenzene	ND		1.0	0.11	ug/L			03/03/17 15:24	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			03/03/17 15:24	1
Chloroethane	ND		2.0	0.16	ug/L			03/03/17 15:24	1
Chloroform	ND		1.0	0.10	ug/L			03/03/17 15:24	1
Chloromethane	ND		2.0	0.10	ug/L			03/03/17 15:24	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			03/03/17 15:24	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			03/03/17 15:24	1
Bromodichloromethane	ND		1.0	0.14	ug/L			03/03/17 15:24	1
Ethylbenzene	ND		1.0	0.12	ug/L			03/03/17 15:24	1
1,2-Dibromoethane	ND		1.0	0.13	ug/L			03/03/17 15:24	1
Methylene Chloride	ND		1.0	0.27	ug/L			03/03/17 15:24	1
n-Butanol	ND		50	12	ug/L			03/03/17 15:24	1
Styrene	ND		1.0	0.13	ug/L			03/03/17 15:24	1
Tetrachloroethene	ND		1.0	0.18	ug/L			03/03/17 15:24	1
Toluene	ND		1.0	0.14	ug/L			03/03/17 15:24	1
trans-1,2-Dichloroethene	ND		1.0	0.10	ug/L			03/03/17 15:24	1
trans-1,3-Dichloropropene	ND		1.0	0.10	ug/L			03/03/17 15:24	1
Trichloroethene	ND		1.0	0.25	ug/L			03/03/17 15:24	1
Vinyl acetate	ND		2.0	0.18	ug/L			03/03/17 15:24	1
Vinyl chloride	ND		2.0	0.19	ug/L			03/03/17 15:24	1
Xylenes, Total	ND		3.0	0.27	ug/L			03/03/17 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 129		03/03/17 15:24	1
4-Bromofluorobenzene (Surr)	110		81 - 130		03/03/17 15:24	1
Dibromofluoromethane (Surr)	101		81 - 124		03/03/17 15:24	1
Toluene-d8 (Surr)	113		87 - 128		03/03/17 15:24	1

Client Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Client Sample ID: GW-BR09JC-022817

Lab Sample ID: 160-21259-2

Date Collected: 02/28/17 09:00

Matrix: Water

Date Received: 03/02/17 13:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	3.4	ug/L			03/07/17 17:27	20
1,1,2,2-Tetrachloroethane	ND		20	2.0	ug/L			03/07/17 17:27	20
1,1,2-Trichloroethane	ND		20	2.6	ug/L			03/07/17 17:27	20
1,1-Dichloroethene	70		20	2.0	ug/L			03/07/17 17:27	20
1,1-Dichloroethane	180		20	1.4	ug/L			03/07/17 17:27	20
1,2,4-Trichlorobenzene	ND		20	2.0	ug/L			03/07/17 17:27	20
1,2-Dibromo-3-Chloropropane	ND		20	8.2	ug/L			03/07/17 17:27	20
1,2-Dichloroethane	ND		20	4.3	ug/L			03/07/17 17:27	20
1,2-Dichloroethene, Total	1500		400	27	ug/L			03/07/17 14:30	200
1,2-Dichloropropane	ND		20	2.0	ug/L			03/07/17 17:27	20
2-Butanone	ND		100	9.4	ug/L			03/07/17 17:27	20
2-Hexanone	ND		100	5.0	ug/L			03/07/17 17:27	20
4-Methyl-2-pentanone	ND		100	4.3	ug/L			03/07/17 17:27	20
Acetone	ND		40	11	ug/L			03/07/17 17:27	20
Benzene	ND		20	2.0	ug/L			03/07/17 17:27	20
Bromoform	ND		20	3.4	ug/L			03/07/17 17:27	20
Methyl bromide	ND		40	5.0	ug/L			03/07/17 17:27	20
Carbon disulfide	ND		20	2.0	ug/L			03/07/17 17:27	20
Carbon tetrachloride	ND		20	3.6	ug/L			03/07/17 17:27	20
Chlorobenzene	ND		20	2.2	ug/L			03/07/17 17:27	20
Chlorodibromomethane	ND		20	2.9	ug/L			03/07/17 17:27	20
Chloroethane	ND		40	3.3	ug/L			03/07/17 17:27	20
Chloroform	ND		20	2.0	ug/L			03/07/17 17:27	20
Chloromethane	ND		40	2.0	ug/L			03/07/17 17:27	20
cis-1,2-Dichloroethene	1500		200	20	ug/L			03/07/17 14:30	200
cis-1,3-Dichloropropene	ND		20	3.2	ug/L			03/07/17 17:27	20
Bromodichloromethane	ND		20	2.8	ug/L			03/07/17 17:27	20
Ethylbenzene	ND		20	2.4	ug/L			03/07/17 17:27	20
1,2-Dibromoethane	ND		20	2.6	ug/L			03/07/17 17:27	20
Methylene Chloride	ND		20	5.4	ug/L			03/07/17 17:27	20
n-Butanol	ND		1000	250	ug/L			03/07/17 17:27	20
Styrene	ND		20	2.7	ug/L			03/07/17 17:27	20
Tetrachloroethene	1600		200	36	ug/L			03/07/17 14:30	200
Toluene	ND		20	2.8	ug/L			03/07/17 17:27	20
trans-1,2-Dichloroethene	9.3 J		20	2.1	ug/L			03/07/17 17:27	20
trans-1,3-Dichloropropene	ND		20	2.0	ug/L			03/07/17 17:27	20
Trichloroethene	4200		200	50	ug/L			03/07/17 14:30	200
Vinyl acetate	ND *		40	3.6	ug/L			03/07/17 17:27	20
Vinyl chloride	180		40	3.9	ug/L			03/07/17 17:27	20
Xylenes, Total	ND		60	5.5	ug/L			03/07/17 17:27	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 129		03/07/17 14:30	200
1,2-Dichloroethane-d4 (Surr)	108		75 - 129		03/07/17 17:27	20
4-Bromofluorobenzene (Surr)	107		81 - 130		03/07/17 14:30	200
4-Bromofluorobenzene (Surr)	109		81 - 130		03/07/17 17:27	20
Dibromofluoromethane (Surr)	107		81 - 124		03/07/17 14:30	200
Dibromofluoromethane (Surr)	107		81 - 124		03/07/17 17:27	20
Toluene-d8 (Surr)	117		87 - 128		03/07/17 14:30	200
Toluene-d8 (Surr)	117		87 - 128		03/07/17 17:27	20

TestAmerica St. Louis

Surrogate Summary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-129)	BFB (81-130)	DBFM (81-124)	TOL (87-128)
160-21259-1	TB-022817	91	110	101	113
160-21259-2	GW-BR09JC-022817	110	107	107	117
160-21259-2	GW-BR09JC-022817	108	109	107	117
LCS 160-295720/5	Lab Control Sample	89	95	97	103
LCS 160-296328/3	Lab Control Sample	103	106	106	109
LCSD 160-295720/6	Lab Control Sample Dup	86	95	99	104
LCSD 160-296328/4	Lab Control Sample Dup	101	109	103	112
MB 160-295720/8	Method Blank	91	107	97	115
MB 160-296328/6	Method Blank	108	112	104	116

Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

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

Lab Sample ID: MB 160-295720/8

Matrix: Water

Analysis Batch: 295720

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			03/03/17 08:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			03/03/17 08:33	1
1,1,2-Trichloroethane	ND		1.0	0.13	ug/L			03/03/17 08:33	1
1,1-Dichloroethene	ND		1.0	0.10	ug/L			03/03/17 08:33	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			03/03/17 08:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.10	ug/L			03/03/17 08:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.41	ug/L			03/03/17 08:33	1
1,2-Dichloroethane	ND		1.0	0.22	ug/L			03/03/17 08:33	1
1,2-Dichloroethene, Total	ND		2.0	0.14	ug/L			03/03/17 08:33	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			03/03/17 08:33	1
2-Butanone	ND		5.0	0.47	ug/L			03/03/17 08:33	1
2-Hexanone	ND		5.0	0.25	ug/L			03/03/17 08:33	1
4-Methyl-2-pentanone	ND		5.0	0.22	ug/L			03/03/17 08:33	1
Acetone	ND		2.0	0.55	ug/L			03/03/17 08:33	1
Benzene	ND		1.0	0.10	ug/L			03/03/17 08:33	1
Bromoform	ND		1.0	0.17	ug/L			03/03/17 08:33	1
Methyl bromide	ND		2.0	0.25	ug/L			03/03/17 08:33	1
Carbon disulfide	ND		1.0	0.10	ug/L			03/03/17 08:33	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			03/03/17 08:33	1
Chlorobenzene	ND		1.0	0.11	ug/L			03/03/17 08:33	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			03/03/17 08:33	1
Chloroethane	ND		2.0	0.16	ug/L			03/03/17 08:33	1
Chloroform	ND		1.0	0.10	ug/L			03/03/17 08:33	1
Chloromethane	ND		2.0	0.10	ug/L			03/03/17 08:33	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			03/03/17 08:33	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			03/03/17 08:33	1
Bromodichloromethane	ND		1.0	0.14	ug/L			03/03/17 08:33	1
Ethylbenzene	ND		1.0	0.12	ug/L			03/03/17 08:33	1
1,2-Dibromoethane	ND		1.0	0.13	ug/L			03/03/17 08:33	1
Methylene Chloride	ND		1.0	0.27	ug/L			03/03/17 08:33	1
n-Butanol	ND		50	12	ug/L			03/03/17 08:33	1
Styrene	ND		1.0	0.13	ug/L			03/03/17 08:33	1
Tetrachloroethene	ND		1.0	0.18	ug/L			03/03/17 08:33	1
Toluene	ND		1.0	0.14	ug/L			03/03/17 08:33	1
trans-1,2-Dichloroethene	ND		1.0	0.10	ug/L			03/03/17 08:33	1
trans-1,3-Dichloropropene	ND		1.0	0.10	ug/L			03/03/17 08:33	1
Trichloroethene	ND		1.0	0.25	ug/L			03/03/17 08:33	1
Vinyl acetate	ND		2.0	0.18	ug/L			03/03/17 08:33	1
Vinyl chloride	ND		2.0	0.19	ug/L			03/03/17 08:33	1
Xylenes, Total	ND		3.0	0.27	ug/L			03/03/17 08:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 129		03/03/17 08:33	1
4-Bromofluorobenzene (Surr)	107		81 - 130		03/03/17 08:33	1
Dibromofluoromethane (Surr)	97		81 - 124		03/03/17 08:33	1
Toluene-d8 (Surr)	115		87 - 128		03/03/17 08:33	1

TestAmerica St. Louis

QC Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

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

Lab Sample ID: LCS 160-295720/5

Matrix: Water

Analysis Batch: 295720

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	10.0		ug/L		100	85 - 116
1,1,2,2-Tetrachloroethane	10.0	9.05		ug/L		90	80 - 120
1,1,2-Trichloroethane	10.0	8.64		ug/L		86	80 - 120
1,1-Dichloroethene	10.0	10.2		ug/L		102	80 - 120
1,1-Dichloroethane	10.0	10.1		ug/L		101	80 - 120
1,2,4-Trichlorobenzene	10.0	8.91		ug/L		89	75 - 121
1,2-Dibromo-3-Chloropropane	10.0	7.98		ug/L		80	73 - 123
1,2-Dichloroethane	10.0	8.52		ug/L		85	80 - 115
1,2-Dichloroethene, Total	20.0	19.5		ug/L		97	80 - 120
1,2-Dichloropropane	10.0	10.1		ug/L		101	80 - 120
2-Butanone	10.0	8.40		ug/L		84	67 - 127
2-Hexanone	10.0	8.80		ug/L		88	70 - 123
4-Methyl-2-pentanone	10.0	8.87		ug/L		89	75 - 126
Acetone	10.0	10.3		ug/L		103	69 - 129
Benzene	10.0	10.6		ug/L		106	80 - 120
Bromoform	10.0	8.93		ug/L		89	80 - 120
Methyl bromide	10.0	9.38		ug/L		94	70 - 124
Carbon disulfide	10.0	9.85		ug/L		99	80 - 121
Carbon tetrachloride	10.0	10.2		ug/L		102	83 - 125
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120
Chlorodibromomethane	10.0	9.20		ug/L		92	80 - 120
Chloroethane	10.0	10.3		ug/L		103	73 - 119
Chloroform	10.0	9.49		ug/L		95	80 - 120
Chloromethane	10.0	9.11		ug/L		91	72 - 124
cis-1,2-Dichloroethene	10.0	9.70		ug/L		97	80 - 120
cis-1,3-Dichloropropene	10.0	9.75		ug/L		97	80 - 120
Bromodichloromethane	10.0	9.16		ug/L		92	80 - 120
Ethylbenzene	10.0	10.6		ug/L		106	80 - 120
1,2-Dibromoethane	10.0	8.91		ug/L		89	80 - 120
Methylene Chloride	10.0	9.24		ug/L		92	80 - 120
n-Butanol	250	230		ug/L		92	62 - 128
Styrene	10.0	10.7		ug/L		107	81 - 133
Tetrachloroethene	10.0	10.1		ug/L		101	83 - 123
Toluene	10.0	10.6		ug/L		106	80 - 120
trans-1,2-Dichloroethene	10.0	9.79		ug/L		98	80 - 120
trans-1,3-Dichloropropene	10.0	9.80		ug/L		98	82 - 124
Trichloroethene	10.0	10.1		ug/L		101	80 - 120
Vinyl acetate	10.0	9.21		ug/L		92	63 - 140
Vinyl chloride	10.0	10.2		ug/L		102	77 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		75 - 129
4-Bromofluorobenzene (Surr)	95		81 - 130
Dibromofluoromethane (Surr)	97		81 - 124
Toluene-d8 (Surr)	103		87 - 128

QC Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

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

Lab Sample ID: LCSD 160-295720/6

Matrix: Water

Analysis Batch: 295720

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	RPD Limit
							Limits	RPD		
1,1,1-Trichloroethane	10.0	9.93		ug/L		99	85 - 116	1	20	
1,1,2,2-Tetrachloroethane	10.0	8.78		ug/L		88	80 - 120	3	20	
1,1,2-Trichloroethane	10.0	8.70		ug/L		87	80 - 120	1	20	
1,1-Dichloroethene	10.0	9.93		ug/L		99	80 - 120	3	20	
1,1-Dichloroethane	10.0	9.97		ug/L		100	80 - 120	1	20	
1,2,4-Trichlorobenzene	10.0	8.68		ug/L		87	75 - 121	3	20	
1,2-Dibromo-3-Chloropropane	10.0	8.05		ug/L		80	73 - 123	1	20	
1,2-Dichloroethane	10.0	8.52		ug/L		85	80 - 115	0	20	
1,2-Dichloroethene, Total	20.0	19.1		ug/L		96	80 - 120	2	20	
1,2-Dichloropropane	10.0	9.79		ug/L		98	80 - 120	3	20	
2-Butanone	10.0	8.15		ug/L		82	67 - 127	3	20	
2-Hexanone	10.0	8.81		ug/L		88	70 - 123	0	20	
4-Methyl-2-pentanone	10.0	8.47		ug/L		85	75 - 126	5	20	
Acetone	10.0	8.55		ug/L		85	69 - 129	18	20	
Benzene	10.0	10.4		ug/L		104	80 - 120	2	20	
Bromoform	10.0	8.79		ug/L		88	80 - 120	2	20	
Methyl bromide	10.0	9.20		ug/L		92	70 - 124	2	20	
Carbon disulfide	10.0	9.69		ug/L		97	80 - 121	2	20	
Carbon tetrachloride	10.0	10.1		ug/L		101	83 - 125	2	20	
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120	2	20	
Chlorodibromomethane	10.0	9.15		ug/L		92	80 - 120	1	20	
Chloroethane	10.0	10.5		ug/L		105	73 - 119	2	20	
Chloroform	10.0	9.49		ug/L		95	80 - 120	0	20	
Chloromethane	10.0	9.11		ug/L		91	72 - 124	0	20	
cis-1,2-Dichloroethene	10.0	9.52		ug/L		95	80 - 120	2	20	
cis-1,3-Dichloropropene	10.0	9.51		ug/L		95	80 - 120	2	20	
Bromodichloromethane	10.0	9.33		ug/L		93	80 - 120	2	20	
Ethylbenzene	10.0	10.4		ug/L		104	80 - 120	2	20	
1,2-Dibromoethane	10.0	8.75		ug/L		87	80 - 120	2	20	
Methylene Chloride	10.0	9.41		ug/L		94	80 - 120	2	20	
n-Butanol	250	216		ug/L		86	62 - 128	6	20	
Styrene	10.0	10.3		ug/L		103	81 - 133	4	20	
Tetrachloroethene	10.0	9.89		ug/L		99	83 - 123	2	20	
Toluene	10.0	10.4		ug/L		104	80 - 120	1	20	
trans-1,2-Dichloroethene	10.0	9.59		ug/L		96	80 - 120	2	20	
trans-1,3-Dichloropropene	10.0	9.75		ug/L		97	82 - 124	1	20	
Trichloroethene	10.0	9.94		ug/L		99	80 - 120	1	20	
Vinyl acetate	10.0	9.21		ug/L		92	63 - 140	0	20	
Vinyl chloride	10.0	10.3		ug/L		103	77 - 122	1	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	86		75 - 129
4-Bromofluorobenzene (Surr)	95		81 - 130
Dibromofluoromethane (Surr)	99		81 - 124
Toluene-d8 (Surr)	104		87 - 128

QC Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

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

Lab Sample ID: MB 160-296328/6

Matrix: Water

Analysis Batch: 296328

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			03/07/17 10:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			03/07/17 10:42	1
1,1,2-Trichloroethane	ND		1.0	0.13	ug/L			03/07/17 10:42	1
1,1-Dichloroethene	ND		1.0	0.10	ug/L			03/07/17 10:42	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			03/07/17 10:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.10	ug/L			03/07/17 10:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.41	ug/L			03/07/17 10:42	1
1,2-Dichloroethane	ND		1.0	0.22	ug/L			03/07/17 10:42	1
1,2-Dichloroethene, Total	ND		2.0	0.14	ug/L			03/07/17 10:42	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			03/07/17 10:42	1
2-Butanone	ND		5.0	0.47	ug/L			03/07/17 10:42	1
2-Hexanone	ND		5.0	0.25	ug/L			03/07/17 10:42	1
4-Methyl-2-pentanone	ND		5.0	0.22	ug/L			03/07/17 10:42	1
Acetone	ND		2.0	0.55	ug/L			03/07/17 10:42	1
Benzene	ND		1.0	0.10	ug/L			03/07/17 10:42	1
Bromoform	ND		1.0	0.17	ug/L			03/07/17 10:42	1
Methyl bromide	ND		2.0	0.25	ug/L			03/07/17 10:42	1
Carbon disulfide	ND		1.0	0.10	ug/L			03/07/17 10:42	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			03/07/17 10:42	1
Chlorobenzene	ND		1.0	0.11	ug/L			03/07/17 10:42	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			03/07/17 10:42	1
Chloroethane	ND		2.0	0.16	ug/L			03/07/17 10:42	1
Chloroform	ND		1.0	0.10	ug/L			03/07/17 10:42	1
Chloromethane	ND		2.0	0.10	ug/L			03/07/17 10:42	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			03/07/17 10:42	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			03/07/17 10:42	1
Bromodichloromethane	ND		1.0	0.14	ug/L			03/07/17 10:42	1
Ethylbenzene	ND		1.0	0.12	ug/L			03/07/17 10:42	1
1,2-Dibromoethane	ND		1.0	0.13	ug/L			03/07/17 10:42	1
Methylene Chloride	ND		1.0	0.27	ug/L			03/07/17 10:42	1
n-Butanol	ND		50	12	ug/L			03/07/17 10:42	1
Styrene	ND		1.0	0.13	ug/L			03/07/17 10:42	1
Tetrachloroethene	ND		1.0	0.18	ug/L			03/07/17 10:42	1
Toluene	ND		1.0	0.14	ug/L			03/07/17 10:42	1
trans-1,2-Dichloroethene	ND		1.0	0.10	ug/L			03/07/17 10:42	1
trans-1,3-Dichloropropene	ND		1.0	0.10	ug/L			03/07/17 10:42	1
Trichloroethene	ND		1.0	0.25	ug/L			03/07/17 10:42	1
Vinyl acetate	ND		2.0	0.18	ug/L			03/07/17 10:42	1
Vinyl chloride	ND		2.0	0.19	ug/L			03/07/17 10:42	1
Xylenes, Total	ND		3.0	0.27	ug/L			03/07/17 10:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 129		03/07/17 10:42	1
4-Bromofluorobenzene (Surr)	112		81 - 130		03/07/17 10:42	1
Dibromofluoromethane (Surr)	104		81 - 124		03/07/17 10:42	1
Toluene-d8 (Surr)	116		87 - 128		03/07/17 10:42	1

TestAmerica St. Louis

QC Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

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

Lab Sample ID: LCS 160-296328/3

Matrix: Water

Analysis Batch: 296328

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	10.9		ug/L		109	85 - 116
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	80 - 120
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	80 - 120
1,1-Dichloroethene	10.0	10.7		ug/L		107	80 - 120
1,1-Dichloroethane	10.0	10.9		ug/L		109	80 - 120
1,2,4-Trichlorobenzene	10.0	10.7		ug/L		107	75 - 121
1,2-Dibromo-3-Chloropropane	10.0	10.9		ug/L		109	73 - 123
1,2-Dichloroethane	10.0	10.7		ug/L		107	80 - 115
1,2-Dichloroethene, Total	20.0	21.2		ug/L		106	80 - 120
1,2-Dichloropropane	10.0	10.9		ug/L		109	80 - 120
2-Butanone	10.0	10.4		ug/L		104	67 - 127
2-Hexanone	10.0	9.98		ug/L		100	70 - 123
4-Methyl-2-pentanone	10.0	9.39		ug/L		94	75 - 126
Acetone	10.0	10.9		ug/L		109	69 - 129
Benzene	10.0	10.5		ug/L		105	80 - 120
Bromoform	10.0	10.4		ug/L		104	80 - 120
Methyl bromide	10.0	10.6		ug/L		106	70 - 124
Carbon disulfide	10.0	11.1		ug/L		111	80 - 121
Carbon tetrachloride	10.0	10.9		ug/L		109	83 - 125
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120
Chlorodibromomethane	10.0	10.5		ug/L		105	80 - 120
Chloroethane	10.0	11.1		ug/L		111	73 - 119
Chloroform	10.0	10.6		ug/L		106	80 - 120
Chloromethane	10.0	10.8		ug/L		108	72 - 124
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	80 - 120
cis-1,3-Dichloropropene	10.0	11.8		ug/L		118	80 - 120
Bromodichloromethane	10.0	10.8		ug/L		108	80 - 120
Ethylbenzene	10.0	10.9		ug/L		109	80 - 120
1,2-Dibromoethane	10.0	10.5		ug/L		105	80 - 120
Methylene Chloride	10.0	10.3		ug/L		103	80 - 120
n-Butanol	250	253		ug/L		101	62 - 128
Styrene	10.0	11.7		ug/L		117	81 - 133
Tetrachloroethene	10.0	10.7		ug/L		107	83 - 123
Toluene	10.0	11.1		ug/L		111	80 - 120
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	80 - 120
trans-1,3-Dichloropropene	10.0	11.9		ug/L		119	82 - 124
Trichloroethene	10.0	10.4		ug/L		104	80 - 120
Vinyl acetate	10.0	14.8 *		ug/L		148	63 - 140
Vinyl chloride	10.0	10.9		ug/L		109	77 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		75 - 129
4-Bromofluorobenzene (Surr)	106		81 - 130
Dibromofluoromethane (Surr)	106		81 - 124
Toluene-d8 (Surr)	109		87 - 128

QC Sample Results

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

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

Lab Sample ID: LCSD 160-296328/4

Matrix: Water

Analysis Batch: 296328

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	RPD	Limit
1,1,1-Trichloroethane	10.0	10.8		ug/L		108	85 - 116	1	20	
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	80 - 120	3	20	
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	80 - 120	2	20	
1,1-Dichloroethene	10.0	10.9		ug/L		109	80 - 120	2	20	
1,1-Dichloroethane	10.0	10.8		ug/L		108	80 - 120	1	20	
1,2,4-Trichlorobenzene	10.0	10.6		ug/L		106	75 - 121	1	20	
1,2-Dibromo-3-Chloropropane	10.0	10.3		ug/L		103	73 - 123	6	20	
1,2-Dichloroethane	10.0	10.4		ug/L		104	80 - 115	3	20	
1,2-Dichloroethene, Total	20.0	21.2		ug/L		106	80 - 120	0	20	
1,2-Dichloropropane	10.0	10.9		ug/L		109	80 - 120	0	20	
2-Butanone	10.0	9.88		ug/L		99	67 - 127	5	20	
2-Hexanone	10.0	9.69		ug/L		97	70 - 123	3	20	
4-Methyl-2-pentanone	10.0	9.25		ug/L		92	75 - 126	2	20	
Acetone	10.0	11.0		ug/L		110	69 - 129	0	20	
Benzene	10.0	10.4		ug/L		104	80 - 120	1	20	
Bromoform	10.0	10.3		ug/L		103	80 - 120	1	20	
Methyl bromide	10.0	9.90		ug/L		99	70 - 124	7	20	
Carbon disulfide	10.0	11.1		ug/L		111	80 - 121	0	20	
Carbon tetrachloride	10.0	10.9		ug/L		109	83 - 125	0	20	
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120	1	20	
Chlorodibromomethane	10.0	10.4		ug/L		104	80 - 120	2	20	
Chloroethane	10.0	10.8		ug/L		108	73 - 119	2	20	
Chloroform	10.0	10.5		ug/L		105	80 - 120	1	20	
Chloromethane	10.0	10.9		ug/L		109	72 - 124	1	20	
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	80 - 120	0	20	
cis-1,3-Dichloropropene	10.0	11.6		ug/L		116	80 - 120	2	20	
Bromodichloromethane	10.0	10.6		ug/L		106	80 - 120	2	20	
Ethylbenzene	10.0	11.1		ug/L		111	80 - 120	1	20	
1,2-Dibromoethane	10.0	10.4		ug/L		104	80 - 120	1	20	
Methylene Chloride	10.0	10.1		ug/L		101	80 - 120	2	20	
n-Butanol	250	232		ug/L		93	62 - 128	8	20	
Styrene	10.0	11.7		ug/L		117	81 - 133	0	20	
Tetrachloroethene	10.0	10.9		ug/L		109	83 - 123	2	20	
Toluene	10.0	11.3		ug/L		113	80 - 120	2	20	
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	80 - 120	0	20	
trans-1,3-Dichloropropene	10.0	11.7		ug/L		117	82 - 124	2	20	
Trichloroethene	10.0	10.3		ug/L		103	80 - 120	1	20	
Vinyl acetate	10.0	14.1 *		ug/L		141	63 - 140	5	20	
Vinyl chloride	10.0	10.9		ug/L		109	77 - 122	0	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		75 - 129
4-Bromofluorobenzene (Surr)	109		81 - 130
Dibromofluoromethane (Surr)	103		81 - 124
Toluene-d8 (Surr)	112		87 - 128

QC Association Summary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

GC/MS VOA

Analysis Batch: 295720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-21259-1	TB-022817	Total/NA	Water	8260C	
MB 160-295720/8	Method Blank	Total/NA	Water	8260C	
LCS 160-295720/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-295720/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 296328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-21259-2	GW-BR09JC-022817	Total/NA	Water	8260C	
160-21259-2	GW-BR09JC-022817	Total/NA	Water	8260C	
MB 160-296328/6	Method Blank	Total/NA	Water	8260C	
LCS 160-296328/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-296328/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Client Sample ID: TB-022817

Date Collected: 02/28/17 07:00

Date Received: 03/02/17 13:25

Lab Sample ID: 160-21259-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	295720	03/03/17 15:24	ECF	TAL SL

Client Sample ID: GW-BR09JC-022817

Date Collected: 02/28/17 09:00

Date Received: 03/02/17 13:25

Lab Sample ID: 160-21259-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	296328	03/07/17 14:30	SMR	TAL SL
Total/NA	Analysis	8260C		20	296328	03/07/17 17:27	SMR	TAL SL

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Certification Summary

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Louisiana	NELAP	6	04080	06-30-17

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

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dibromoethane
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloroethene, Total
8260C		Water	1,2-Dichloropropane
8260C		Water	2-Butanone
8260C		Water	2-Hexanone
8260C		Water	4-Methyl-2-pentanone
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromodichloromethane
8260C		Water	Bromoform
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Ethylbenzene
8260C		Water	Methyl bromide
8260C		Water	Methylene Chloride
8260C		Water	n-Butanol
8260C		Water	Styrene
8260C		Water	Tetrachloroethene
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Vinyl acetate
8260C		Water	Vinyl chloride
8260C		Water	Xylenes, Total

Missouri	State Program	7	780	06-30-17
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The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane

Certification Summary

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Missouri	State Program	7	780	06-30-17

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

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dibromoethane
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloroethene, Total
8260C		Water	1,2-Dichloropropane
8260C		Water	2-Butanone
8260C		Water	2-Hexanone
8260C		Water	4-Methyl-2-pentanone
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromodichloromethane
8260C		Water	Bromoform
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Ethylbenzene
8260C		Water	Methyl bromide
8260C		Water	Methylene Chloride
8260C		Water	n-Butanol
8260C		Water	Styrene
8260C		Water	Tetrachloroethene
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Vinyl acetate
8260C		Water	Vinyl chloride
8260C		Water	Xylenes, Total

NRC	NRC	24-24817-01	12-31-22
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The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,2,4-Trichlorobenzene

Certification Summary

Client: Westinghouse Electric Company LLC
 Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
NRC	NRC		24-24817-01	12-31-22

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

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dibromoethane
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloroethene, Total
8260C		Water	1,2-Dichloropropane
8260C		Water	2-Butanone
8260C		Water	2-Hexanone
8260C		Water	4-Methyl-2-pentanone
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromodichloromethane
8260C		Water	Bromoform
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Ethylbenzene
8260C		Water	Methyl bromide
8260C		Water	Methylene Chloride
8260C		Water	n-Butanol
8260C		Water	Styrene
8260C		Water	Tetrachloroethene
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Vinyl acetate
8260C		Water	Vinyl chloride
8260C		Water	Xylenes, Total

Method Summary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL SL

Protocol References:

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

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-21259-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-21259-1	TB-022817	Water	02/28/17 07:00	03/02/17 13:25
160-21259-2	GW-BR09JC-022817	Water	02/28/17 09:00	03/02/17 13:25

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1

SDG No.: _____

Instrument ID: VMSL Analysis Batch Number: 292232Lab Sample ID: IC 160-292232/6 Client Sample ID: _____Date Analyzed: 02/14/17 12:23 Lab File ID: LICL7558.D GC Column: RTX-VMS40 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.25	Peak Tail	rhoadess	02/15/17 10:50
1,4-Dioxane	9.78	Peak Tail	rhoadess	02/15/17 10:50
2-Chloroethyl vinyl ether	10.06	Peak Tail	rhoadess	02/15/17 10:50
1,2-Dibromo-3-Chloropropane	15.15	Peak Tail	rhoadess	02/15/17 10:50

Lab Sample ID: IC 160-292232/7 Client Sample ID: _____Date Analyzed: 02/14/17 12:49 Lab File ID: LICL7559.D GC Column: RTX-VMS40 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.25	Peak Tail	rhoadess	02/15/17 10:51
2-Chloroethyl vinyl ether	10.06	Peak Tail	rhoadess	02/15/17 10:51
1,2-Dibromo-3-Chloropropane	15.15	Peak Tail	rhoadess	02/15/17 10:51

Lab Sample ID: IC 160-292232/8 Client Sample ID: _____Date Analyzed: 02/14/17 13:14 Lab File ID: LICL7560.D GC Column: RTX-VMS40 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.25	Peak Tail	rhoadess	02/15/17 10:54

Lab Sample ID: ICV 160-292232/14 Client Sample ID: _____Date Analyzed: 02/14/17 15:47 Lab File ID: LICV7566.D GC Column: RTX-VMS40 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.25	Peak Tail	rhoadess	02/15/17 10:59

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1

SDG No.: _____

Instrument ID: VMSL Analysis Batch Number: 296328

Lab Sample ID: CCVIS 160-296328/2 Client Sample ID: _____

Date Analyzed: 03/07/17 09:01 Lab File ID: LCCV7799.D GC Column: RTX-VMS40 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.25	Peak Tail	rhoadess	03/07/17 09:40

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8260 NewWkMix_00204	02/05/17	01/29/17	Methanol, Lot DQ538	10 mL	8260_2_CLEVE_00048	100 uL	2-Chloroethyl vinyl ether	25 ug/mL
					8260Custom1_00047	125 uL	1,2-Dichloro-1,1,2,2-tetrafluoroethane	25 ug/mL
							n-Nonyl Aldehyde	25 ug/mL
					8260Cyclohexa_00048	100 uL	Cyclohexanone	250 ug/mL
					8260Gases_00193	100 uL	Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Methyl bromide	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					8260Ketones_00048	20 uL	2-Butanone	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone	25 ug/mL
							Acetone	25 ug/mL
					8260MegaMix_00048	100 uL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
					2-Chlorotoluene	25 ug/mL		
					2-Methyl-2-propanol	250 ug/mL		
3-Chloro-1-propene	25 ug/mL							
4-Chlorotoluene	25 ug/mL							
4-Isopropyltoluene	25 ug/mL							
Acrylonitrile	250 ug/mL							
Benzene	25 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromobenzene	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
					8260VinAcetat_00051	50 uL	Vinyl acetate	25 ug/mL
					Acrolein_00043	62.5 uL	Acrolein	125 ug/mL
					Adds(A)_2016_00011	100 uL	1,2,3-Trimethylbenzene	25 ug/mL
							1,3,5-Trichlorobenzene	25 ug/mL
							2-Chloro-1,3-butadiene	25 ug/mL
							2-Nitropropane	50 ug/mL
							Benzyl chloride	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isooctane	25 ug/mL
							Isopropyl alcohol	250 ug/mL
							Methacrylonitrile	250 ug/mL
							n-Butanol	625 ug/mL
					Adds (B) 2016_00011	100 uL	Ethyl acetate	50 ug/mL
							Ethyl acrylate	25 ug/mL
							Methyl methacrylate	50 ug/mL
							n-Butyl acetate	25 ug/mL
					Polar Add._00039	100 uL	Acetonitrile	250 ug/mL
							Ethanol	1000 ug/mL
							Isopropyl ether	25 ug/mL
							Propionitrile	250 ug/mL
							Tert-amyl methyl ether	25 ug/mL
							Tert-butyl ethyl ether	25 ug/mL
.8260 2 CLEVE 00048	02/08/17		Restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.8260Custom1_00047	02/28/17		Accustandard, Lot 215101095-01		(Purchased Reagent)		1,2-Dichloro-1,1,2,2-tetrafluoroethane	2000 ug/mL
							n-Nonyl Aldehyde	2000 ug/mL
.8260Cyclohexa 00048	02/08/17		Restek, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.8260Gases_00193	02/05/17		Restek, Lot A0122964		(Purchased Reagent)		Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Methyl bromide	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.8260Ketones_00048	02/08/17		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.8260MegaMix_00048	02/08/17		Restek, Lot A0118177		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	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
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							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	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-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
							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		
.8260VinAcetat_00051	02/15/17		Restek, Lot A0123104		(Purchased Reagent)		Vinyl acetate	5000 ug/mL		
.Acrolein_00043	02/28/17		Restek, Lot A0122668		(Purchased Reagent)		Acrolein	20000 ug/mL		
.Adds (A) 2016_00011	02/22/17		Restek, Lot A0116133		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL		
							1,3,5-Trichlorobenzene	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		
.Adds (B) 2016_00011	02/22/17		Restek, Lot A0116077		(Purchased Reagent)		Ethyl acetate	5000 ug/mL		
							Ethyl acrylate	2500 ug/mL		
							Methyl methacrylate	5000 ug/mL		
							n-Butyl acetate	2500 ug/mL		
.Polar Add._00039	02/08/17		Restek, Lot A0114666		(Purchased Reagent)		Acetonitrile	25000 ug/mL		
							Ethanol	100000 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		
8260 NewWkMix_00206	02/19/17	02/12/17	Methanol, Lot DQ538	10 mL	8260_2_CLEVE_00049	100 uL	2-Chloroethyl vinyl ether	25 ug/mL		
					8260Custom1_00047	125 uL	1,2-Dichloro-1,1,2,2-tetrafluoroethane	25 ug/mL		
							n-Nonyl Aldehyde	25 ug/mL		
					8260Cyclohexa_00049	100 uL	Cyclohexanone	250 ug/mL		
					8260Gases_00195	100 uL	Butadiene	25 ug/mL		
							Chloroethane	25 ug/mL		
							Chloromethane	25 ug/mL		
							Dichlorodifluoromethane	25 ug/mL		
							Dichlorofluoromethane	25 ug/mL		
							Methyl bromide	25 ug/mL		
							Trichlorofluoromethane	25 ug/mL		
							Vinyl chloride	25 ug/mL		
							8260Ketones_00049	20 uL	2-Butanone	25 ug/mL
									2-Hexanone	25 ug/mL
					4-Methyl-2-pentanone	25 ug/mL				
					8260MegaMix_00049	100 uL	Acetone	25 ug/mL		
							1,1,1,2-Tetrachloroethane	25 ug/mL		
							1,1,1-Trichloroethane	25 ug/mL		
							1,1,2,2-Tetrachloroethane	25 ug/mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

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	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
					8260VinAcetat_00052	50 uL	Vinyl acetate	25 ug/mL
					Acrolein_00043	62.5 uL	Acrolein	125 ug/mL
					Adds(A)_2016_00011	100 uL	1,2,3-Trimethylbenzene	25 ug/mL
							1,3,5-Trichlorobenzene	25 ug/mL
							2-Chloro-1,3-butadiene	25 ug/mL
							2-Nitropropane	50 ug/mL
							Benzyl chloride	25 ug/mL
							Isooctane	25 ug/mL
							Isopropyl alcohol	250 ug/mL
							Methacrylonitrile	250 ug/mL
							n-Butanol	625 ug/mL
					Adds(B)_2016_00011	100 uL	Ethyl acetate	50 ug/mL
							Ethyl acrylate	25 ug/mL
							Methyl methacrylate	50 ug/mL
							n-Butyl acetate	25 ug/mL
					Polar Add._00040	100 uL	Acetonitrile	250 ug/mL
							Ethanol	1000 ug/mL
							Isopropyl ether	25 ug/mL
							Propionitrile	250 ug/mL
							Tert-amyl methyl ether	25 ug/mL
							Tert-butyl ethyl ether	25 ug/mL
.8260_2_CLEVE_00049	03/05/17		Restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.8260Custom1_00047	02/28/17		Accustandard, Lot 215101095-01		(Purchased Reagent)		1,2-Dichloro-1,1,2,2-tetrafluoroethane	2000 ug/mL
.8260Cyclohexa_00049	03/05/17		Restek, Lot A0118487		(Purchased Reagent)		n-Nonyl Aldehyde	2000 ug/mL
.8260Gases_00195	02/19/17		Restek, Lot A0122964		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
							Butadiene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

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
							Methyl bromide	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.8260Ketones_00049	03/05/17		Restek, Lot A0115554			(Purchased Reagent)	2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.8260MegaMix_00049	03/05/17		Restek, Lot A0118177			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-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
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							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	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-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.8260VinAcetat_00052	03/12/17		Restek, Lot A0123626		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.Acrolein_00043	02/28/17		Restek, Lot A0122668		(Purchased Reagent)		Acrolein	20000 ug/mL
.Adds (A) 2016_00011	02/22/17		Restek, Lot A0116133		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	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
.Adds (B) 2016_00011	02/22/17		Restek, Lot A0116077		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
.Polar Add._00040	03/05/17		Restek, Lot A0114666			(Purchased Reagent)	Methyl methacrylate	5000 ug/mL							
							n-Butyl acetate	2500 ug/mL							
							Acetonitrile	25000 ug/mL							
							Ethanol	100000 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							
8260 NewWkMix_00208	03/05/17	02/26/17	Methanol, Lot DQ538	10 mL			8260Gases_00197	100 uL	Chloroethane	25 ug/mL					
									Chloromethane	25 ug/mL					
									Methyl bromide	25 ug/mL					
									Vinyl chloride	25 ug/mL					
							8260Ketones_00049	20 uL	2-Butanone	25 ug/mL					
									2-Hexanone	25 ug/mL					
									4-Methyl-2-pentanone	25 ug/mL					
									Acetone	25 ug/mL					
									8260MegaMix_00049	100 uL	1,1,1-Trichloroethane	25 ug/mL			
									1,1,2,2-Tetrachloroethane	25 ug/mL					
									1,1,2-Trichloroethane	25 ug/mL					
									1,1-Dichloroethane	25 ug/mL					
									1,1-Dichloroethene	25 ug/mL					
									1,2,4-Trichlorobenzene	25 ug/mL					
									1,2-Dibromo-3-Chloropropane	25 ug/mL					
									1,2-Dibromoethane	25 ug/mL					
									1,2-Dichloroethane	25 ug/mL					
									1,2-Dichloropropane	25 ug/mL					
									Benzene	25 ug/mL					
									Bromodichloromethane	25 ug/mL					
									Bromoform	25 ug/mL					
									Carbon disulfide	25 ug/mL					
									Carbon tetrachloride	25 ug/mL					
									Chlorobenzene	25 ug/mL					
									Chlorodibromomethane	25 ug/mL					
									Chloroform	25 ug/mL					
									cis-1,2-Dichloroethene	25 ug/mL					
									cis-1,3-Dichloropropene	25 ug/mL					
									Ethylbenzene	25 ug/mL					
									Methylene Chloride	25 ug/mL					
									Styrene	25 ug/mL					
									Tetrachloroethene	25 ug/mL					
									Toluene	25 ug/mL					
									trans-1,2-Dichloroethene	25 ug/mL					
									trans-1,3-Dichloropropene	25 ug/mL					
									Trichloroethene	25 ug/mL					
									8260VinAcetat_00052	50 uL	Vinyl acetate	25 ug/mL			
									Adds (A) 2016_00012	100 uL	n-Butanol	625 ug/mL			
							.8260Gases_00197	03/05/17		Restek, Lot A0122964			(Purchased Reagent)	Chloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	2500 ug/mL
							Methyl bromide	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.8260Ketones_00049	03/05/17		Restek, Lot A0115554			(Purchased Reagent)	2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.8260MegaMix_00049	03/05/17		Restek, Lot A0118177			(Purchased Reagent)	1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	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
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.8260VinAcetat_00052	03/12/17		Restek, Lot A0123626			(Purchased Reagent)	Vinyl acetate	5000 ug/mL
.Adds (A) 2016_00012	03/19/17		Restek, Lot A0123685			(Purchased Reagent)	n-Butanol	62500 ug/mL
8260 NewWkMix_00209	03/12/17	03/05/17	Methanol, Lot DQ538	10 mL	8260Gases_00198	100 uL	Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Methyl bromide	25 ug/mL
							Vinyl chloride	25 ug/mL
					8260Ketones_00050	20 uL	2-Butanone	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone	25 ug/mL
							Acetone	25 ug/mL
					8260MegaMix_00050	100 uL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							Benzene	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
					8260VinAcetat_00052	50 uL	Vinyl acetate	25 ug/mL
					Adds(A)_2016_00012	100 uL	n-Butanol	625 ug/mL
.8260Gases_00198	03/12/17		Restek, Lot A0122964		(Purchased Reagent)		Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Methyl bromide	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.8260Ketones_00050	04/05/17		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.8260MegaMix_00050	04/05/17		Restek, Lot A0118177		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromodichloromethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.8260VinAcetat 00052	03/12/17		Restek, Lot A0123626			(Purchased Reagent)	Vinyl acetate	5000 ug/mL
.Adds (A) 2016_00012	03/19/17		Restek, Lot A0123685			(Purchased Reagent)	n-Butanol	62500 ug/mL
8260 Surr 25_00070	02/03/17	01/03/17	Methanol, Lot DP461	25 mL	8260_Surr_00043	0.25 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.8260_Surr_00043	02/03/17		Restek, Lot A0120212			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
8260 Surr 25_00071	03/05/17	02/05/17	Methanol, Lot DQ538	25 mL	8260_Surr_00044	250 uL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.8260_Surr_00044	03/05/17		Restek, Lot A0120212			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
8260 Surr 25_00072	04/05/17	03/05/17	Methanol, Lot DQ538	25 mL	8260_Surr_00045	250 uL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.8260_Surr_00045	04/05/17		Restek, Lot A0120212			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
8260_Surr_00043	02/03/17		Restek, Lot A0120212			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8260_Surr_00044	03/05/17		Restek, Lot A0120212		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
8260NewHiWrk_00181	02/05/17	01/29/17	Methanol, Lot DQ538	1 mL	8260_2_CLEVE_00048	50 uL	2-Chloroethyl vinyl ether	125 ug/mL
					8260Custom1_00047	62.5 uL	1,2-Dichloro-1,1,2,2-tetrafluoroethane	125 ug/mL
					8260Cyclohexa_00048	50 uL	n-Nonyl Aldehyde	125 ug/mL
					8260Gases_00193	50 uL	Cyclohexanone	1250 ug/mL
							Butadiene	125 ug/mL
							Chloroethane	125 ug/mL
							Chloromethane	125 ug/mL
							Dichlorodifluoromethane	125 ug/mL
							Dichlorofluoromethane	125 ug/mL
							Methyl bromide	125 ug/mL
							Trichlorofluoromethane	125 ug/mL
							Vinyl chloride	125 ug/mL
							8260Ketones_00048	10 uL
					2-Hexanone	125 ug/mL		
					4-Methyl-2-pentanone	125 ug/mL		
					Acetone	125 ug/mL		
					8260MegaMix_00048	50 uL	1,1,1,2-Tetrachloroethane	125 ug/mL
							1,1,1-Trichloroethane	125 ug/mL
							1,1,2,2-Tetrachloroethane	125 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	125 ug/mL
							1,1,2-Trichloroethane	125 ug/mL
							1,1-Dichloroethane	125 ug/mL
							1,1-Dichloroethene	125 ug/mL
							1,1-Dichloropropene	125 ug/mL
							1,2,3-Trichlorobenzene	125 ug/mL
							1,2,3-Trichloropropane	125 ug/mL
							1,2,4-Trichlorobenzene	125 ug/mL
							1,2,4-Trimethylbenzene	125 ug/mL
							1,2-Dibromo-3-Chloropropane	125 ug/mL
							1,2-Dibromoethane	125 ug/mL
							1,2-Dichlorobenzene	125 ug/mL
							1,2-Dichloroethane	125 ug/mL
							1,2-Dichloropropane	125 ug/mL
							1,3,5-Trimethylbenzene	125 ug/mL
							1,3-Dichlorobenzene	125 ug/mL
							1,3-Dichloropropane	125 ug/mL
1,4-Dichlorobenzene	125 ug/mL							
1,4-Dioxane	2500 ug/mL							
2,2-Dichloropropane	125 ug/mL							
2-Chlorotoluene	125 ug/mL							
2-Methyl-2-propanol	1250 ug/mL							
3-Chloro-1-propene	125 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

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SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorotoluene	125 ug/mL
							4-Isopropyltoluene	125 ug/mL
							Acrylonitrile	1250 ug/mL
							Benzene	125 ug/mL
							Bromobenzene	125 ug/mL
							Bromodichloromethane	125 ug/mL
							Bromoform	125 ug/mL
							Carbon disulfide	125 ug/mL
							Carbon tetrachloride	125 ug/mL
							Chlorobenzene	125 ug/mL
							Chlorobromomethane	125 ug/mL
							Chlorodibromomethane	125 ug/mL
							Chloroform	125 ug/mL
							cis-1,2-Dichloroethene	125 ug/mL
							cis-1,3-Dichloropropene	125 ug/mL
							Cyclohexane	125 ug/mL
							Dibromomethane	125 ug/mL
							Ethyl ether	125 ug/mL
							Ethyl methacrylate	125 ug/mL
							Ethylbenzene	125 ug/mL
							Hexachlorobutadiene	125 ug/mL
							Hexane	125 ug/mL
							Iodomethane	125 ug/mL
							Isobutyl alcohol	3125 ug/mL
							Isopropylbenzene	125 ug/mL
							m-Xylene & p-Xylene	125 ug/mL
							Methyl acetate	625 ug/mL
							Methyl tert-butyl ether	125 ug/mL
							Methylcyclohexane	125 ug/mL
							Methylene Chloride	125 ug/mL
							n-Butylbenzene	125 ug/mL
							n-Heptane	125 ug/mL
							N-Propylbenzene	125 ug/mL
							Naphthalene	125 ug/mL
							o-Xylene	125 ug/mL
							sec-Butylbenzene	125 ug/mL
							Styrene	125 ug/mL
							tert-Butylbenzene	125 ug/mL
							Tetrachloroethene	125 ug/mL
							Tetrahydrofuran	250 ug/mL
							Toluene	125 ug/mL
							trans-1,2-Dichloroethene	125 ug/mL
							trans-1,3-Dichloropropene	125 ug/mL
							trans-1,4-Dichloro-2-butene	125 ug/mL
							Trichloroethene	125 ug/mL
					8260VinAcetat_00051	25 uL	Vinyl acetate	125 ug/mL
					Acrolein_00043	31.25 uL	Acrolein	625 ug/mL
					Adds(A)_2016_00011	50 uL	1,2,3-Trimethylbenzene	125 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trichlorobenzene	125 ug/mL
							2-Chloro-1,3-butadiene	125 ug/mL
							2-Nitropropane	250 ug/mL
							Benzyl chloride	125 ug/mL
							Isooctane	125 ug/mL
							Isopropyl alcohol	1250 ug/mL
							Methacrylonitrile	1250 ug/mL
							n-Butanol	3125 ug/mL
					Adds (B) 2016_00011	50 uL	Ethyl acetate	250 ug/mL
							Ethyl acrylate	125 ug/mL
							Methyl methacrylate	250 ug/mL
							n-Butyl acetate	125 ug/mL
					Polar Add._00039	50 uL	Acetonitrile	1250 ug/mL
							Ethanol	5000 ug/mL
							Isopropyl ether	125 ug/mL
							Propionitrile	1250 ug/mL
							Tert-amyl methyl ether	125 ug/mL
							Tert-butyl ethyl ether	125 ug/mL
.8260_2_CLEVE_00048	02/08/17		Restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.8260Custom1_00047	02/28/17		Accustandard, Lot 215101095-01		(Purchased Reagent)		1,2-Dichloro-1,1,2,2-tetrafluoroethane	2000 ug/mL
							n-Nonyl Aldehyde	2000 ug/mL
.8260Cyclohexa_00048	02/08/17		Restek, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.8260Gases_00193	02/05/17		Restek, Lot A0122964		(Purchased Reagent)		Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Methyl bromide	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.8260Ketones_00048	02/08/17		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.8260MegaMix_00048	02/08/17		Restek, Lot A0118177		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	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
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							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	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-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

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
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.8260VinAcetat_00051	02/15/17		Restek, Lot A0123104		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.Acrolein_00043	02/28/17		Restek, Lot A0122668		(Purchased Reagent)		Acrolein	20000 ug/mL
.Adds(A)_2016_00011	02/22/17		Restek, Lot A0116133		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	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
.Adds(B)_2016_00011	02/22/17		Restek, Lot A0116077		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
.Polar Add._00039	02/08/17		Restek, Lot A0114666		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Ethanol	100000 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
8260NewHiWrk_00183	02/19/17	02/12/17	Methanol, Lot DQ538	1 mL	8260_2_CLEVE_00049	50 uL	2-Chloroethyl vinyl ether	125 ug/mL
					8260Custom1_00047	62.5 uL	1,2-Dichloro-1,1,2,2-tetrafluoroethane	125 ug/mL
							n-Nonyl Aldehyde	125 ug/mL
					8260Cyclohexa_00049	50 uL	Cyclohexanone	1250 ug/mL
					8260Gases_00195	50 uL	Butadiene	125 ug/mL
							Chloroethane	125 ug/mL
							Chloromethane	125 ug/mL
							Dichlorodifluoromethane	125 ug/mL
							Dichlorofluoromethane	125 ug/mL
							Methyl bromide	125 ug/mL
							Trichlorofluoromethane	125 ug/mL
							Vinyl chloride	125 ug/mL
					8260Ketones_00049	10 uL	2-Butanone	125 ug/mL
							2-Hexanone	125 ug/mL
							4-Methyl-2-pentanone	125 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

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SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	125 ug/mL
					8260MegaMix_00049	50 uL	1,1,1,2-Tetrachloroethane	125 ug/mL
							1,1,1-Trichloroethane	125 ug/mL
							1,1,2,2-Tetrachloroethane	125 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	125 ug/mL
							1,1,2-Trichloroethane	125 ug/mL
							1,1-Dichloroethane	125 ug/mL
							1,1-Dichloroethene	125 ug/mL
							1,1-Dichloropropene	125 ug/mL
							1,2,3-Trichlorobenzene	125 ug/mL
							1,2,3-Trichloropropane	125 ug/mL
							1,2,4-Trichlorobenzene	125 ug/mL
							1,2,4-Trimethylbenzene	125 ug/mL
							1,2-Dibromo-3-Chloropropane	125 ug/mL
							1,2-Dibromoethane	125 ug/mL
							1,2-Dichlorobenzene	125 ug/mL
							1,2-Dichloroethane	125 ug/mL
							1,2-Dichloropropane	125 ug/mL
							1,3,5-Trimethylbenzene	125 ug/mL
							1,3-Dichlorobenzene	125 ug/mL
							1,3-Dichloropropane	125 ug/mL
							1,4-Dichlorobenzene	125 ug/mL
							1,4-Dioxane	2500 ug/mL
							2,2-Dichloropropane	125 ug/mL
							2-Chlorotoluene	125 ug/mL
							2-Methyl-2-propanol	1250 ug/mL
							3-Chloro-1-propene	125 ug/mL
							4-Chlorotoluene	125 ug/mL
							4-Isopropyltoluene	125 ug/mL
							Acrylonitrile	1250 ug/mL
							Benzene	125 ug/mL
							Bromobenzene	125 ug/mL
							Bromodichloromethane	125 ug/mL
							Bromoform	125 ug/mL
							Carbon disulfide	125 ug/mL
							Carbon tetrachloride	125 ug/mL
							Chlorobenzene	125 ug/mL
							Chlorobromomethane	125 ug/mL
							Chlorodibromomethane	125 ug/mL
							Chloroform	125 ug/mL
							cis-1,2-Dichloroethene	125 ug/mL
							cis-1,3-Dichloropropene	125 ug/mL
							Cyclohexane	125 ug/mL
							Dibromomethane	125 ug/mL
							Ethyl ether	125 ug/mL
							Ethyl methacrylate	125 ug/mL
							Ethylbenzene	125 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

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SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
							Hexachlorobutadiene	125 ug/mL		
							Hexane	125 ug/mL		
							Iodomethane	125 ug/mL		
							Isobutyl alcohol	3125 ug/mL		
							Isopropylbenzene	125 ug/mL		
							m-Xylene & p-Xylene	125 ug/mL		
							Methyl acetate	625 ug/mL		
							Methyl tert-butyl ether	125 ug/mL		
							Methylcyclohexane	125 ug/mL		
							Methylene Chloride	125 ug/mL		
							n-Butylbenzene	125 ug/mL		
							n-Heptane	125 ug/mL		
							N-Propylbenzene	125 ug/mL		
							Naphthalene	125 ug/mL		
							o-Xylene	125 ug/mL		
							sec-Butylbenzene	125 ug/mL		
							Styrene	125 ug/mL		
							tert-Butylbenzene	125 ug/mL		
							Tetrachloroethene	125 ug/mL		
							Tetrahydrofuran	250 ug/mL		
							Toluene	125 ug/mL		
							trans-1,2-Dichloroethene	125 ug/mL		
							trans-1,3-Dichloropropene	125 ug/mL		
							trans-1,4-Dichloro-2-butene	125 ug/mL		
							Trichloroethene	125 ug/mL		
							8260VinAcetat_00052	25 uL	Vinyl acetate	125 ug/mL
							Acrolein_00043	31.25 uL	Acrolein	625 ug/mL
							Adds(A)_2016_00011	50 uL	1,2,3-Trimethylbenzene	125 ug/mL
									1,3,5-Trichlorobenzene	125 ug/mL
									2-Chloro-1,3-butadiene	125 ug/mL
									2-Nitropropane	250 ug/mL
									Benzyl chloride	125 ug/mL
									Isooctane	125 ug/mL
		Isopropyl alcohol	1250 ug/mL							
		Methacrylonitrile	1250 ug/mL							
		n-Butanol	3125 ug/mL							
Adds(B)_2016_00011	50 uL	Ethyl acetate	250 ug/mL							
		Ethyl acrylate	125 ug/mL							
		Methyl methacrylate	250 ug/mL							
		n-Butyl acetate	125 ug/mL							
Polar Add._00040	50 uL	Acetonitrile	1250 ug/mL							
		Ethanol	5000 ug/mL							
		Isopropyl ether	125 ug/mL							
		Propionitrile	1250 ug/mL							
		Tert-amyl methyl ether	125 ug/mL							
		Tert-butyl ethyl ether	125 ug/mL							
.8260_2_CLEVE_00049	03/05/17	Restek, Lot A0115628	(Purchased Reagent)	2-Chloroethyl vinyl ether	2500 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

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SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8260Custom1_00047	02/28/17		Accustandard, Lot 215101095-01		(Purchased Reagent)		1,2-Dichloro-1,1,2,2-tetrafluoroethane	2000 ug/mL
.8260Cyclohexa_00049	03/05/17		Restek, Lot A0118487		(Purchased Reagent)		n-Nonyl Aldehyde	2000 ug/mL
.8260Gases_00195	02/19/17		Restek, Lot A0122964		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Methyl bromide	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
							2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.8260Ketones_00049	03/05/17		Restek, Lot A0115554		(Purchased Reagent)			
							1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-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
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
Bromobenzene	2500 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

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SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							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	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-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.8260VinAcetat 00052	03/12/17		Restek, Lot A0123626		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.Acrolein 00043	02/28/17		Restek, Lot A0122668		(Purchased Reagent)		Acrolein	20000 ug/mL
.Adds (A) 2016_00011	02/22/17		Restek, Lot A0116133		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
			Restek, Lot A0116077				Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
							Ethyl acetate	5000 ug/mL
.Adds(B) 2016_00011	02/22/17		Restek, Lot A0116077			(Purchased Reagent)	Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
.Polar Add._00040	03/05/17		Restek, Lot A0114666			(Purchased Reagent)	Acetonitrile	25000 ug/mL
							Ethanol	100000 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
8260NewICVMix_00194	02/05/17	01/29/17	Methanol, Lot DQ538	5 mL	8260GasesSS_00194	50 uL	Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Methyl bromide	25 ug/mL
							Vinyl chloride	25 ug/mL
					8260KetonesSS_00047	10 uL	2-Butanone	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone	25 ug/mL
							Acetone	25 ug/mL
					8260MegaMixSS_00047	50 uL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							Benzene	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
trans-1,2-Dichloroethene	25 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
					8260VinAcetSS_00050	25 uL	Vinyl acetate	25 ug/mL
					Add(A)SS_2016_00013	50 uL	n-Butanol	625 ug/mL
.8260GasesSS_00194	02/05/17		Restek, Lot A0115484		(Purchased Reagent)		Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Methyl bromide	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.8260KetonesSS_00047	02/08/17		Restek, Lot A0118013		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
.8260MegaMixSS_00047	02/08/17		Restek, Lot A0120604		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	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
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.8260VinAcetSS_00050	02/22/17		Restek, Lot A0122475		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.Add(A)SS_2016_00013	02/22/17		Restek, Lot A0116135		(Purchased Reagent)		n-Butanol	62500 ug/mL
8260NewICVMix_00196	02/19/17	02/12/17	Methanol, Lot DQ538	5 mL	8260GasesSS_00196	50 uL	Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Methyl bromide	25 ug/mL
							Vinyl chloride	25 ug/mL
					8260KetonesSS_00048	10 uL	2-Butanone	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
					8260MegaMixSS_00048	50 uL	2-Hexanone	25 ug/mL	
							4-Methyl-2-pentanone	25 ug/mL	
							Acetone	25 ug/mL	
							1,1,1-Trichloroethane	25 ug/mL	
							1,1,2,2-Tetrachloroethane	25 ug/mL	
							1,1,2-Trichloroethane	25 ug/mL	
							1,1-Dichloroethane	25 ug/mL	
							1,1-Dichloroethene	25 ug/mL	
							1,2,4-Trichlorobenzene	25 ug/mL	
							1,2-Dibromo-3-Chloropropane	25 ug/mL	
							1,2-Dibromoethane	25 ug/mL	
							1,2-Dichloroethane	25 ug/mL	
							1,2-Dichloropropane	25 ug/mL	
							Benzene	25 ug/mL	
							Bromodichloromethane	25 ug/mL	
							Bromoform	25 ug/mL	
							Carbon disulfide	25 ug/mL	
							Carbon tetrachloride	25 ug/mL	
							Chlorobenzene	25 ug/mL	
							Chlorodibromomethane	25 ug/mL	
							Chloroform	25 ug/mL	
							cis-1,2-Dichloroethene	25 ug/mL	
							cis-1,3-Dichloropropene	25 ug/mL	
							Ethylbenzene	25 ug/mL	
							Methylene Chloride	25 ug/mL	
Styrene	25 ug/mL								
Tetrachloroethene	25 ug/mL								
Toluene	25 ug/mL								
trans-1,2-Dichloroethene	25 ug/mL								
trans-1,3-Dichloropropene	25 ug/mL								
Trichloroethene	25 ug/mL								
					8260VinAcetSS_00050	25 uL	Vinyl acetate	25 ug/mL	
					Add(A)SS_2016_00013	50 uL	n-Butanol	625 ug/mL	
.8260GasesSS_00196	02/19/17		Restek, Lot A0115484				(Purchased Reagent)	Chloroethane	2500 ug/mL
								Chloromethane	2500 ug/mL
								Methyl bromide	2500 ug/mL
								Vinyl chloride	2500 ug/mL
.8260KetonesSS_00048	03/05/17		Restek, Lot A0118013				(Purchased Reagent)	2-Butanone	12500 ug/mL
								2-Hexanone	12500 ug/mL
								4-Methyl-2-pentanone	12500 ug/mL
								Acetone	12500 ug/mL
.8260MegaMixSS_00048	03/05/17		Restek, Lot A0120604				(Purchased Reagent)	1,1,1-Trichloroethane	2500 ug/mL
								1,1,2,2-Tetrachloroethane	2500 ug/mL
								1,1,2-Trichloroethane	2500 ug/mL
								1,1-Dichloroethane	2500 ug/mL
								1,1-Dichloroethene	2500 ug/mL
								1,2,4-Trichlorobenzene	2500 ug/mL
								1,2-Dibromo-3-Chloropropane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							1,2-Dibromoethane	2500 ug/mL	
							1,2-Dichloroethane	2500 ug/mL	
							1,2-Dichloropropane	2500 ug/mL	
							Benzene	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	
							Chlorodibromomethane	2500 ug/mL	
							Chloroform	2500 ug/mL	
							cis-1,2-Dichloroethene	2500 ug/mL	
							cis-1,3-Dichloropropene	2500 ug/mL	
							Ethylbenzene	2500 ug/mL	
							Methylene Chloride	2500 ug/mL	
							Styrene	2500 ug/mL	
							Tetrachloroethene	2500 ug/mL	
							Toluene	2500 ug/mL	
							trans-1,2-Dichloroethene	2500 ug/mL	
							trans-1,3-Dichloropropene	2500 ug/mL	
							Trichloroethene	2500 ug/mL	
.8260VinAcetSS 00050	02/22/17		Restek, Lot A0122475				(Purchased Reagent)	Vinyl acetate	5000 ug/mL
.Add(A)SS 2016 00013	02/22/17		Restek, Lot A0116135				(Purchased Reagent)	n-Butanol	62500 ug/mL
I.S. Working_00143	02/20/17	01/20/17	Methanol, Lot DP461	25 mL	8260 IS(2014)_00036	250 uL	1,4-Dichlorobenzene-d4	25 ug/mL	
							Chlorobenzene-d5	25 ug/mL	
							Fluorobenzene	25 ug/mL	
.8260 IS(2014)_00036	02/20/17		Restek, Lot A0118801				(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL
								Chlorobenzene-d5	2500 ug/mL
								Fluorobenzene	2500 ug/mL
I.S. Working_00144	03/19/17	02/19/17	Methanol, Lot DQ538	25 mL	8260 IS(2014)_00037	250 uL	1,4-Dichlorobenzene-d4	25 ug/mL	
								Chlorobenzene-d5	25 ug/mL
								Fluorobenzene	25 ug/mL
.8260 IS(2014)_00037	03/19/17		Restek, Lot A0118801				(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL
								Chlorobenzene-d5	2500 ug/mL
								Fluorobenzene	2500 ug/mL

Reagent

8260 IS (2014)_00036



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 30241 Lot No.: A0118801
 Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : April 30, 2021 Storage: 0°C or colder

REC'D - 12-12-16
 JDH
 1074908 - 912

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,507.2 µg/mL (Lot BCBK8171V)	+/-	14.5771	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	140.5762	µg/mL	Unstressed
	Purity 99%		+/-	143.8655	µg/mL	Stressed
2	Chlorobenzene-d5	2,508.4 µg/mL (Lot PR-23926)	+/-	14.5841	µg/mL	Gravimetric
	CAS # 3114-55-4		+/-	140.6435	µg/mL	Unstressed
	Purity 99%		+/-	143.9344	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,511.0 µg/mL (Lot PR-18488)	+/-	14.5992	µg/mL	Gravimetric
	CAS # 3855-82-1		+/-	140.7893	µg/mL	Unstressed
	Purity 99%		+/-	144.0836	µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

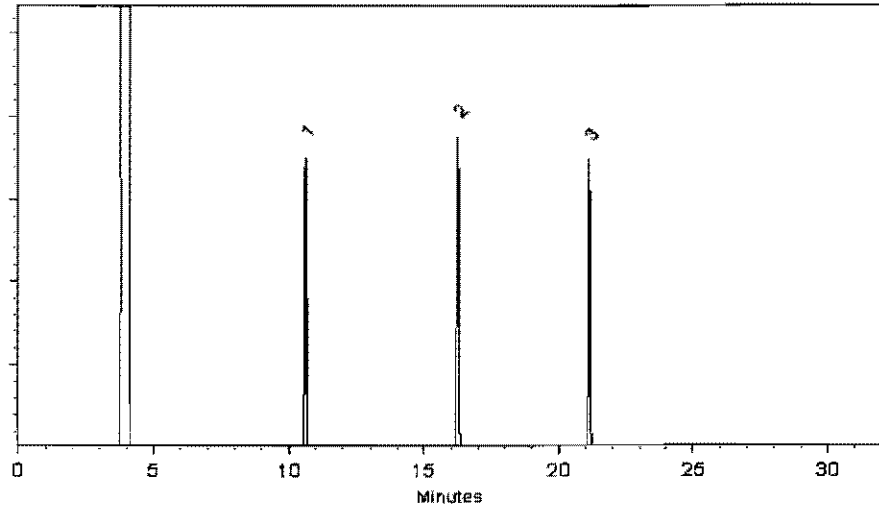
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Isaiah Harrison

Isaiah Harrison - Mix Technician

Date Mixed: 19-Apr-2016

Balance: 1125113331

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 21-Apr-2016

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

Reagent

8260 IS (2014)_00037



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

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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. : 30241 Lot No.: A0118801
 Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : April 30, 2021 Storage: 0°C or colder

REC'D - 12-12-16
 JDH
 1074908 - 912

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,507.2 µg/mL (Lot BCBK8171V)	+/-	14.5771	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	140.5762	µg/mL	Unstressed
	Purity 99%		+/-	143.8655	µg/mL	Stressed
2	Chlorobenzene-d5	2,508.4 µg/mL (Lot PR-23926)	+/-	14.5841	µg/mL	Gravimetric
	CAS # 3114-55-4		+/-	140.6435	µg/mL	Unstressed
	Purity 99%		+/-	143.9344	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,511.0 µg/mL (Lot PR-18488)	+/-	14.5992	µg/mL	Gravimetric
	CAS # 3855-82-1		+/-	140.7893	µg/mL	Unstressed
	Purity 99%		+/-	144.0836	µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

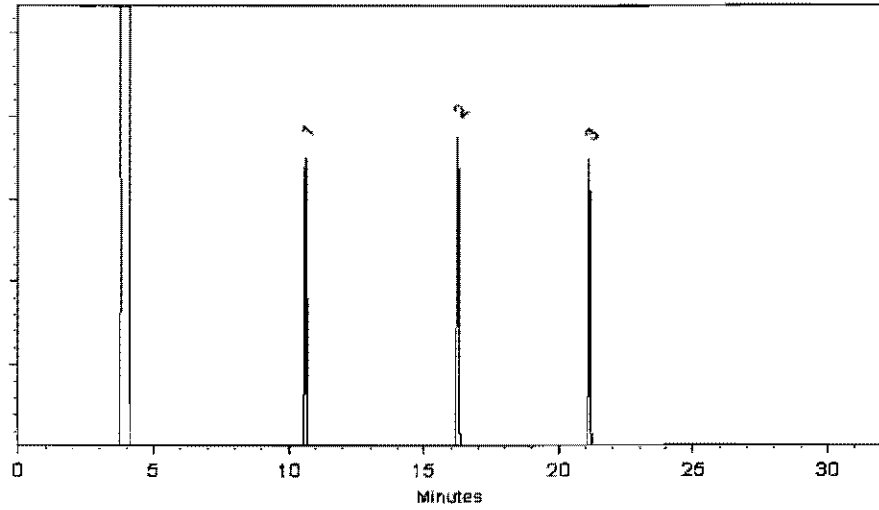
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Isaiah Harrison

Isaiah Harrison - Mix Technician

Date Mixed: 19-Apr-2016

Balance: 1125113331

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 21-Apr-2016

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

Reagent

8260_2_CLEVE_00048



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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. : 569723 Lot No.: A0115628

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

Container Size : 2 mL Pkg Amt: > 1 mL

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

REC'D 12-15-16
JDT
1074902-904

CERTIFIED VALUES

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

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

Tech Tips:

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10B10)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

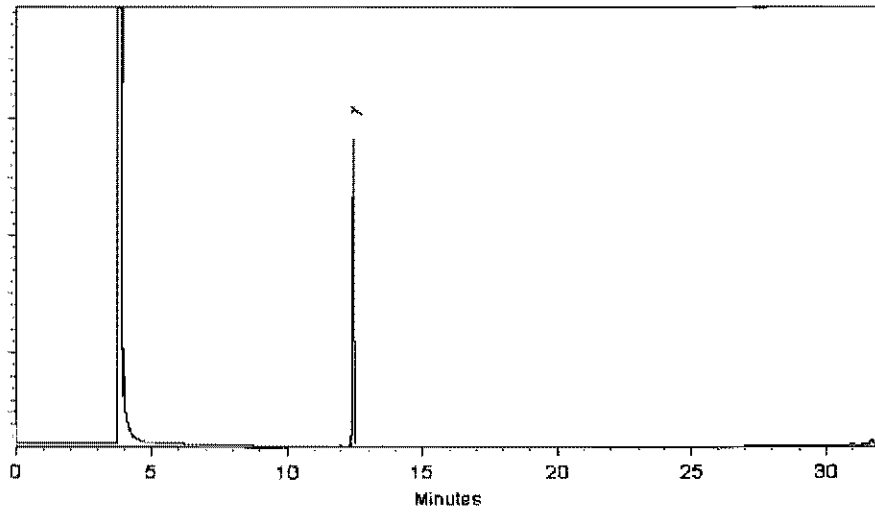
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Cheryl Graham

Cheryl Graham - Mix Technician

Date Mixed: 24-Nov-2015

Balance: B251644995

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 30-Nov-2015

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

Reagent

8260_2_CLEVE_00049



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 569723 **Lot No.:** A0115628
Description : 8260 List 1 / Std #4 2-CEVE (2015)
8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : November 30, 2018 **Storage:** 0°C or colder

REC'D 12-15-16
 JDT
 1074902-904

CERTIFIED VALUES

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

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

Tech Tips:

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10B10)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

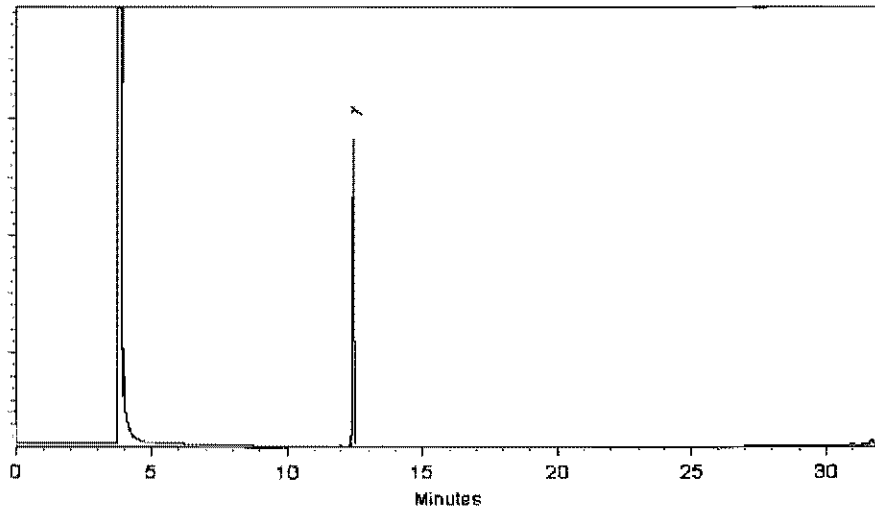
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Cheryl Graham
Cheryl Graham - Mix Technician

Date Mixed: 24-Nov-2015 Balance: B251644995

Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 30-Nov-2015

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

Reagent

8260_Surr_00043



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 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

REC'D 12-12-16
 JDH
 1074913-917

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,521.3 µg/mL	+/-	14.6591	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 032015)		+/-	141.3668	µg/mL	Unstressed
	Purity 99%		+/-	144.6746	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,523.7 µg/mL	+/-	14.6730	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 14C-191)		+/-	141.5014	µg/mL	Unstressed
	Purity 99%		+/-	144.8123	µg/mL	Stressed
3	Toluene-d8	2,523.6 µg/mL	+/-	14.6724	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/-	141.4957	µg/mL	Unstressed
	Purity 99%		+/-	144.8066	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,510.9 µg/mL	+/-	14.5986	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/-	140.7837	µg/mL	Unstressed
	Purity 99%		+/-	144.0778	µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

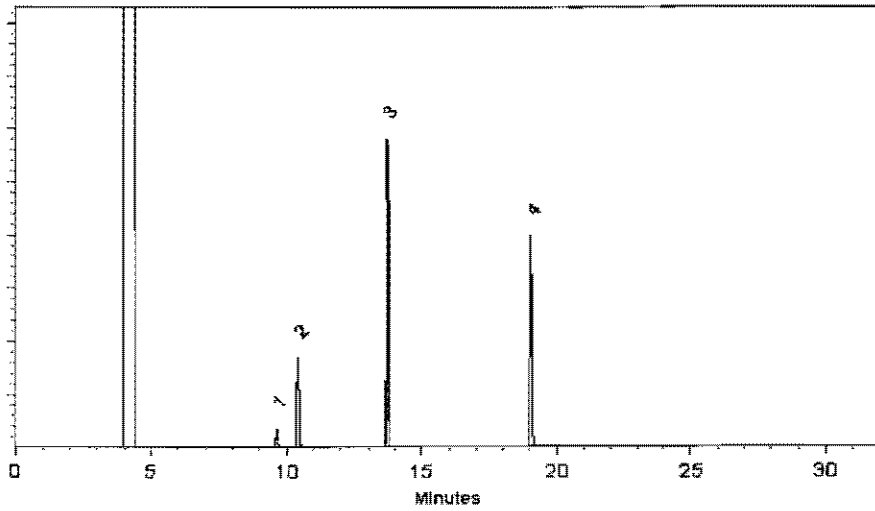
200°C

Det. Temp:

250°C

Det. Type:

FD



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

Dawn Brown

Dawn Brownson - Mix Technician

Date Mixed: 06-Jul-2016

Balance: 1125113331

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 11-Jul-2016

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

Reagent

8260_Surr_00044



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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

REC'D 12-12-16
 JDH
 1074913-917

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,521.3 µg/mL	+/-	14.6591	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 032015)		+/-	141.3668	µg/mL	Unstressed
	Purity 99%		+/-	144.6746	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,523.7 µg/mL	+/-	14.6730	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 14C-191)		+/-	141.5014	µg/mL	Unstressed
	Purity 99%		+/-	144.8123	µg/mL	Stressed
3	Toluene-d8	2,523.6 µg/mL	+/-	14.6724	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/-	141.4957	µg/mL	Unstressed
	Purity 99%		+/-	144.8066	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,510.9 µg/mL	+/-	14.5986	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/-	140.7837	µg/mL	Unstressed
	Purity 99%		+/-	144.0778	µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

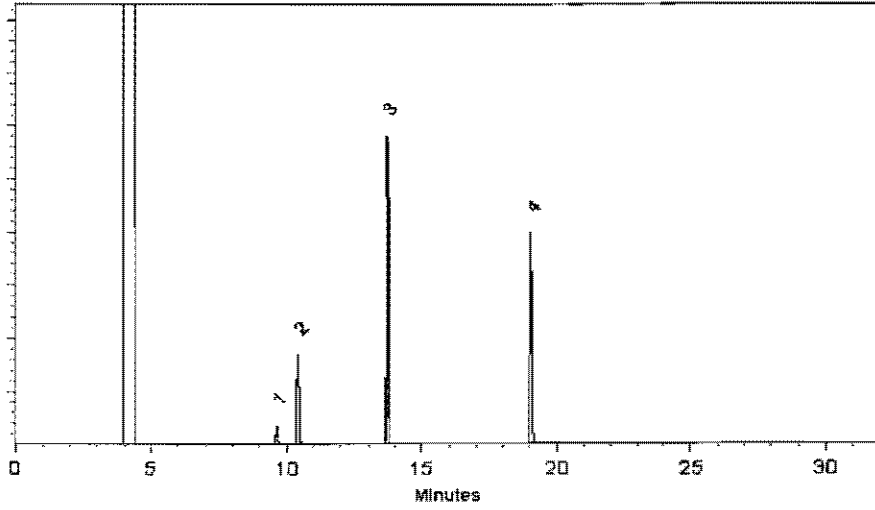
200°C

Det. Temp:

250°C

Det. Type:

FD



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

Dawn Brown

Dawn Brownson - Mix Technician

Date Mixed: 06-Jul-2016

Balance: 1125113331

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 11-Jul-2016

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

Reagent

8260_Surr_00045



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 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

REC'D 12-12-16
 JDH
 1074913-917

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,521.3 µg/mL	+/-	14.6591	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 032015)		+/-	141.3668	µg/mL	Unstressed
	Purity 99%		+/-	144.6746	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,523.7 µg/mL	+/-	14.6730	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 14C-191)		+/-	141.5014	µg/mL	Unstressed
	Purity 99%		+/-	144.8123	µg/mL	Stressed
3	Toluene-d8	2,523.6 µg/mL	+/-	14.6724	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/-	141.4957	µg/mL	Unstressed
	Purity 99%		+/-	144.8066	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,510.9 µg/mL	+/-	14.5986	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/-	140.7837	µg/mL	Unstressed
	Purity 99%		+/-	144.0778	µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

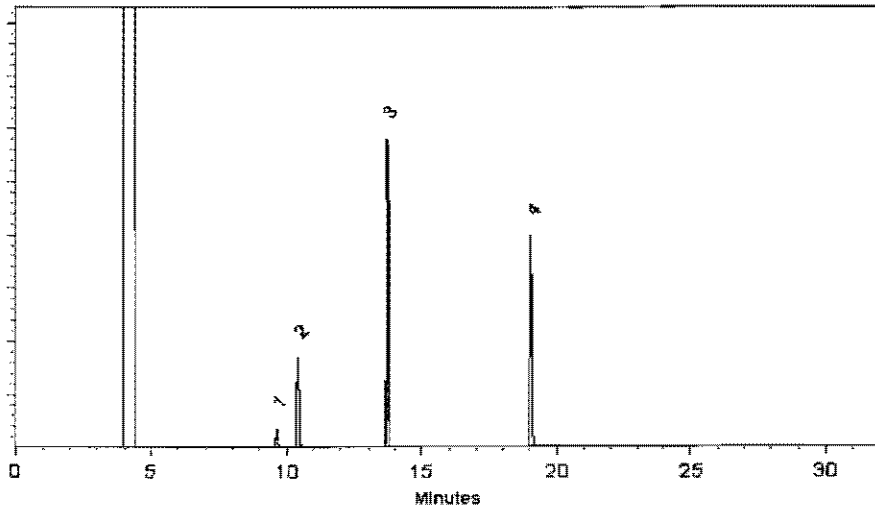
200°C

Det. Temp:

250°C

Det. Type:

FD



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

Dawn Brown

Dawn Brownson - Mix Technician

Date Mixed: 06-Jul-2016

Balance: 1125113331

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 11-Jul-2016

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

Reagent

8260Custom1_00047



CERTIFICATE OF ANALYSIS

Catalog No: S-26138
Description: Custom VOC Standard
Lot: 215101095-01
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - Refer to SDS for safety info

Date Certified: Jul 25, 2016
Expiration: Jul 25, 2017
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)
Included on ISO/IEC 17025 Scope of Accreditation: Yes
Included on ISO Guide 34 Scope of Accreditation: Yes



Danger 2

Component	CAS #	Purity % (GC/FID)	Prepared Concentration ¹ (µg/mL)	Certified Analyte Concentration ² (µg/mL)
Freon 114	76-14-2	99.0	2013	1993
Nonanal	124-19-6	100.0	2004	2004

REC'D 12-8-16
JDH

1063471-480

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

¹ All weights are traceable through NIST, Test No. 822-275872-11

² Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By:

Larry Decker, Organic QC Manager

CERTIFICATION REPORT

1. **Quality Documentation:** This certificate is designed in accordance with ISO Guide 31 (Reference Materials - Contents of Certificates and Labels) and ISO Guide 35 (Reference Materials – General and Statistical Principles for Certification).

2. **Quality Standards:**

ISO Guide 34 - General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463



ISO/IEC 17025 - General Requirements for the Competence of Testing and Calibration Laboratories ANAB Certificate Number AT-1339



ISO 9001 - Quality Management System - Requirements
Eagle Registrations Certificate Number 3774

3. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11. If dilution is required, use only Class A glassware and diluent compatible with all certified analytes in this preparation. All solutions should be thoroughly mixed prior to use.

4. **Raw Materials:** Reference standards are prepared from the highest quality starting materials with defined purities. All analytes and solvents are obtained from pre-qualified vendors and then analyzed or evaluated prior to use.

5. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

6. **Homogeneity Assessment:** Homogeneity of the finished product is assessed by analyzing sample batches or by other methods consistent with the intended use of the product and by procedures that comply with the appropriate Quality System requirements, and ISO Guide 35.

7. **Stability Assessment:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label. To ensure a uniform solution, mix the contents of the sealed container thoroughly prior to use. Care should be taken not to contaminate the contents of the original container.

8. **Analytical Quality Control:** Products are tested by validated analytical methods specified in the manufacturer's quality system.

9. **Uncertainty Statistics and Confidence Limits:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula:

$$u_m = \sqrt{(u(P))^2 + (u(m))^2 + (u(V))^2}$$
 . The expanded uncertainty, U_{CRM} assumes a normal distribution and a coverage factor of $k=2$ is chosen using approximately a 95% confidence level. The U_{CRM} for organic products is $\pm 5\%$, the U_{CRM} for inorganic products is $\pm 2\%$.

10. **Warranties:** The manufacturer warrants that its products shall conform to the description of such products as provided in its catalog or on the specific product label. This warranty is exclusive, and the manufacturer makes no other warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.

11. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. Due to the hazardous nature, only trained personnel should handle this product. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8260Cyclohexa_00048



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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. : 569727 Lot No.: A0118487

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)
8260 List 2/ Std #3 Cyclohexanone (2015) 25,000 µg/ml, Water, 1 ml/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : March 31, 2019 Storage: 10°C or colder

REC'D 12-12-16
JDH
1074885-887

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Cyclohexanone CAS # 108-94-1 Purity 99% (Lot MKBN5282V)	25,000.4 µg/mL	+/- 146.3826 µg/mL +/- 1,508.4819 µg/mL +/- 1,512.0629 µg/mL
			Gravimetric Unstressed Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

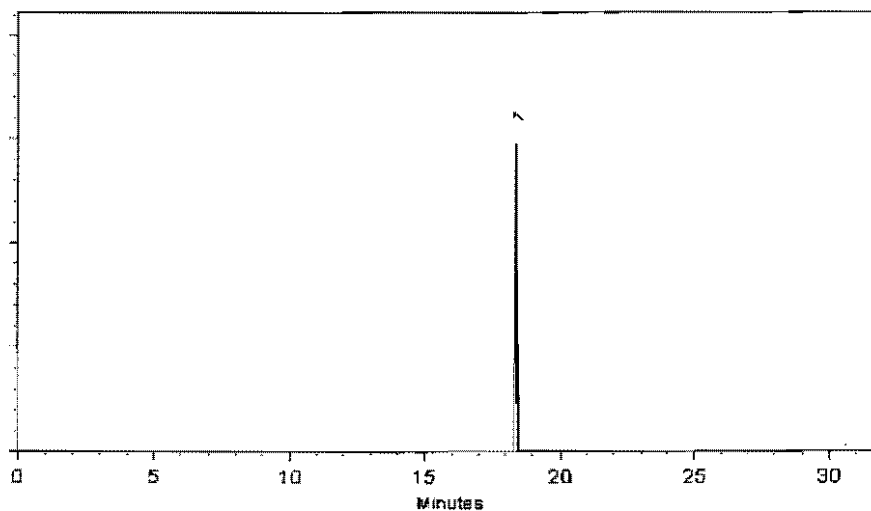
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Joseph Jaglowski
Joseph Jaglowski - Mix Technician

Date Mixed: 31-Mar-2016 **Balance:** B442140311

Jodi E. Breon
Jodi E. Breon - QA Analyst

Date Passed: 04-Apr-2016

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

Reagent

8260Cyclohexa_00049



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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. : 569727 Lot No.: A0118487

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)
8260 List 2/ Std #3 Cyclohexanone (2015) 25,000 µg/ml, Water, 1 ml/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : March 31, 2019 Storage: 10°C or colder

REC'D 12-12-16
JDH
1074885-887

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Cyclohexanone CAS # 108-94-1 Purity 99% (Lot MKBN5282V)	25,000.4 µg/mL	+/- 146.3826 µg/mL +/- 1,508.4819 µg/mL +/- 1,512.0629 µg/mL
			Gravimetric Unstressed Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

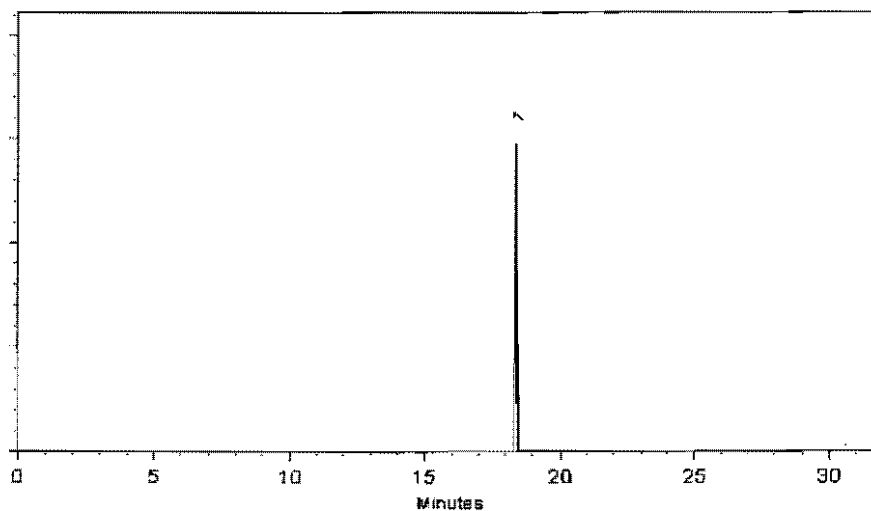
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Joseph Jaglowski
Joseph Jaglowski - Mix Technician

Date Mixed: 31-Mar-2016 **Balance:** B442140311

Jodi E. Breon
Jodi E. Breon - QA Analyst

Date Passed: 04-Apr-2016

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

Reagent

8260Ketones_00048



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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. : 569721 Lot No.: A0115554

Description : B260 List 1/ Std #2 Ketones (2015)

B260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

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

REC'D 12-12-16
Jdt

1074890-892

CERTIFIED VALUES

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

Solvent: P&T Methanol/Water (90:10)

CAS # 67-56-1/7732-18-5

Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

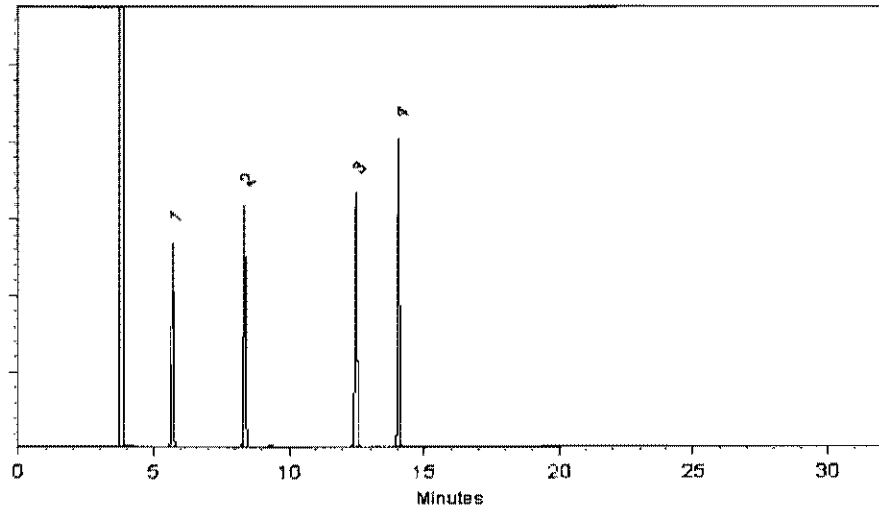
200°C

Det. Temp:

250°C

Det. Type:

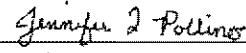
FID



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


F. Joseph Talon - Mix Technician

Date Mixed: 20-Nov-2015 Balance: B251644995


Jennifer L. Pollino - QC Analyst

Date Passed: 24-Nov-2015

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

Reagent

8260Ketones_00049



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis



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

Catalog No. : 569721 Lot No.: A0115554

Description : B260 List 1/ Std #2 Ketones (2015)
B260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

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

REC'D 12-12-16
Jdt

1074890-892

CERTIFIED VALUES

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

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

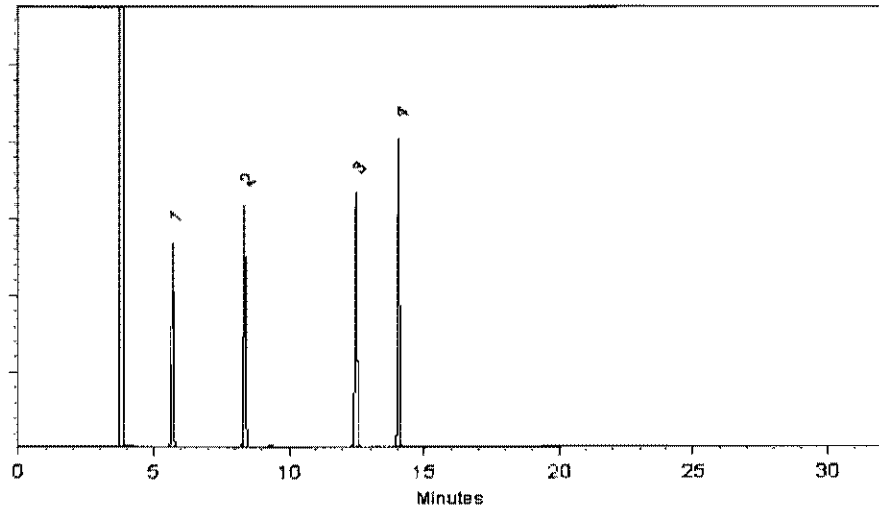
200°C

Det. Temp:

250°C

Det. Type:

FID



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

F. Joseph Talon
F. Joseph Talon - Mix Technician

Date Mixed: 20-Nov-2015 Balance: B251644995

Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 24-Nov-2015

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

Reagent

8260Ketones_00050



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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

Description : B260 List 1/ Std #2 Ketones (2015)

B260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

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

REC'D 12-12-16
Jdt

1074890-892

CERTIFIED VALUES

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

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

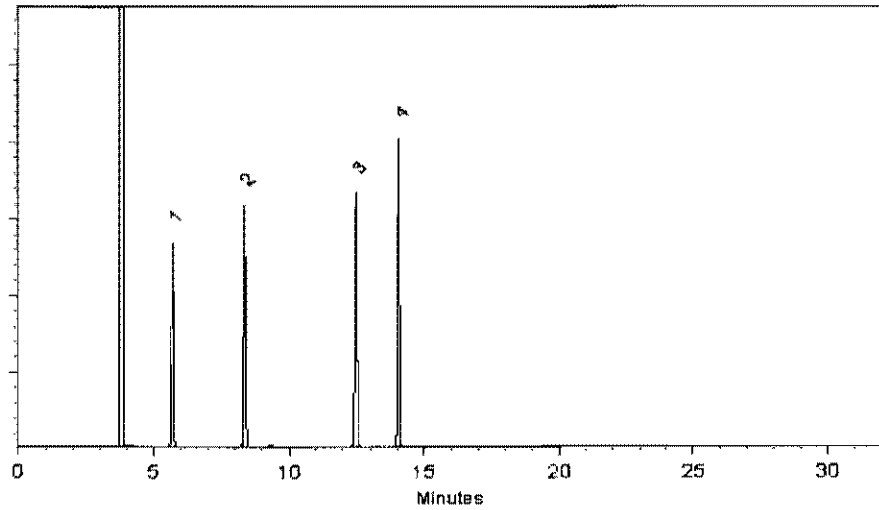
200°C

Det. Temp:

250°C

Det. Type:

FID



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

F. Joseph Talon
F. Joseph Talon - Mix Technician

Date Mixed: 20-Nov-2015 Balance: B251644995

Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 24-Nov-2015

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

Reagent

8260KetonesSS_00047



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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

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

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

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

REC'D 12-12-16
JDH
1074893-895

CERTIFIED VALUES

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

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

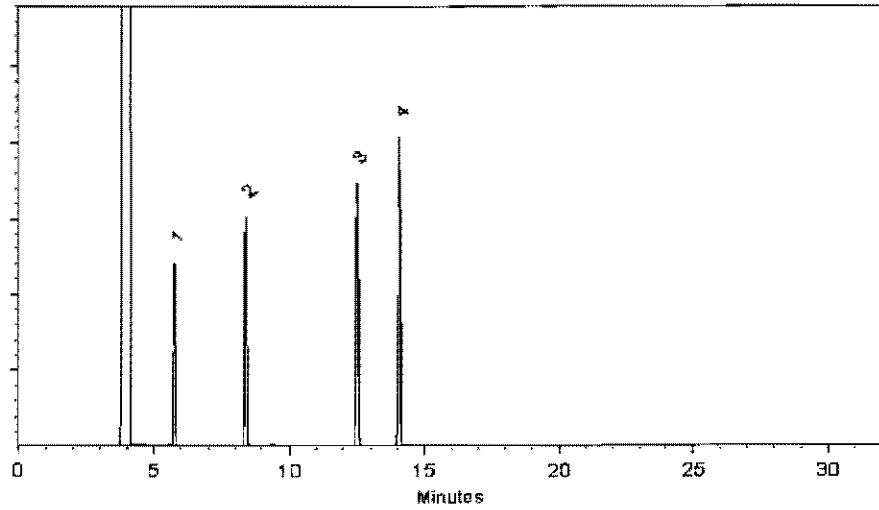
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Isaiah Harrison

Isaiah Harrison - Mix Technician

Date Mixed: 14-Mar-2016

Balance: 1127510105

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 16-Mar-2016

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

Reagent

8260KetonesSS_00048



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 569721.sec **Lot No.:** A0118013
Description : 8260 List 1/ Std #2 Ketones (2015)
8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2019 **Storage:** 0°C or colder

REC'D 12-12-16
 JDX
 1074893-895

CERTIFIED VALUES

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

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

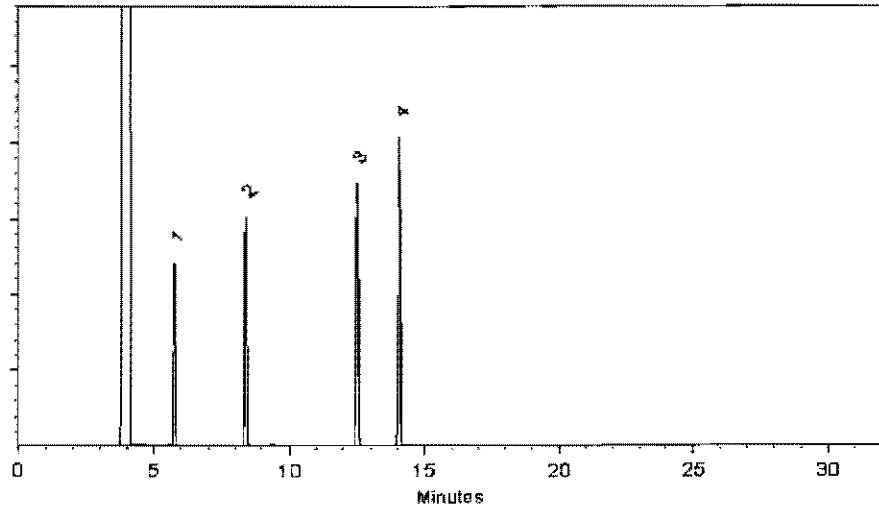
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Isaiah Harrison

Isaiah Harrison - Mix Technician

Date Mixed: 14-Mar-2016

Balance: 1127510105

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 16-Mar-2016

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

Reagent

8260MegaMix_00048



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

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Certificate of Analysis



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Catalog No. : 569720 Lot No.: A0118177
 Description : 8260 List 1 / Std #1 MegaMix (2015)
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : March 31, 2018 Storage: 0°C or colder

REC'D 12-12-16
 JDT
 1074879-081

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.: K=2)		
1	Diethyl ether (ethyl ether) CAS # 60-29-7 (Lot SHBG1462V) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric
			+/- 151.0472	µg/mL	Unstressed
			+/- 151.4059	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00004562) Purity 99%	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
			+/- 150.8361	µg/mL	Unstressed
			+/- 151.1942	µg/mL	Stressed
3	1,1-Dichloroethane CAS # 75-34-3 (Lot 00008621) Purity 99%	2,500.1 µg/mL	+/- 14.5359	µg/mL	Gravimetric
			+/- 150.8436	µg/mL	Unstressed
			+/- 151.2017	µg/mL	Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBD0362V) Purity 99%	25,033.4 µg/mL	+/- 145.5386	µg/mL	Gravimetric
			+/- 1,510.3737	µg/mL	Unstressed
			+/- 1,513.9596	µg/mL	Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBF2149V) Purity 98%	2,502.9 µg/mL	+/- 14.5522	µg/mL	Gravimetric
			+/- 151.0123	µg/mL	Unstressed
			+/- 151.3708	µg/mL	Stressed
6	Methyl acetate CAS # 79-20-9 (Lot SHBD7134V) Purity 98%	12,508.6 µg/mL	+/- 72.7223	µg/mL	Gravimetric
			+/- 754.6987	µg/mL	Unstressed
			+/- 756.4905	µg/mL	Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot SHBF8133V) Purity 99%	2,500.0 µg/mL	+/- 19.2743	µg/mL	Gravimetric
			+/- 151.3663	µg/mL	Unstressed
			+/- 151.7231	µg/mL	Stressed

8	Methylene chloride (dichloromethane)	2,521.4	µg/mL	+/-	14.6595	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBF9870V)			+/-	152.1257	µg/mL	Unstressed
	Purity 99%			+/-	152.4869	µg/mL	Stressed
9	Carbon disulfide	2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
	CAS # 75-15-0 (Lot S20A856)			+/-	151.8014	µg/mL	Unstressed
	Purity 99%			+/-	152.1618	µg/mL	Stressed
10	Acrylonitrile	25,001.3	µg/mL	+/-	145.3518	µg/mL	Gravimetric
	CAS # 107-13-1 (Lot J08Z057)			+/-	1,508.4355	µg/mL	Unstressed
	Purity 99%			+/-	1,512.0167	µg/mL	Stressed
11	cis-1,2-Dichloroethene	2,507.8	µg/mL	+/-	14.5807	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBV2831V)			+/-	151.3079	µg/mL	Unstressed
	Purity 98%			+/-	151.6671	µg/mL	Stressed
12	n-Hexane (C6)	2,512.4	µg/mL	+/-	14.6072	µg/mL	Gravimetric
	CAS # 110-54-3 (Lot SHBF7674V)			+/-	151.5827	µg/mL	Unstressed
	Purity 99%			+/-	151.9426	µg/mL	Stressed
13	1,1-dichloroethene	2,508.1	µg/mL	+/-	14.5825	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot 73896KMV)			+/-	151.3263	µg/mL	Unstressed
	Purity 99%			+/-	151.6856	µg/mL	Stressed
14	2,2-Dichloropropane	2,507.6	µg/mL	+/-	14.5795	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBL9720V)			+/-	151.2961	µg/mL	Unstressed
	Purity 99%			+/-	151.6553	µg/mL	Stressed
15	trans-1,2-Dichloroethene	2,509.8	µg/mL	+/-	14.5919	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)			+/-	151.4243	µg/mL	Unstressed
	Purity 99%			+/-	151.7838	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)	62,815.4	µg/mL	+/-	365.1949	µg/mL	Gravimetric
	CAS # 78-83-1 (Lot SHBD1647V)			+/-	3,789.9281	µg/mL	Unstressed
	Purity 99%			+/-	3,798.9260	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)	2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 1634-04-4 (Lot MKBV2134V)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%			+/-	151.7990	µg/mL	Stressed
18	Bromochloromethane	2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot 00004559)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%			+/-	151.6175	µg/mL	Stressed
19	Tetrahydrofuran	5,025.3	µg/mL	+/-	29.2172	µg/mL	Gravimetric
	CAS # 109-99-9 (Lot SHBG2910V)			+/-	303.1956	µg/mL	Unstressed
	Purity 99%			+/-	303.9154	µg/mL	Stressed
20	1,1,1-trichloroethane	2,508.9	µg/mL	+/-	14.5868	µg/mL	Gravimetric
	CAS # 71-55-6 (Lot B15MW0705)			+/-	151.3715	µg/mL	Unstressed
	Purity 99%			+/-	151.7309	µg/mL	Stressed
21	Cyclohexane	2,503.4	µg/mL	+/-	14.5548	µg/mL	Gravimetric
	CAS # 110-82-7 (Lot MKBV3194V)			+/-	151.0397	µg/mL	Unstressed
	Purity 99%			+/-	151.3983	µg/mL	Stressed
22	1,1-Dichloropropene	2,507.4	µg/mL	+/-	14.5781	µg/mL	Gravimetric
	CAS # 563-58-6 (Lot PR09161302)			+/-	151.2810	µg/mL	Unstressed
	Purity 99%			+/-	151.6402	µg/mL	Stressed
23	carbon tetrachloride	2,505.9	µg/mL	+/-	14.5694	µg/mL	Gravimetric
	CAS # 56-23-5 (Lot SHBG1763V)			+/-	151.1905	µg/mL	Unstressed
	Purity 99%			+/-	151.5495	µg/mL	Stressed

24	n-Heptane (C7)		2,510.8	µg/mL	+/-	14.5977	µg/mL	Gravimetric
	CAS #	142-82-5	(Lot MKBV6176V)		+/-	151.4847	µg/mL	Unstressed
	Purity	99%			+/-	151.8443	µg/mL	Stressed
25	1,2-Dichloroethane		2,511.1	µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot MKBV4565V)		+/-	151.5073	µg/mL	Unstressed
	Purity	99%			+/-	151.8670	µg/mL	Stressed
26	Benzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBG1169V)		+/-	151.0095	µg/mL	Unstressed
	Purity	99%			+/-	151.3681	µg/mL	Stressed
27	Trichloroethene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBF0943V)		+/-	150.8587	µg/mL	Unstressed
	Purity	99%			+/-	151.2169	µg/mL	Stressed
28	Methylcyclohexane		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS #	108-87-2	(Lot 50996APV)		+/-	151.0699	µg/mL	Unstressed
	Purity	99%			+/-	151.4285	µg/mL	Stressed
29	1,2-Dichloropropane		2,523.5	µg/mL	+/-	14.6718	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot 01113D0V)		+/-	152.2539	µg/mL	Unstressed
	Purity	99%			+/-	152.6154	µg/mL	Stressed
30	bromodichloromethane		2,509.0	µg/mL	+/-	14.5878	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKBL1617V)		+/-	151.3818	µg/mL	Unstressed
	Purity	98%			+/-	151.7412	µg/mL	Stressed
31	1,4-Dioxane		50,018.1	µg/mL	+/-	290.7945	µg/mL	Gravimetric
	CAS #	123-91-1	(Lot SHBG6312V)		+/-	3,017.8137	µg/mL	Unstressed
	Purity	99%			+/-	3,024.9785	µg/mL	Stressed
32	Dibromomethane		2,511.4	µg/mL	+/-	14.6013	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10183283)		+/-	151.5222	µg/mL	Unstressed
	Purity	98%			+/-	151.8820	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,506.0	µg/mL	+/-	14.5701	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 22622)		+/-	151.1981	µg/mL	Unstressed
	Purity	99%			+/-	151.5571	µg/mL	Stressed
34	Toluene		2,515.5	µg/mL	+/-	14.6253	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot MKBV5601V)		+/-	151.7713	µg/mL	Unstressed
	Purity	99%			+/-	152.1316	µg/mL	Stressed
35	Ethyl methacrylate		2,503.1	µg/mL	+/-	14.5534	µg/mL	Gravimetric
	CAS #	97-63-2	(Lot SHBD9190V)		+/-	151.0246	µg/mL	Unstressed
	Purity	99%			+/-	151.3832	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C584177)		+/-	151.3188	µg/mL	Unstressed
	Purity	99%			+/-	151.6780	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,508.4	µg/mL	+/-	14.5839	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)		+/-	151.3414	µg/mL	Unstressed
	Purity	99%			+/-	151.7007	µg/mL	Stressed
38	1,3-Dichloropropane		2,522.8	µg/mL	+/-	14.6675	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)		+/-	152.2087	µg/mL	Unstressed
	Purity	99%			+/-	152.5701	µg/mL	Stressed
39	Tetrachloroethene		2,518.9	µg/mL	+/-	14.6450	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBD9374V)		+/-	151.9749	µg/mL	Unstressed
	Purity	99%			+/-	152.3357	µg/mL	Stressed

40	dibromochloromethane		2,505.4	µg/mL	+/-	14.5664	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBQ6577V)			+/-	151.1601	µg/mL	Unstressed
	Purity 98%				+/-	151.5190	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
42	Chlorobenzene		2,505.6	µg/mL	+/-	14.5679	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)			+/-	151.1755	µg/mL	Unstressed
	Purity 99%				+/-	151.5344	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
44	Ethylbenzene		2,506.1	µg/mL	+/-	14.5708	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)			+/-	151.2056	µg/mL	Unstressed
	Purity 99%				+/-	151.5646	µg/mL	Stressed
45	m-Xylene		1,254.4	µg/mL	+/-	7.2930	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF8095V)			+/-	75.6820	µg/mL	Unstressed
	Purity 99%				+/-	75.8617	µg/mL	Stressed
46	p-Xylene		1,250.0	µg/mL	+/-	7.2676	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	75.4180	µg/mL	Unstressed
	Purity 99%				+/-	75.5971	µg/mL	Stressed
47	o-Xylene		2,506.3	µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBF7003V)			+/-	151.2132	µg/mL	Unstressed
	Purity 99%				+/-	151.5722	µg/mL	Stressed
48	Styrene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,509.4	µg/mL	+/-	14.5897	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot I0185056)			+/-	151.4017	µg/mL	Unstressed
	Purity 99%				+/-	151.7612	µg/mL	Stressed
50	bromoform		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
52	chloroform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot MKBV2089V)			+/-	151.3037	µg/mL	Unstressed
	Purity 99%				+/-	151.6629	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,504.8	µg/mL	+/-	14.5628	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	151.1227	µg/mL	Unstressed
	Purity 99%				+/-	151.4815	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.7	µg/mL	+/-	14.5334	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)			+/-	150.8172	µg/mL	Unstressed
	Purity 95%				+/-	151.1753	µg/mL	Stressed
55	n-Propylbenzene		2,507.5	µg/mL	+/-	14.5788	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)			+/-	151.2886	µg/mL	Unstressed
	Purity 99%				+/-	151.6478	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot MKBD4032V)	2,515.1 µg/mL	+/-	14.6232 µg/mL 151.7486 µg/mL 152.1089 µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ6229V)	2,503.7 µg/mL	+/-	14.5565 µg/mL 151.0566 µg/mL 151.4152 µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBH8892V)	2,502.1 µg/mL	+/-	14.5476 µg/mL 150.9643 µg/mL 151.3227 µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,512.6 µg/mL	+/-	14.6086 µg/mL 151.5978 µg/mL 151.9577 µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot S52237V)	2,507.8 µg/mL	+/-	14.5803 µg/mL 151.3037 µg/mL 151.6629 µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBJ6245V)	2,502.5 µg/mL	+/-	14.5498 µg/mL 150.9869 µg/mL 151.3454 µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBK3151V)	2,521.8 µg/mL	+/-	14.6617 µg/mL 152.1484 µg/mL 152.5096 µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBK4439V)	2,502.6 µg/mL	+/-	14.5505 µg/mL 150.9945 µg/mL 151.3529 µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBM5751V)	2,505.8 µg/mL	+/-	14.5686 µg/mL 151.1830 µg/mL 151.5419 µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS1350V)	2,504.1 µg/mL	+/-	14.5592 µg/mL 151.0850 µg/mL 151.4437 µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09418JIV)	2,503.3 µg/mL	+/-	14.5541 µg/mL 151.0322 µg/mL 151.3907 µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBD7331V)	2,505.5 µg/mL	+/-	14.5672 µg/mL 151.1679 µg/mL 151.5268 µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01-JM)	2,508.6 µg/mL	+/-	14.5854 µg/mL 151.3565 µg/mL 151.7158 µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	2,518.6 µg/mL	+/-	14.6435 µg/mL 151.9598 µg/mL 152.3206 µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot J31X013)	2,499.9 µg/mL	+/-	14.5344 µg/mL 150.8275 µg/mL 151.1856 µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	2,514.9 µg/mL	+/-	14.6217 µg/mL 151.7336 µg/mL 152.0938 µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBS4859V)		+/- 150.9567	µg/mL	Unstressed
	Purity 99%			+/- 151.3151	µg/mL	Stressed

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

Column:

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

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

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

Inj. Temp:

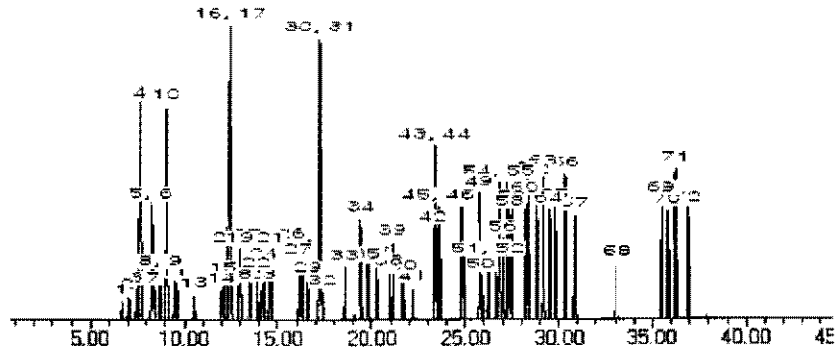
200°C

Det. Temp:

250°C

Det. Type:

MSD



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

Rebecca Sawyer

Date Mixed: 21-Mar-2016 Balance: 1125113331

Jodi E. Breon
Jodi E. Breon - QA Analyst

Date Passed: 28-Mar-2016

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

Reagent

8260MegaMix_00049



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 569720 Lot No.: A0118177
 Description : 8260 List 1 / Std #1 MegaMix (2015)
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : March 31, 2018 Storage: 0°C or colder

REC'D 12-12-16
 JDT
 1074879-081

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.: K=2)		
1	Diethyl ether (ethyl ether) CAS # 60-29-7 (Lot SHBG1462V) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric
			+/- 151.0472	µg/mL	Unstressed
			+/- 151.4059	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00004562) Purity 99%	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
			+/- 150.8361	µg/mL	Unstressed
			+/- 151.1942	µg/mL	Stressed
3	1,1-Dichloroethane CAS # 75-34-3 (Lot 00008621) Purity 99%	2,500.1 µg/mL	+/- 14.5359	µg/mL	Gravimetric
			+/- 150.8436	µg/mL	Unstressed
			+/- 151.2017	µg/mL	Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBD0362V) Purity 99%	25,033.4 µg/mL	+/- 145.5386	µg/mL	Gravimetric
			+/- 1,510.3737	µg/mL	Unstressed
			+/- 1,513.9596	µg/mL	Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBF2149V) Purity 98%	2,502.9 µg/mL	+/- 14.5522	µg/mL	Gravimetric
			+/- 151.0123	µg/mL	Unstressed
			+/- 151.3708	µg/mL	Stressed
6	Methyl acetate CAS # 79-20-9 (Lot SHBD7134V) Purity 98%	12,508.6 µg/mL	+/- 72.7223	µg/mL	Gravimetric
			+/- 754.6987	µg/mL	Unstressed
			+/- 756.4905	µg/mL	Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot SHBF8133V) Purity 99%	2,500.0 µg/mL	+/- 19.2743	µg/mL	Gravimetric
			+/- 151.3663	µg/mL	Unstressed
			+/- 151.7231	µg/mL	Stressed

8	Methylene chloride (dichloromethane)	2,521.4	µg/mL	+/-	14.6595	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBF9870V)			+/-	152.1257	µg/mL	Unstressed
	Purity 99%			+/-	152.4869	µg/mL	Stressed
9	Carbon disulfide	2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
	CAS # 75-15-0 (Lot S20A856)			+/-	151.8014	µg/mL	Unstressed
	Purity 99%			+/-	152.1618	µg/mL	Stressed
10	Acrylonitrile	25,001.3	µg/mL	+/-	145.3518	µg/mL	Gravimetric
	CAS # 107-13-1 (Lot J08Z057)			+/-	1,508.4355	µg/mL	Unstressed
	Purity 99%			+/-	1,512.0167	µg/mL	Stressed
11	cis-1,2-Dichloroethene	2,507.8	µg/mL	+/-	14.5807	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBV2831V)			+/-	151.3079	µg/mL	Unstressed
	Purity 98%			+/-	151.6671	µg/mL	Stressed
12	n-Hexane (C6)	2,512.4	µg/mL	+/-	14.6072	µg/mL	Gravimetric
	CAS # 110-54-3 (Lot SHBF7674V)			+/-	151.5827	µg/mL	Unstressed
	Purity 99%			+/-	151.9426	µg/mL	Stressed
13	1,1-dichloroethene	2,508.1	µg/mL	+/-	14.5825	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot 73896KMV)			+/-	151.3263	µg/mL	Unstressed
	Purity 99%			+/-	151.6856	µg/mL	Stressed
14	2,2-Dichloropropane	2,507.6	µg/mL	+/-	14.5795	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBL9720V)			+/-	151.2961	µg/mL	Unstressed
	Purity 99%			+/-	151.6553	µg/mL	Stressed
15	trans-1,2-Dichloroethene	2,509.8	µg/mL	+/-	14.5919	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)			+/-	151.4243	µg/mL	Unstressed
	Purity 99%			+/-	151.7838	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)	62,815.4	µg/mL	+/-	365.1949	µg/mL	Gravimetric
	CAS # 78-83-1 (Lot SHBD1647V)			+/-	3,789.9281	µg/mL	Unstressed
	Purity 99%			+/-	3,798.9260	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)	2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 1634-04-4 (Lot MKBV2134V)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%			+/-	151.7990	µg/mL	Stressed
18	Bromochloromethane	2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot 00004559)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%			+/-	151.6175	µg/mL	Stressed
19	Tetrahydrofuran	5,025.3	µg/mL	+/-	29.2172	µg/mL	Gravimetric
	CAS # 109-99-9 (Lot SHBG2910V)			+/-	303.1956	µg/mL	Unstressed
	Purity 99%			+/-	303.9154	µg/mL	Stressed
20	1,1,1-trichloroethane	2,508.9	µg/mL	+/-	14.5868	µg/mL	Gravimetric
	CAS # 71-55-6 (Lot B15MW0705)			+/-	151.3715	µg/mL	Unstressed
	Purity 99%			+/-	151.7309	µg/mL	Stressed
21	Cyclohexane	2,503.4	µg/mL	+/-	14.5548	µg/mL	Gravimetric
	CAS # 110-82-7 (Lot MKBV3194V)			+/-	151.0397	µg/mL	Unstressed
	Purity 99%			+/-	151.3983	µg/mL	Stressed
22	1,1-Dichloropropene	2,507.4	µg/mL	+/-	14.5781	µg/mL	Gravimetric
	CAS # 563-58-6 (Lot PR09161302)			+/-	151.2810	µg/mL	Unstressed
	Purity 99%			+/-	151.6402	µg/mL	Stressed
23	carbon tetrachloride	2,505.9	µg/mL	+/-	14.5694	µg/mL	Gravimetric
	CAS # 56-23-5 (Lot SHBG1763V)			+/-	151.1905	µg/mL	Unstressed
	Purity 99%			+/-	151.5495	µg/mL	Stressed

24	n-Heptane (C7)		2,510.8	µg/mL	+/-	14.5977	µg/mL	Gravimetric
	CAS #	142-82-5	(Lot MKBV6176V)		+/-	151.4847	µg/mL	Unstressed
	Purity	99%			+/-	151.8443	µg/mL	Stressed
25	1,2-Dichloroethane		2,511.1	µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot MKBV4565V)		+/-	151.5073	µg/mL	Unstressed
	Purity	99%			+/-	151.8670	µg/mL	Stressed
26	Benzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBG1169V)		+/-	151.0095	µg/mL	Unstressed
	Purity	99%			+/-	151.3681	µg/mL	Stressed
27	Trichloroethene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBF0943V)		+/-	150.8587	µg/mL	Unstressed
	Purity	99%			+/-	151.2169	µg/mL	Stressed
28	Methylcyclohexane		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS #	108-87-2	(Lot 50996APV)		+/-	151.0699	µg/mL	Unstressed
	Purity	99%			+/-	151.4285	µg/mL	Stressed
29	1,2-Dichloropropane		2,523.5	µg/mL	+/-	14.6718	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot 01113D0V)		+/-	152.2539	µg/mL	Unstressed
	Purity	99%			+/-	152.6154	µg/mL	Stressed
30	bromodichloromethane		2,509.0	µg/mL	+/-	14.5878	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKBL1617V)		+/-	151.3818	µg/mL	Unstressed
	Purity	98%			+/-	151.7412	µg/mL	Stressed
31	1,4-Dioxane		50,018.1	µg/mL	+/-	290.7945	µg/mL	Gravimetric
	CAS #	123-91-1	(Lot SHBG6312V)		+/-	3,017.8137	µg/mL	Unstressed
	Purity	99%			+/-	3,024.9785	µg/mL	Stressed
32	Dibromomethane		2,511.4	µg/mL	+/-	14.6013	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10183283)		+/-	151.5222	µg/mL	Unstressed
	Purity	98%			+/-	151.8820	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,506.0	µg/mL	+/-	14.5701	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 22622)		+/-	151.1981	µg/mL	Unstressed
	Purity	99%			+/-	151.5571	µg/mL	Stressed
34	Toluene		2,515.5	µg/mL	+/-	14.6253	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot MKBV5601V)		+/-	151.7713	µg/mL	Unstressed
	Purity	99%			+/-	152.1316	µg/mL	Stressed
35	Ethyl methacrylate		2,503.1	µg/mL	+/-	14.5534	µg/mL	Gravimetric
	CAS #	97-63-2	(Lot SHBD9190V)		+/-	151.0246	µg/mL	Unstressed
	Purity	99%			+/-	151.3832	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot C584177)		+/-	151.3188	µg/mL	Unstressed
	Purity	99%			+/-	151.6780	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,508.4	µg/mL	+/-	14.5839	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)		+/-	151.3414	µg/mL	Unstressed
	Purity	99%			+/-	151.7007	µg/mL	Stressed
38	1,3-Dichloropropane		2,522.8	µg/mL	+/-	14.6675	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBG2162V)		+/-	152.2087	µg/mL	Unstressed
	Purity	99%			+/-	152.5701	µg/mL	Stressed
39	Tetrachloroethene		2,518.9	µg/mL	+/-	14.6450	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBD9374V)		+/-	151.9749	µg/mL	Unstressed
	Purity	99%			+/-	152.3357	µg/mL	Stressed

40	dibromochloromethane		2,505.4	µg/mL	+/-	14.5664	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBQ6577V)			+/-	151.1601	µg/mL	Unstressed
	Purity 98%				+/-	151.5190	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
42	Chlorobenzene		2,505.6	µg/mL	+/-	14.5679	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)			+/-	151.1755	µg/mL	Unstressed
	Purity 99%				+/-	151.5344	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
44	Ethylbenzene		2,506.1	µg/mL	+/-	14.5708	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)			+/-	151.2056	µg/mL	Unstressed
	Purity 99%				+/-	151.5646	µg/mL	Stressed
45	m-Xylene		1,254.4	µg/mL	+/-	7.2930	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF8095V)			+/-	75.6820	µg/mL	Unstressed
	Purity 99%				+/-	75.8617	µg/mL	Stressed
46	p-Xylene		1,250.0	µg/mL	+/-	7.2676	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	75.4180	µg/mL	Unstressed
	Purity 99%				+/-	75.5971	µg/mL	Stressed
47	o-Xylene		2,506.3	µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBF7003V)			+/-	151.2132	µg/mL	Unstressed
	Purity 99%				+/-	151.5722	µg/mL	Stressed
48	Styrene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,509.4	µg/mL	+/-	14.5897	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot I0185056)			+/-	151.4017	µg/mL	Unstressed
	Purity 99%				+/-	151.7612	µg/mL	Stressed
50	bromoform		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
52	chloroform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot MKBV2089V)			+/-	151.3037	µg/mL	Unstressed
	Purity 99%				+/-	151.6629	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,504.8	µg/mL	+/-	14.5628	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	151.1227	µg/mL	Unstressed
	Purity 99%				+/-	151.4815	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.7	µg/mL	+/-	14.5334	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)			+/-	150.8172	µg/mL	Unstressed
	Purity 95%				+/-	151.1753	µg/mL	Stressed
55	n-Propylbenzene		2,507.5	µg/mL	+/-	14.5788	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)			+/-	151.2886	µg/mL	Unstressed
	Purity 99%				+/-	151.6478	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot MKBD4032V)	2,515.1 µg/mL	+/-	14.6232 µg/mL 151.7486 µg/mL 152.1089 µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ6229V)	2,503.7 µg/mL	+/-	14.5565 µg/mL 151.0566 µg/mL 151.4152 µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBH8892V)	2,502.1 µg/mL	+/-	14.5476 µg/mL 150.9643 µg/mL 151.3227 µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,512.6 µg/mL	+/-	14.6086 µg/mL 151.5978 µg/mL 151.9577 µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot S52237V)	2,507.8 µg/mL	+/-	14.5803 µg/mL 151.3037 µg/mL 151.6629 µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBJ6245V)	2,502.5 µg/mL	+/-	14.5498 µg/mL 150.9869 µg/mL 151.3454 µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBK3151V)	2,521.8 µg/mL	+/-	14.6617 µg/mL 152.1484 µg/mL 152.5096 µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBK4439V)	2,502.6 µg/mL	+/-	14.5505 µg/mL 150.9945 µg/mL 151.3529 µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBM5751V)	2,505.8 µg/mL	+/-	14.5686 µg/mL 151.1830 µg/mL 151.5419 µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS1350V)	2,504.1 µg/mL	+/-	14.5592 µg/mL 151.0850 µg/mL 151.4437 µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09418JIV)	2,503.3 µg/mL	+/-	14.5541 µg/mL 151.0322 µg/mL 151.3907 µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBD7331V)	2,505.5 µg/mL	+/-	14.5672 µg/mL 151.1679 µg/mL 151.5268 µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01-JM)	2,508.6 µg/mL	+/-	14.5854 µg/mL 151.3565 µg/mL 151.7158 µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	2,518.6 µg/mL	+/-	14.6435 µg/mL 151.9598 µg/mL 152.3206 µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot J31X013)	2,499.9 µg/mL	+/-	14.5344 µg/mL 150.8275 µg/mL 151.1856 µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	2,514.9 µg/mL	+/-	14.6217 µg/mL 151.7336 µg/mL 152.0938 µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBS4859V)		+/- 150.9567	µg/mL	Unstressed
	Purity 99%			+/- 151.3151	µg/mL	Stressed

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

Column:

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

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

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

Inj. Temp:

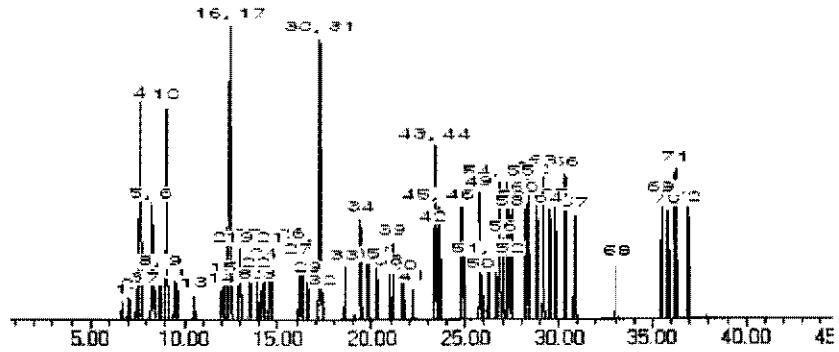
200°C

Det. Temp:

250°C

Det. Type:

MSD



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

Rebecca Sawyer

Date Mixed: 21-Mar-2016 Balance: 1125113331

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 28-Mar-2016

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

Reagent

8260MegaMix_00050



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 569720 Lot No.: A0118177
 Description : 8260 List 1 / Std #1 MegaMix (2015)
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : March 31, 2018 Storage: 0°C or colder

REC'D 12-12-16
 JDT
 1074879-081

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.: K=2)		
1	Diethyl ether (ethyl ether) CAS # 60-29-7 (Lot SHBG1462V) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric
			+/- 151.0472	µg/mL	Unstressed
			+/- 151.4059	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00004562) Purity 99%	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
			+/- 150.8361	µg/mL	Unstressed
			+/- 151.1942	µg/mL	Stressed
3	1,1-Dichloroethane CAS # 75-34-3 (Lot 00008621) Purity 99%	2,500.1 µg/mL	+/- 14.5359	µg/mL	Gravimetric
			+/- 150.8436	µg/mL	Unstressed
			+/- 151.2017	µg/mL	Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBD0362V) Purity 99%	25,033.4 µg/mL	+/- 145.5386	µg/mL	Gravimetric
			+/- 1,510.3737	µg/mL	Unstressed
			+/- 1,513.9596	µg/mL	Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBF2149V) Purity 98%	2,502.9 µg/mL	+/- 14.5522	µg/mL	Gravimetric
			+/- 151.0123	µg/mL	Unstressed
			+/- 151.3708	µg/mL	Stressed
6	Methyl acetate CAS # 79-20-9 (Lot SHBD7134V) Purity 98%	12,508.6 µg/mL	+/- 72.7223	µg/mL	Gravimetric
			+/- 754.6987	µg/mL	Unstressed
			+/- 756.4905	µg/mL	Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot SHBF8133V) Purity 99%	2,500.0 µg/mL	+/- 19.2743	µg/mL	Gravimetric
			+/- 151.3663	µg/mL	Unstressed
			+/- 151.7231	µg/mL	Stressed

8	Methylene chloride (dichloromethane)	2,521.4	µg/mL	+/-	14.6595	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBF9870V)			+/-	152.1257	µg/mL	Unstressed
	Purity 99%			+/-	152.4869	µg/mL	Stressed
9	Carbon disulfide	2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
	CAS # 75-15-0 (Lot S20A856)			+/-	151.8014	µg/mL	Unstressed
	Purity 99%			+/-	152.1618	µg/mL	Stressed
10	Acrylonitrile	25,001.3	µg/mL	+/-	145.3518	µg/mL	Gravimetric
	CAS # 107-13-1 (Lot J08Z057)			+/-	1,508.4355	µg/mL	Unstressed
	Purity 99%			+/-	1,512.0167	µg/mL	Stressed
11	cis-1,2-Dichloroethene	2,507.8	µg/mL	+/-	14.5807	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBV2831V)			+/-	151.3079	µg/mL	Unstressed
	Purity 98%			+/-	151.6671	µg/mL	Stressed
12	n-Hexane (C6)	2,512.4	µg/mL	+/-	14.6072	µg/mL	Gravimetric
	CAS # 110-54-3 (Lot SHBF7674V)			+/-	151.5827	µg/mL	Unstressed
	Purity 99%			+/-	151.9426	µg/mL	Stressed
13	1,1-dichloroethene	2,508.1	µg/mL	+/-	14.5825	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot 73896KMV)			+/-	151.3263	µg/mL	Unstressed
	Purity 99%			+/-	151.6856	µg/mL	Stressed
14	2,2-Dichloropropane	2,507.6	µg/mL	+/-	14.5795	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBL9720V)			+/-	151.2961	µg/mL	Unstressed
	Purity 99%			+/-	151.6553	µg/mL	Stressed
15	trans-1,2-Dichloroethene	2,509.8	µg/mL	+/-	14.5919	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)			+/-	151.4243	µg/mL	Unstressed
	Purity 99%			+/-	151.7838	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)	62,815.4	µg/mL	+/-	365.1949	µg/mL	Gravimetric
	CAS # 78-83-1 (Lot SHBD1647V)			+/-	3,789.9281	µg/mL	Unstressed
	Purity 99%			+/-	3,798.9260	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)	2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 1634-04-4 (Lot MKBV2134V)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%			+/-	151.7990	µg/mL	Stressed
18	Bromochloromethane	2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot 00004559)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%			+/-	151.6175	µg/mL	Stressed
19	Tetrahydrofuran	5,025.3	µg/mL	+/-	29.2172	µg/mL	Gravimetric
	CAS # 109-99-9 (Lot SHBG2910V)			+/-	303.1956	µg/mL	Unstressed
	Purity 99%			+/-	303.9154	µg/mL	Stressed
20	1,1,1-trichloroethane	2,508.9	µg/mL	+/-	14.5868	µg/mL	Gravimetric
	CAS # 71-55-6 (Lot B15MW0705)			+/-	151.3715	µg/mL	Unstressed
	Purity 99%			+/-	151.7309	µg/mL	Stressed
21	Cyclohexane	2,503.4	µg/mL	+/-	14.5548	µg/mL	Gravimetric
	CAS # 110-82-7 (Lot MKBV3194V)			+/-	151.0397	µg/mL	Unstressed
	Purity 99%			+/-	151.3983	µg/mL	Stressed
22	1,1-Dichloropropene	2,507.4	µg/mL	+/-	14.5781	µg/mL	Gravimetric
	CAS # 563-58-6 (Lot PR09161302)			+/-	151.2810	µg/mL	Unstressed
	Purity 99%			+/-	151.6402	µg/mL	Stressed
23	carbon tetrachloride	2,505.9	µg/mL	+/-	14.5694	µg/mL	Gravimetric
	CAS # 56-23-5 (Lot SHBG1763V)			+/-	151.1905	µg/mL	Unstressed
	Purity 99%			+/-	151.5495	µg/mL	Stressed

24	n-Heptane (C7)		2,510.8	µg/mL	+/-	14.5977	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot MKBV6176V)			+/-	151.4847	µg/mL	Unstressed
	Purity 99%				+/-	151.8443	µg/mL	Stressed
25	1,2-Dichloroethane		2,511.1	µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKBV4565V)			+/-	151.5073	µg/mL	Unstressed
	Purity 99%				+/-	151.8670	µg/mL	Stressed
26	Benzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBG1169V)			+/-	151.0095	µg/mL	Unstressed
	Purity 99%				+/-	151.3681	µg/mL	Stressed
27	Trichloroethene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBF0943V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
28	Methylcyclohexane		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot 50996APV)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
29	1,2-Dichloropropane		2,523.5	µg/mL	+/-	14.6718	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot 01113D0V)			+/-	152.2539	µg/mL	Unstressed
	Purity 99%				+/-	152.6154	µg/mL	Stressed
30	bromodichloromethane		2,509.0	µg/mL	+/-	14.5878	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKBL1617V)			+/-	151.3818	µg/mL	Unstressed
	Purity 98%				+/-	151.7412	µg/mL	Stressed
31	1,4-Dioxane		50,018.1	µg/mL	+/-	290.7945	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBG6312V)			+/-	3,017.8137	µg/mL	Unstressed
	Purity 99%				+/-	3,024.9785	µg/mL	Stressed
32	Dibromomethane		2,511.4	µg/mL	+/-	14.6013	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10183283)			+/-	151.5222	µg/mL	Unstressed
	Purity 98%				+/-	151.8820	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,506.0	µg/mL	+/-	14.5701	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 22622)			+/-	151.1981	µg/mL	Unstressed
	Purity 99%				+/-	151.5571	µg/mL	Stressed
34	Toluene		2,515.5	µg/mL	+/-	14.6253	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot MKBV5601V)			+/-	151.7713	µg/mL	Unstressed
	Purity 99%				+/-	152.1316	µg/mL	Stressed
35	Ethyl methacrylate		2,503.1	µg/mL	+/-	14.5534	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot SHBD9190V)			+/-	151.0246	µg/mL	Unstressed
	Purity 99%				+/-	151.3832	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot C584177)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,508.4	µg/mL	+/-	14.5839	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	151.3414	µg/mL	Unstressed
	Purity 99%				+/-	151.7007	µg/mL	Stressed
38	1,3-Dichloropropane		2,522.8	µg/mL	+/-	14.6675	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBG2162V)			+/-	152.2087	µg/mL	Unstressed
	Purity 99%				+/-	152.5701	µg/mL	Stressed
39	Tetrachloroethene		2,518.9	µg/mL	+/-	14.6450	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBD9374V)			+/-	151.9749	µg/mL	Unstressed
	Purity 99%				+/-	152.3357	µg/mL	Stressed

40	dibromochloromethane		2,505.4	µg/mL	+/-	14.5664	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBQ6577V)			+/-	151.1601	µg/mL	Unstressed
	Purity 98%				+/-	151.5190	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
42	Chlorobenzene		2,505.6	µg/mL	+/-	14.5679	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)			+/-	151.1755	µg/mL	Unstressed
	Purity 99%				+/-	151.5344	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
44	Ethylbenzene		2,506.1	µg/mL	+/-	14.5708	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)			+/-	151.2056	µg/mL	Unstressed
	Purity 99%				+/-	151.5646	µg/mL	Stressed
45	m-Xylene		1,254.4	µg/mL	+/-	7.2930	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF8095V)			+/-	75.6820	µg/mL	Unstressed
	Purity 99%				+/-	75.8617	µg/mL	Stressed
46	p-Xylene		1,250.0	µg/mL	+/-	7.2676	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	75.4180	µg/mL	Unstressed
	Purity 99%				+/-	75.5971	µg/mL	Stressed
47	o-Xylene		2,506.3	µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBF7003V)			+/-	151.2132	µg/mL	Unstressed
	Purity 99%				+/-	151.5722	µg/mL	Stressed
48	Styrene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,509.4	µg/mL	+/-	14.5897	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot I0185056)			+/-	151.4017	µg/mL	Unstressed
	Purity 99%				+/-	151.7612	µg/mL	Stressed
50	bromoform		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
52	chloroform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot MKBV2089V)			+/-	151.3037	µg/mL	Unstressed
	Purity 99%				+/-	151.6629	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,504.8	µg/mL	+/-	14.5628	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	151.1227	µg/mL	Unstressed
	Purity 99%				+/-	151.4815	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.7	µg/mL	+/-	14.5334	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)			+/-	150.8172	µg/mL	Unstressed
	Purity 95%				+/-	151.1753	µg/mL	Stressed
55	n-Propylbenzene		2,507.5	µg/mL	+/-	14.5788	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)			+/-	151.2886	µg/mL	Unstressed
	Purity 99%				+/-	151.6478	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot MKBD4032V)	2,515.1 µg/mL	+/-	14.6232 µg/mL 151.7486 µg/mL 152.1089 µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ6229V)	2,503.7 µg/mL	+/-	14.5565 µg/mL 151.0566 µg/mL 151.4152 µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBH8892V)	2,502.1 µg/mL	+/-	14.5476 µg/mL 150.9643 µg/mL 151.3227 µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,512.6 µg/mL	+/-	14.6086 µg/mL 151.5978 µg/mL 151.9577 µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot S52237V)	2,507.8 µg/mL	+/-	14.5803 µg/mL 151.3037 µg/mL 151.6629 µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBJ6245V)	2,502.5 µg/mL	+/-	14.5498 µg/mL 150.9869 µg/mL 151.3454 µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBK3151V)	2,521.8 µg/mL	+/-	14.6617 µg/mL 152.1484 µg/mL 152.5096 µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBK4439V)	2,502.6 µg/mL	+/-	14.5505 µg/mL 150.9945 µg/mL 151.3529 µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBM5751V)	2,505.8 µg/mL	+/-	14.5686 µg/mL 151.1830 µg/mL 151.5419 µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS1350V)	2,504.1 µg/mL	+/-	14.5592 µg/mL 151.0850 µg/mL 151.4437 µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09418JIV)	2,503.3 µg/mL	+/-	14.5541 µg/mL 151.0322 µg/mL 151.3907 µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBD7331V)	2,505.5 µg/mL	+/-	14.5672 µg/mL 151.1679 µg/mL 151.5268 µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01-JM)	2,508.6 µg/mL	+/-	14.5854 µg/mL 151.3565 µg/mL 151.7158 µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	2,518.6 µg/mL	+/-	14.6435 µg/mL 151.9598 µg/mL 152.3206 µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot J31X013)	2,499.9 µg/mL	+/-	14.5344 µg/mL 150.8275 µg/mL 151.1856 µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	2,514.9 µg/mL	+/-	14.6217 µg/mL 151.7336 µg/mL 152.0938 µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBS4859V)		+/- 150.9567	µg/mL	Unstressed
	Purity 99%			+/- 151.3151	µg/mL	Stressed

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

Column:

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

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

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

Inj. Temp:

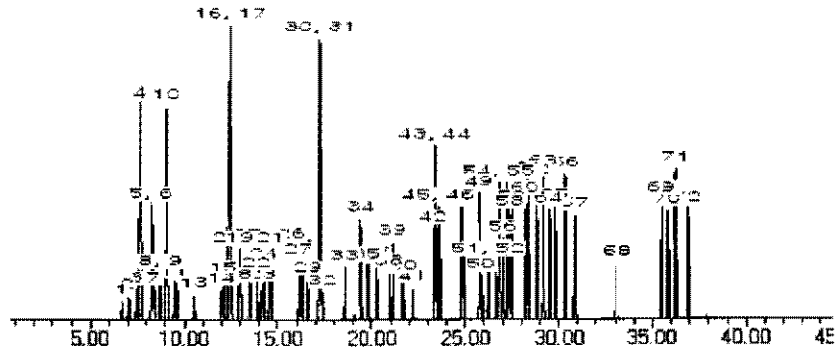
200°C

Det. Temp:

250°C

Det. Type:

MSD



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

Rebecca Sawyer

Date Mixed: 21-Mar-2016 Balance: 1125113331

Jodi E. Breon
Jodi E. Breon - QA Analyst

Date Passed: 28-Mar-2016

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

Reagent

8260MegaMixSS_00047



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 569720.sec Lot No.: A0120604
 Description : 8260 List 1 / Std #1 MegaMix (2015)
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : July 31, 2018 Storage: 0°C or colder

REC'D 12-12-16
 JDH
 1074882-884

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,501.1 µg/mL	+/-	14.5415	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/-	150.9014	µg/mL	Unstressed
	Purity 98%		+/-	151.2597	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.1 µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	150.9040	µg/mL	Unstressed
	Purity 99%		+/-	151.2622	µg/mL	Stressed
3	1,1-Dichloroethene	2,500.8 µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 2767000)		+/-	150.8813	µg/mL	Unstressed
	Purity 99%		+/-	151.2395	µg/mL	Stressed
4	tert-Butanol (TBA)	25,004.1 µg/mL	+/-	145.3683	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot XYXDO)		+/-	1,508.6067	µg/mL	Unstressed
	Purity 98%		+/-	1,512.1884	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,501.0 µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	150.8964	µg/mL	Unstressed
	Purity 99%		+/-	151.2547	µg/mL	Stressed
6	Methyl acetate	12,501.6 µg/mL	+/-	72.6817	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot 6WOXM)		+/-	754.2781	µg/mL	Unstressed
	Purity 99%		+/-	756.0689	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,501.0 µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot VEBOC)		+/-	150.8940	µg/mL	Unstressed
	Purity 98%		+/-	151.2522	µg/mL	Stressed

8	Methylene chloride (dichloromethane)	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
9	Carbon disulfide	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-15-0.SEC (Lot MKBL1376V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%			+/-	151.2244	µg/mL	Stressed
10	Acrylonitrile	25,020.0	µg/mL	+/-	145.4608	µg/mL	Gravimetric
	CAS # 107-13-1.SEC (Lot UERIL-DA)			+/-	1,509.5667	µg/mL	Unstressed
	Purity 99%			+/-	1,513.1507	µg/mL	Stressed
11	cis-1,2-Dichloroethene	2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot HGC01-BLKT)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%			+/-	151.2448	µg/mL	Stressed
12	n-Hexane (C6)	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 110-54-3.SEC (Lot 10188491)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
13	1,1-Dichloroethane	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 5035700)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
14	2,2-Dichloropropane	2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot GI01)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%			+/-	151.2320	µg/mL	Stressed
15	trans-1,2-Dichloroethene	2,501.3	µg/mL	+/-	14.5426	µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)			+/-	150.9125	µg/mL	Unstressed
	Purity 97%			+/-	151.2708	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)	62,503.0	µg/mL	+/-	363.3788	µg/mL	Gravimetric
	CAS # 78-83-1.SEC (Lot 83NHH)			+/-	3,771.0811	µg/mL	Unstressed
	Purity 99%			+/-	3,780.0343	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)	2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC (Lot ZAQTA-MS)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%			+/-	151.2547	µg/mL	Stressed
18	Bromochloromethane	2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 74-97-5.SEC (Lot 1775400)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%			+/-	151.2169	µg/mL	Stressed
19	Tetrahydrofuran	5,000.3	µg/mL	+/-	29.0719	µg/mL	Gravimetric
	CAS # 109-99-9.SEC (Lot K3V7J-SJ)			+/-	301.6872	µg/mL	Unstressed
	Purity 99%			+/-	302.4035	µg/mL	Stressed
20	1,1,1-Trichloroethane	2,501.3	µg/mL	+/-	14.5429	µg/mL	Gravimetric
	CAS # 71-55-6.SEC (Lot CS160712)			+/-	150.9162	µg/mL	Unstressed
	Purity 98%			+/-	151.2745	µg/mL	Stressed
21	Cyclohexane	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 110-82-7.SEC (Lot YADRA)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%			+/-	151.2093	µg/mL	Stressed
22	1,1-Dichloropropene	2,500.4	µg/mL	+/-	14.5378	µg/mL	Gravimetric
	CAS # 563-58-6.SEC (Lot 4672600)			+/-	150.8626	µg/mL	Unstressed
	Purity 96%			+/-	151.2208	µg/mL	Stressed
23	Carbon tetrachloride	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC (Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%			+/-	151.2244	µg/mL	Stressed

24	n-Heptane (C7)			2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS #	142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity	99%				+/-	151.2244	µg/mL	Stressed
25	1,2-Dichloroethane			2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS #	107-06-2.SEC	(Lot FO6PK)			+/-	150.9115	µg/mL	Unstressed
	Purity	99%				+/-	151.2698	µg/mL	Stressed
26	Benzene			2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS #	71-43-2.SEC	(Lot B28Y008)			+/-	150.8738	µg/mL	Unstressed
	Purity	99%				+/-	151.2320	µg/mL	Stressed
27	Trichloroethene			2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	79-01-6.SEC	(Lot H04X050)			+/-	150.8587	µg/mL	Unstressed
	Purity	99%				+/-	151.2169	µg/mL	Stressed
28	Methylcyclohexane			2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS #	108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.9492	µg/mL	Unstressed
	Purity	99%				+/-	151.3076	µg/mL	Stressed
29	1,2-Dichloropropane			2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS #	78-87-5.SEC	(Lot OGG01)			+/-	150.8813	µg/mL	Unstressed
	Purity	99%				+/-	151.2395	µg/mL	Stressed
30	Bromodichloromethane			2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	75-27-4.SEC	(Lot 10171168)			+/-	150.8587	µg/mL	Unstressed
	Purity	99%				+/-	151.2169	µg/mL	Stressed
31	1,4-Dioxane			50,014.8	µg/mL	+/-	290.7749	µg/mL	Gravimetric
	CAS #	123-91-1.SEC	(Lot CHA4A)			+/-	3,017.6100	µg/mL	Unstressed
	Purity	99%				+/-	3,024.7743	µg/mL	Stressed
32	Dibromomethane			2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS #	74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9190	µg/mL	Unstressed
	Purity	99%				+/-	151.2773	µg/mL	Stressed
33	cis-1,3-Dichloropropene			2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS #	10061-01-5.SEC	(Lot 7ZLXJ-TJ)			+/-	150.8813	µg/mL	Unstressed
	Purity	99%				+/-	151.2395	µg/mL	Stressed
34	Toluene			2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS #	108-88-3.SEC	(Lot YND2B-BD)			+/-	150.9115	µg/mL	Unstressed
	Purity	99%				+/-	151.2698	µg/mL	Stressed
35	Ethyl methacrylate			2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS #	97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.9341	µg/mL	Unstressed
	Purity	99%				+/-	151.2925	µg/mL	Stressed
36	trans-1,3-Dichloropropene			2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS #	10061-02-6.SEC	(Lot 2ECIC)			+/-	150.8662	µg/mL	Unstressed
	Purity	99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane			2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS #	79-00-5.SEC	(Lot 3440900)			+/-	150.8644	µg/mL	Unstressed
	Purity	98%				+/-	151.2226	µg/mL	Stressed
38	1,3-Dichloropropane			2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS #	142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8964	µg/mL	Unstressed
	Purity	99%				+/-	151.2547	µg/mL	Stressed
39	Tetrachloroethene			2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS #	127-18-4.SEC	(Lot F09W014)			+/-	150.9266	µg/mL	Unstressed
	Purity	99%				+/-	151.2849	µg/mL	Stressed

40	Dibromochloromethane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS #	124-48-1.SEC (Lot 10181507)			+/-	150.9491	µg/mL	Unstressed
	Purity	97%			+/-	151.3074	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS #	106-93-4.SEC (Lot 3505900)			+/-	150.8436	µg/mL	Unstressed
	Purity	99%			+/-	151.2017	µg/mL	Stressed
42	Chlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS #	108-90-7.SEC (Lot 1161936)			+/-	150.9266	µg/mL	Unstressed
	Purity	99%			+/-	151.2849	µg/mL	Stressed
43	1,1,1,2-Tetrachloroethane		2,501.0	µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS #	630-20-6.SEC (Lot GC01)			+/-	150.8940	µg/mL	Unstressed
	Purity	98%			+/-	151.2522	µg/mL	Stressed
44	Ethylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS #	100-41-4.SEC (Lot P14SE)			+/-	150.9190	µg/mL	Unstressed
	Purity	99%			+/-	151.2773	µg/mL	Stressed
45	m-Xylene		1,250.9	µg/mL	+/-	7.2727	µg/mL	Gravimetric
	CAS #	108-38-3.SEC (Lot OUKMG-GB)			+/-	75.4708	µg/mL	Unstressed
	Purity	99%			+/-	75.6500	µg/mL	Stressed
46	p-Xylene		1,250.8	µg/mL	+/-	7.2720	µg/mL	Gravimetric
	CAS #	106-42-3.SEC (Lot GM01)			+/-	75.4633	µg/mL	Unstressed
	Purity	99%			+/-	75.6425	µg/mL	Stressed
47	o-Xylene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS #	95-47-6.SEC (Lot FGL01-KTPK)			+/-	150.8964	µg/mL	Unstressed
	Purity	99%			+/-	151.2547	µg/mL	Stressed
48	Styrene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	100-42-5.SEC (Lot OFIOL-LA)			+/-	150.8587	µg/mL	Unstressed
	Purity	99%			+/-	151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	98-82-8.SEC (Lot 2PHXG-IH)			+/-	150.8587	µg/mL	Unstressed
	Purity	99%			+/-	151.2169	µg/mL	Stressed
50	Bromoform		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS #	75-25-2.SEC (Lot 5139000)			+/-	150.8512	µg/mL	Unstressed
	Purity	99%			+/-	151.2093	µg/mL	Stressed
51	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS #	79-34-5.SEC (Lot CFA4D-AQ)			+/-	150.8662	µg/mL	Unstressed
	Purity	99%			+/-	151.2244	µg/mL	Stressed
52	Chloroform		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS #	67-66-3.SEC (Lot 1297547)			+/-	150.8738	µg/mL	Unstressed
	Purity	99%			+/-	151.2320	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS #	96-18-4.SEC (Lot OGI01)			+/-	150.9236	µg/mL	Unstressed
	Purity	98%			+/-	151.2819	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS #	110-57-6.SEC (Lot 100700-3)			+/-	150.8644	µg/mL	Unstressed
	Purity	98%			+/-	151.2226	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS #	103-65-1.SEC (Lot T2HFC-IT)			+/-	150.8361	µg/mL	Unstressed
	Purity	99%			+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,501.0 µg/mL	+/-	14.5410 µg/mL 150.8964 µg/mL 151.2547 µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	2,500.6 µg/mL	+/-	14.5388 µg/mL 150.8738 µg/mL 151.2320 µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,500.6 µg/mL	+/-	14.5388 µg/mL 150.8738 µg/mL 151.2320 µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,500.9 µg/mL	+/-	14.5403 µg/mL 150.8889 µg/mL 151.2471 µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot OGN01-CAI)	2,500.5 µg/mL	+/-	14.5381 µg/mL 150.8662 µg/mL 151.2244 µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,500.8 µg/mL	+/-	14.5396 µg/mL 150.8813 µg/mL 151.2395 µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,500.9 µg/mL	+/-	14.5403 µg/mL 150.8889 µg/mL 151.2471 µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	(Lot 1195000)	2,501.5 µg/mL	+/-	14.5441 µg/mL 150.9278 µg/mL 151.2861 µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,501.6 µg/mL	+/-	14.5447 µg/mL 150.9341 µg/mL 151.2925 µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,501.1 µg/mL	+/-	14.5418 µg/mL 150.9040 µg/mL 151.2622 µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot OGN01-PNP)	2,501.4 µg/mL	+/-	14.5432 µg/mL 150.9190 µg/mL 151.2773 µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	2,500.3 µg/mL	+/-	14.5367 µg/mL 150.8512 µg/mL 151.2093 µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 97%	(Lot LC00408V)	2,500.3 µg/mL	+/-	14.5369 µg/mL 150.8539 µg/mL 151.2121 µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,500.4 µg/mL	+/-	14.5374 µg/mL 150.8587 µg/mL 151.2169 µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 98%	(Lot 4974700)	2,500.7 µg/mL	+/-	14.5394 µg/mL 150.8792 µg/mL 151.2374 µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot SKZ5N)	2,500.0 µg/mL	+/-	14.5352 µg/mL 150.8361 µg/mL 151.1942 µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,501.6 µg/mL	+/-	14.5444	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot A0043055)		+/-	150.9310	µg/mL	Unstressed
	Purity 98%			+/-	151.2893	µg/mL	Stressed

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

Column:

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

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

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

Inj. Temp:

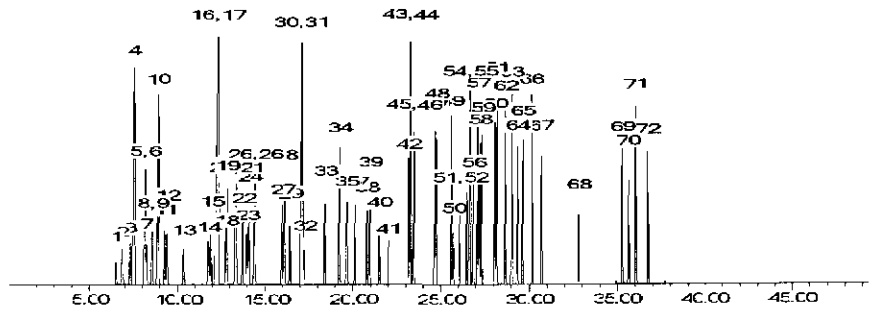
200°C

Det. Temp:

250°C

Det. Type:

MSD



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

Michael Mays

Date Mixed: 25-Jul-2016 **Balance:** 1127510105

Jennifer L. Pollino
 Jennifer L. Pollino - QC Analyst

Date Passed: 28-Jul-2016

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

Reagent

8260MegaMixSS_00048



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
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www.restek.com

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. : 569720.sec Lot No.: A0120604
 Description : 8260 List 1 / Std #1 MegaMix (2015)
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : July 31, 2018 Storage: 0°C or colder

REC'D 12-12-16
 JDH
 1074882-884

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,501.1 µg/mL	+/-	14.5415	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/-	150.9014	µg/mL	Unstressed
	Purity 98%		+/-	151.2597	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.1 µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	150.9040	µg/mL	Unstressed
	Purity 99%		+/-	151.2622	µg/mL	Stressed
3	1,1-Dichloroethene	2,500.8 µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 2767000)		+/-	150.8813	µg/mL	Unstressed
	Purity 99%		+/-	151.2395	µg/mL	Stressed
4	tert-Butanol (TBA)	25,004.1 µg/mL	+/-	145.3683	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot XYXDO)		+/-	1,508.6067	µg/mL	Unstressed
	Purity 98%		+/-	1,512.1884	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,501.0 µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	150.8964	µg/mL	Unstressed
	Purity 99%		+/-	151.2547	µg/mL	Stressed
6	Methyl acetate	12,501.6 µg/mL	+/-	72.6817	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot 6WOXM)		+/-	754.2781	µg/mL	Unstressed
	Purity 99%		+/-	756.0689	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,501.0 µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot VEOC)		+/-	150.8940	µg/mL	Unstressed
	Purity 98%		+/-	151.2522	µg/mL	Stressed

8	Methylene chloride (dichloromethane)	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
9	Carbon disulfide	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-15-0.SEC (Lot MKBL1376V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%			+/-	151.2244	µg/mL	Stressed
10	Acrylonitrile	25,020.0	µg/mL	+/-	145.4608	µg/mL	Gravimetric
	CAS # 107-13-1.SEC (Lot UERIL-DA)			+/-	1,509.5667	µg/mL	Unstressed
	Purity 99%			+/-	1,513.1507	µg/mL	Stressed
11	cis-1,2-Dichloroethene	2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot HGC01-BLKT)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%			+/-	151.2448	µg/mL	Stressed
12	n-Hexane (C6)	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 110-54-3.SEC (Lot 10188491)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
13	1,1-Dichloroethane	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 5035700)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
14	2,2-Dichloropropane	2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot GI01)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%			+/-	151.2320	µg/mL	Stressed
15	trans-1,2-Dichloroethene	2,501.3	µg/mL	+/-	14.5426	µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)			+/-	150.9125	µg/mL	Unstressed
	Purity 97%			+/-	151.2708	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)	62,503.0	µg/mL	+/-	363.3788	µg/mL	Gravimetric
	CAS # 78-83-1.SEC (Lot 83NHH)			+/-	3,771.0811	µg/mL	Unstressed
	Purity 99%			+/-	3,780.0343	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)	2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC (Lot ZAQTA-MS)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%			+/-	151.2547	µg/mL	Stressed
18	Bromochloromethane	2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 74-97-5.SEC (Lot 1775400)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%			+/-	151.2169	µg/mL	Stressed
19	Tetrahydrofuran	5,000.3	µg/mL	+/-	29.0719	µg/mL	Gravimetric
	CAS # 109-99-9.SEC (Lot K3V7J-SJ)			+/-	301.6872	µg/mL	Unstressed
	Purity 99%			+/-	302.4035	µg/mL	Stressed
20	1,1,1-Trichloroethane	2,501.3	µg/mL	+/-	14.5429	µg/mL	Gravimetric
	CAS # 71-55-6.SEC (Lot CS160712)			+/-	150.9162	µg/mL	Unstressed
	Purity 98%			+/-	151.2745	µg/mL	Stressed
21	Cyclohexane	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 110-82-7.SEC (Lot YADRA)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%			+/-	151.2093	µg/mL	Stressed
22	1,1-Dichloropropene	2,500.4	µg/mL	+/-	14.5378	µg/mL	Gravimetric
	CAS # 563-58-6.SEC (Lot 4672600)			+/-	150.8626	µg/mL	Unstressed
	Purity 96%			+/-	151.2208	µg/mL	Stressed
23	Carbon tetrachloride	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC (Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%			+/-	151.2244	µg/mL	Stressed

24	n-Heptane (C7)			2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS #	142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity	99%				+/-	151.2244	µg/mL	Stressed
25	1,2-Dichloroethane			2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS #	107-06-2.SEC	(Lot FO6PK)			+/-	150.9115	µg/mL	Unstressed
	Purity	99%				+/-	151.2698	µg/mL	Stressed
26	Benzene			2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS #	71-43-2.SEC	(Lot B28Y008)			+/-	150.8738	µg/mL	Unstressed
	Purity	99%				+/-	151.2320	µg/mL	Stressed
27	Trichloroethene			2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	79-01-6.SEC	(Lot H04X050)			+/-	150.8587	µg/mL	Unstressed
	Purity	99%				+/-	151.2169	µg/mL	Stressed
28	Methylcyclohexane			2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS #	108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.9492	µg/mL	Unstressed
	Purity	99%				+/-	151.3076	µg/mL	Stressed
29	1,2-Dichloropropane			2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS #	78-87-5.SEC	(Lot OGG01)			+/-	150.8813	µg/mL	Unstressed
	Purity	99%				+/-	151.2395	µg/mL	Stressed
30	Bromodichloromethane			2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS #	75-27-4.SEC	(Lot 10171168)			+/-	150.8587	µg/mL	Unstressed
	Purity	99%				+/-	151.2169	µg/mL	Stressed
31	1,4-Dioxane			50,014.8	µg/mL	+/-	290.7749	µg/mL	Gravimetric
	CAS #	123-91-1.SEC	(Lot CHA4A)			+/-	3,017.6100	µg/mL	Unstressed
	Purity	99%				+/-	3,024.7743	µg/mL	Stressed
32	Dibromomethane			2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS #	74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9190	µg/mL	Unstressed
	Purity	99%				+/-	151.2773	µg/mL	Stressed
33	cis-1,3-Dichloropropene			2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS #	10061-01-5.SEC	(Lot 7ZLXJ-TJ)			+/-	150.8813	µg/mL	Unstressed
	Purity	99%				+/-	151.2395	µg/mL	Stressed
34	Toluene			2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS #	108-88-3.SEC	(Lot YND2B-BD)			+/-	150.9115	µg/mL	Unstressed
	Purity	99%				+/-	151.2698	µg/mL	Stressed
35	Ethyl methacrylate			2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS #	97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.9341	µg/mL	Unstressed
	Purity	99%				+/-	151.2925	µg/mL	Stressed
36	trans-1,3-Dichloropropene			2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS #	10061-02-6.SEC	(Lot 2ECIC)			+/-	150.8662	µg/mL	Unstressed
	Purity	99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane			2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS #	79-00-5.SEC	(Lot 3440900)			+/-	150.8644	µg/mL	Unstressed
	Purity	98%				+/-	151.2226	µg/mL	Stressed
38	1,3-Dichloropropane			2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS #	142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8964	µg/mL	Unstressed
	Purity	99%				+/-	151.2547	µg/mL	Stressed
39	Tetrachloroethene			2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS #	127-18-4.SEC	(Lot F09W014)			+/-	150.9266	µg/mL	Unstressed
	Purity	99%				+/-	151.2849	µg/mL	Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10181507)	2,501.9	µg/mL	+/- +/- +/-	14.5461 150.9491 151.3074	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 98%	(Lot GC01)	2,501.0	µg/mL	+/- +/- +/-	14.5408 150.8940 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot P14SE)	2,501.4	µg/mL	+/- +/- +/-	14.5432 150.9190 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,250.9	µg/mL	+/- +/- +/-	7.2727 75.4708 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,250.8	µg/mL	+/- +/- +/-	7.2720 75.4633 75.6425	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01-KTPK)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-LA)	2,500.4	µg/mL	+/- +/- +/-	14.5374 150.8587 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,500.4	µg/mL	+/- +/- +/-	14.5374 150.8587 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 99%	(Lot 5139000)	2,500.3	µg/mL	+/- +/- +/-	14.5367 150.8512 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Chloroform CAS # 67-66-3.SEC Purity 99%	(Lot 1297547)	2,500.6	µg/mL	+/- +/- +/-	14.5388 150.8738 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	(Lot OGI01)	2,501.5	µg/mL	+/- +/- +/-	14.5436 150.9236 151.2819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,500.5	µg/mL	+/- +/- +/-	14.5379 150.8644 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC-IT)	2,500.0	µg/mL	+/- +/- +/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,501.0 µg/mL	+/-	14.5410 µg/mL 150.8964 µg/mL 151.2547 µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	2,500.6 µg/mL	+/-	14.5388 µg/mL 150.8738 µg/mL 151.2320 µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,500.6 µg/mL	+/-	14.5388 µg/mL 150.8738 µg/mL 151.2320 µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,500.9 µg/mL	+/-	14.5403 µg/mL 150.8889 µg/mL 151.2471 µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot OGN01-CAI)	2,500.5 µg/mL	+/-	14.5381 µg/mL 150.8662 µg/mL 151.2244 µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,500.8 µg/mL	+/-	14.5396 µg/mL 150.8813 µg/mL 151.2395 µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,500.9 µg/mL	+/-	14.5403 µg/mL 150.8889 µg/mL 151.2471 µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	(Lot 1195000)	2,501.5 µg/mL	+/-	14.5441 µg/mL 150.9278 µg/mL 151.2861 µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,501.6 µg/mL	+/-	14.5447 µg/mL 150.9341 µg/mL 151.2925 µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,501.1 µg/mL	+/-	14.5418 µg/mL 150.9040 µg/mL 151.2622 µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot OGN01-PNP)	2,501.4 µg/mL	+/-	14.5432 µg/mL 150.9190 µg/mL 151.2773 µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	2,500.3 µg/mL	+/-	14.5367 µg/mL 150.8512 µg/mL 151.2093 µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 97%	(Lot LC00408V)	2,500.3 µg/mL	+/-	14.5369 µg/mL 150.8539 µg/mL 151.2121 µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,500.4 µg/mL	+/-	14.5374 µg/mL 150.8587 µg/mL 151.2169 µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 98%	(Lot 4974700)	2,500.7 µg/mL	+/-	14.5394 µg/mL 150.8792 µg/mL 151.2374 µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot SKZ5N)	2,500.0 µg/mL	+/-	14.5352 µg/mL 150.8361 µg/mL 151.1942 µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,501.6 µg/mL	+/-	14.5444	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.9310	µg/mL	Unstressed
	Purity 98%			+/-	151.2893	µg/mL	Stressed

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

Column:

60m x 0.25mm x 1.4µm
 Rtx-S02.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

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

Inj. Temp:

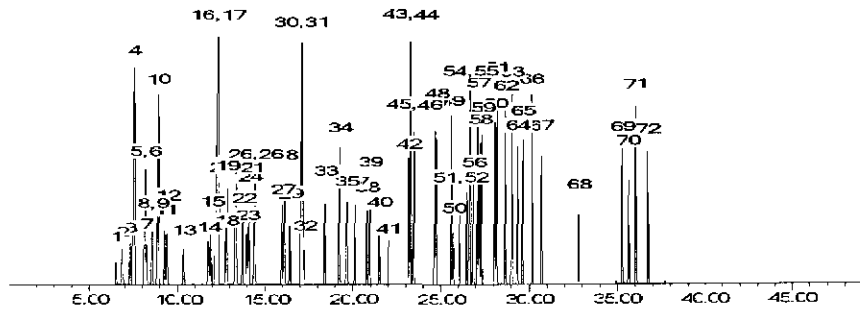
200°C

Det. Temp:

250°C

Det. Type:

MSD



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

Michael Mays

Date Mixed: 25-Jul-2016 **Balance:** 1127510105

Jennifer L. Pollino
 Jennifer L. Pollino - QC Analyst

Date Passed: 28-Jul-2016

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

Reagent

Add (A) SS 2016_00013

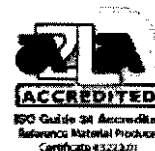


CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 570808.sec Lot No.: A0116135
 Description : 8260 List 2 / Std #6
8260 List 2 / Std #6 2500-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : June 30, 2017 Storage: 0°C or colder

REC'D 11-9-16
 JDH
 1054704-706

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2-Propanol (isopropanol) CAS # 67-63-0.SEC (Lot NWVYK) Purity 98%	25,004.1 µg/mL	+/- 146.4046 µg/mL	+/- 1,237.0209 µg/mL	+/- 1,267.7746 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene CAS # 126-99-8.A * (Lot 151210JLM) Purity 99%	2,502.4 µg/mL	+/- 14.6855 µg/mL	+/- 123.8044 µg/mL	+/- 126.8822 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile CAS # 126-98-7 * (Lot 1012014) Purity 99%	25,001.6 µg/mL	+/- 146.3899 µg/mL	+/- 1,236.8966 µg/mL	+/- 1,267.6472 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (Isooctane) CAS # 540-84-1.SEC (Lot 1894700) Purity 99%	2,500.8 µg/mL	+/- 14.6761 µg/mL	+/- 123.7253 µg/mL	+/- 126.8010 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol CAS # 71-36-3.SEC (Lot QBO2D) Purity 99%	62,500.0 µg/mL	+/- 365.9324 µg/mL	+/- 3,092.0415 µg/mL	+/- 3,168.9130 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane CAS # 79-46-9.SEC (Lot KW38H-RN) Purity 98%	5,000.4 µg/mL	+/- 29.2782 µg/mL	+/- 247.3809 µg/mL	+/- 253.5311 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane CAS # 544-10-5.SEC (Lot 3890000) Purity 98%	2,500.2 µg/mL	+/- 14.6724 µg/mL	+/- 123.6944 µg/mL	+/- 126.7694 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene		2,501.0	µg/mL	+/-	14.6776	µg/mL	Gravimetric
	CAS #	526-73-8.SEC (Lot 4591200)			+/-	123.7375	µg/mL	Unstressed
	Purity	97%			+/-	126.8136	µg/mL	Stressed
9	Benzyl chloride		2,500.4	µg/mL	+/-	14.6737	µg/mL	Gravimetric
	CAS #	100-44-7.SEC (Lot H29N03)			+/-	123.7055	µg/mL	Unstressed
	Purity	99%			+/-	126.7807	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,500.4	µg/mL	+/-	14.6737	µg/mL	Gravimetric
	CAS #	108-70-3.SEC (Lot I28U021)			+/-	123.7055	µg/mL	Unstressed
	Purity	99%			+/-	126.7807	µg/mL	Stressed

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

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Column:

105m x 0.53mm x 3.0µm
 Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
 @ 8°C/min. (hold 5 min.)

Inj. Temp:

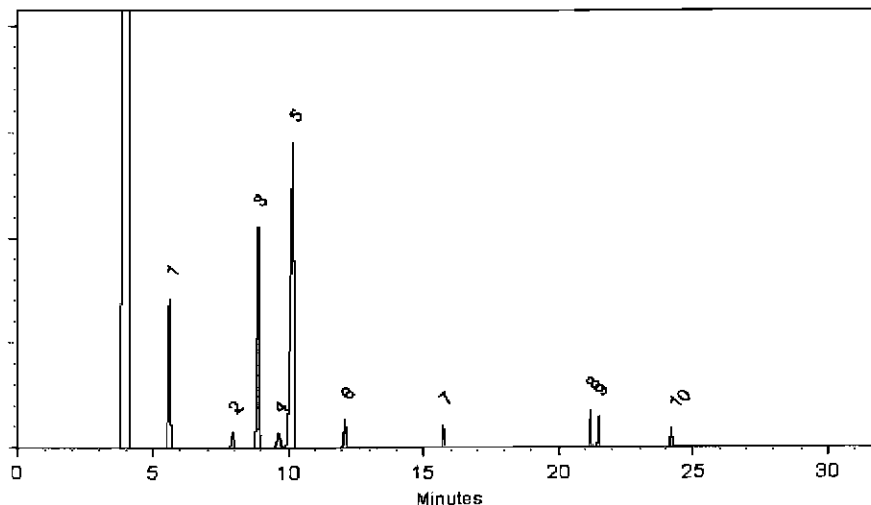
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Michael Maje

Date Mixed: 28-Dec-2015 **Balance:** 1127510105

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 29-Dec-2015

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

Reagent

Adds (A) 2016_00011



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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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. : 570808 Lot No.: A0116133
 Description : 8260 List 2 / Std #6
8260 List 2 / Std #6 2500-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : June 30, 2017 Storage: 0°C or colder

REC'D 11-9-16
JCH
1054701-703

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2-Propanol (isopropanol) CAS # 67-63-0 Purity 99% (Lot SHBF0274V)	25,021.0 µg/mL	+/- 145.4666 µg/mL	+/- 1,237.7341 µg/mL	+/- 1,268.5115 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene CAS # 126-99-8.A Purity 99% (Lot 151210JLM)	2,515.8 µg/mL	+/- 14.6268 µg/mL	+/- 124.4487 µg/mL	+/- 127.5433 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile CAS # 126-98-7 Purity 99% (Lot 1012014)	25,005.8 µg/mL	+/- 145.3780 µg/mL	+/- 1,236.9798 µg/mL	+/- 1,267.7384 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (isooctane) CAS # 540-84-1 Purity 99% (Lot SHBD2922V)	2,501.3 µg/mL	+/- 14.5425 µg/mL	+/- 123.7315 µg/mL	+/- 126.8081 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol CAS # 71-36-3 Purity 99% (Lot SHBF1679V)	62,520.3 µg/mL	+/- 363.4791 µg/mL	+/- 3,092.7400 µg/mL	+/- 3,169.6438 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane CAS # 79-46-9 Purity 97% (Lot BCBB8938)	5,001.3 µg/mL	+/- 29.0781 µg/mL	+/- 247.4045 µg/mL	+/- 253.5565 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane CAS # 544-10-5 Purity 98% (Lot 05107LK)	2,503.2 µg/mL	+/- 14.5536 µg/mL	+/- 123.8262 µg/mL	+/- 126.9052 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-14)			+/-	123.7383	µg/mL	Unstressed
	Purity 97%				+/-	126.8151	µg/mL	Stressed
9	Benzyl chloride		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBB7346V)			+/-	123.7686	µg/mL	Unstressed
	Purity 99%				+/-	126.8462	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	123.7067	µg/mL	Unstressed
	Purity 99%				+/-	126.7828	µg/mL	Stressed
Solvent: P&T Methanol								
	CAS # 67-56-1							
	Purity 99%							

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

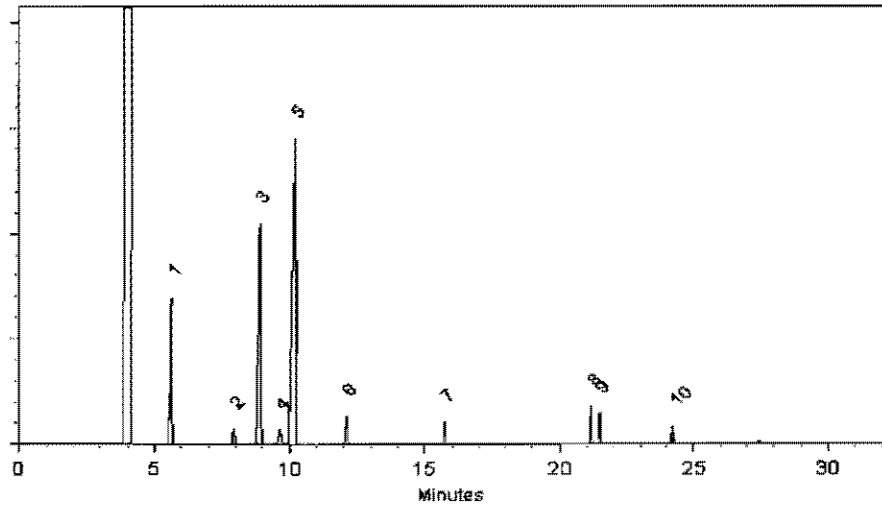
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

F. Joseph Jallen - Mix Technician

Date Mixed: 28-Dec-2015

Balance: B251644995

Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 29-Dec-2015

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

Reagent

Adds (B) 2016_00011



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 570809 **Lot No.:** A0116077
Description : 8260 List 2 / Std #7
8260 List 2 / Std #7 2500-5000 µg/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2017 **Storage:** 0°C or colder

REC'D 11-9-16
 JDH
~~1054715-717~~
 1054713-715

JDH 11-27-14

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Ethyl acetate	5,016.0 µg/mL (Lot SHBF6909V)	+/-	29.1635	µg/mL	Gravimetric
	CAS # 141-78-6		+/-	302.6375	µg/mL	Unstressed
	Purity 99%		+/-	303.3560	µg/mL	Stressed
2	Ethyl acrylate	2,502.5 µg/mL (Lot 10129902)	+/-	14.5498	µg/mL	Gravimetric
	CAS # 140-88-5		+/-	150.9869	µg/mL	Unstressed
	Purity 99%		+/-	151.3454	µg/mL	Stressed
3	Methyl methacrylate	5,007.8 µg/mL (Lot MKBN8882V)	+/-	29.1155	µg/mL	Gravimetric
	CAS # 80-62-6		+/-	302.1397	µg/mL	Unstressed
	Purity 99%		+/-	302.8571	µg/mL	Stressed
4	Butyl acetate	2,501.3 µg/mL (Lot SHBF4442V)	+/-	14.5425	µg/mL	Gravimetric
	CAS # 123-86-4		+/-	150.9115	µg/mL	Unstressed
	Purity 99%		+/-	151.2698	µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

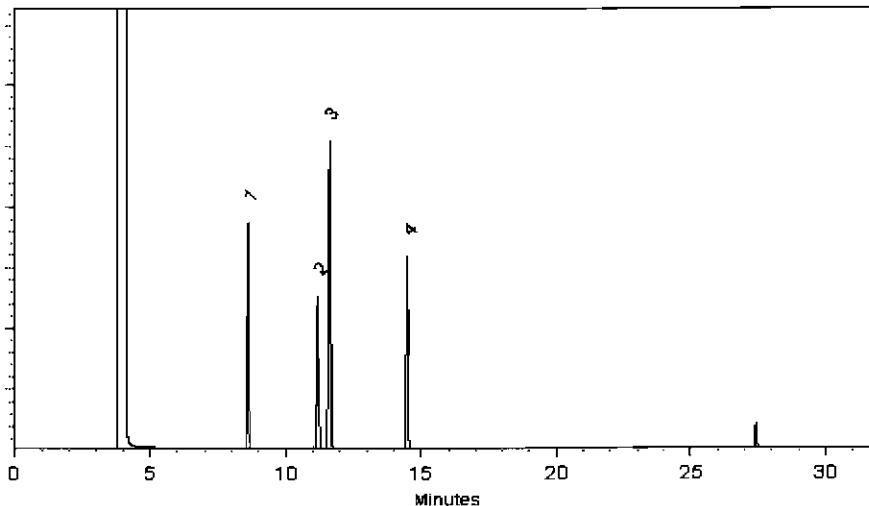
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Rebecca Sawyer

Date Mixed: 21-Dec-2015 Balance: 1125113331

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 22-Dec-2015

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

Reagent

Polar Add. _00039



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 569728 Lot No.: A0114666
 Description : 8260 List 3/ Std#1 Polar Additions (2015)
8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : October 31, 2017 Storage: 0°C or colder

REC'D 12-12-16
 JCH
 1074896-898

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethanol	100,005.8 µg/mL (Lot PG0219)	+/-	581.4117 µg/mL	Gravimetric
	CAS # 64-17-5		+/-	4,947.0657 µg/mL	Unstressed
	Purity 99%		+/-	5,070.0789 µg/mL	Stressed
2	Acetonitrile	25,001.0 µg/mL (Lot SHBB3177V)	+/-	145.3505 µg/mL	Gravimetric
	CAS # 75-05-8		+/-	1,236.7460 µg/mL	Unstressed
	Purity 98%		+/-	1,267.4988 µg/mL	Stressed
3	Diisopropyl ether (DIPE)	2,500.8 µg/mL (Lot SHBB6268V)	+/-	14.5396 µg/mL	Gravimetric
	CAS # 108-20-3		+/-	123.7067 µg/mL	Unstressed
	Purity 99%		+/-	126.7828 µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)	2,505.0 µg/mL (Lot MKBR1623V)	+/-	14.5643 µg/mL	Gravimetric
	CAS # 637-92-3		+/-	123.9170 µg/mL	Unstressed
	Purity 99%		+/-	126.9983 µg/mL	Stressed
5	Propionitrile	25,001.5 µg/mL (Lot BCBM6569V)	+/-	145.3533 µg/mL	Gravimetric
	CAS # 107-12-0		+/-	1,236.7695 µg/mL	Unstressed
	Purity 99%		+/-	1,267.5229 µg/mL	Stressed
6	tert-Amyl alcohol	25,012.3 µg/mL (Lot STBB1898V)	+/-	145.4158 µg/mL	Gravimetric
	CAS # 75-85-4		+/-	1,237.3013 µg/mL	Unstressed
	Purity 99%		+/-	1,268.0679 µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)	2,503.5 µg/mL (Lot HMBC8037V)	+/-	14.5556 µg/mL	Gravimetric
	CAS # 994-05-8		+/-	123.8428 µg/mL	Unstressed
	Purity 99%		+/-	126.9222 µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

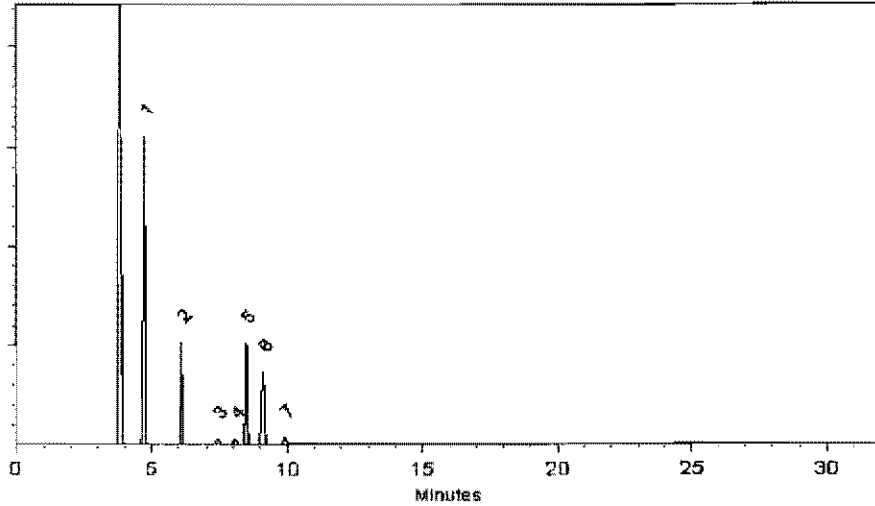
200°C

Det. Temp:

250°C

Det. Type:

FID



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

F. Joseph Tallon
F. Joseph Tallon - M.M. Technician

Date Mixed: 12-Oct-2015 Balance: B251644995

Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 14-Oct-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80387

Reagent

Polar Add. _00040



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

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. : 569728 Lot No.: A0114666
 Description : 8260 List 3/ Std#1 Polar Additions (2015)
8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : October 31, 2017 Storage: 0°C or colder

REC'D 12-12-16
 JCH

1074896-898

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethanol	100,005.8 µg/mL (Lot PG0219)	+/-	581.4117 µg/mL	Gravimetric
	CAS # 64-17-5		+/-	4,947.0657 µg/mL	Unstressed
	Purity 99%		+/-	5,070.0789 µg/mL	Stressed
2	Acetonitrile	25,001.0 µg/mL (Lot SHBB3177V)	+/-	145.3505 µg/mL	Gravimetric
	CAS # 75-05-8		+/-	1,236.7460 µg/mL	Unstressed
	Purity 98%		+/-	1,267.4988 µg/mL	Stressed
3	Diisopropyl ether (DIPE)	2,500.8 µg/mL (Lot SHBB6268V)	+/-	14.5396 µg/mL	Gravimetric
	CAS # 108-20-3		+/-	123.7067 µg/mL	Unstressed
	Purity 99%		+/-	126.7828 µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)	2,505.0 µg/mL (Lot MKBR1623V)	+/-	14.5643 µg/mL	Gravimetric
	CAS # 637-92-3		+/-	123.9170 µg/mL	Unstressed
	Purity 99%		+/-	126.9983 µg/mL	Stressed
5	Propionitrile	25,001.5 µg/mL (Lot BCBM6569V)	+/-	145.3533 µg/mL	Gravimetric
	CAS # 107-12-0		+/-	1,236.7695 µg/mL	Unstressed
	Purity 99%		+/-	1,267.5229 µg/mL	Stressed
6	tert-Amyl alcohol	25,012.3 µg/mL (Lot STBB1898V)	+/-	145.4158 µg/mL	Gravimetric
	CAS # 75-85-4		+/-	1,237.3013 µg/mL	Unstressed
	Purity 99%		+/-	1,268.0679 µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)	2,503.5 µg/mL (Lot HMBC8037V)	+/-	14.5556 µg/mL	Gravimetric
	CAS # 994-05-8		+/-	123.8428 µg/mL	Unstressed
	Purity 99%		+/-	126.9222 µg/mL	Stressed

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

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

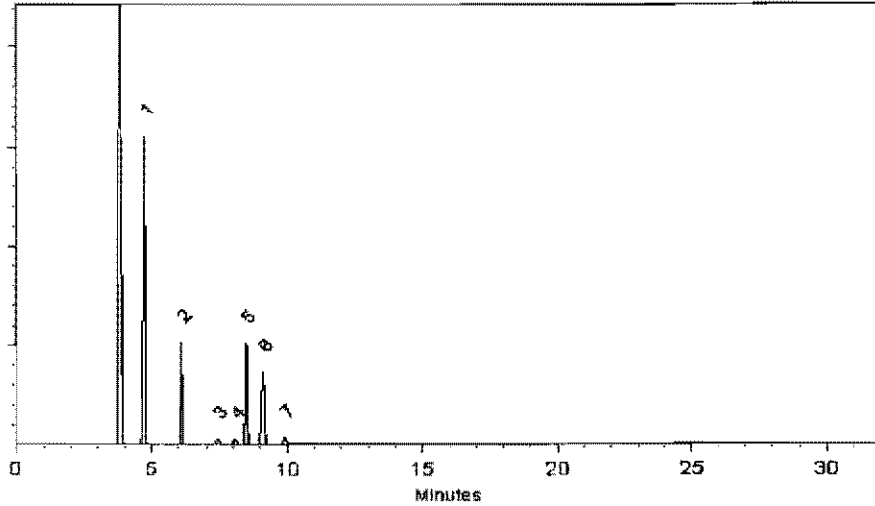
200°C

Det. Temp:

250°C

Det. Type:

FID



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

F. Joseph Tallon
F. Joseph Tallon - M.M. Technician

Date Mixed: 12-Oct-2015 Balance: B251644995

Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 14-Oct-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80387

Method 8260C Low Level

Volatile Organic Compounds (GC/MS)
by Method 8260C Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): RTX-VMS40 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-022817	160-21259-1	101	91	113	110
GW-BR09JC-022817	160-21259-2	107	110	117	107
GW-BR09JC-022817	160-21259-2	107	108	117	109
	MB 160-295720/8	97	91	115	107
	MB 160-296328/6	104	108	116	112
	LCS 160-295720/5	97	89	103	95
	LCS 160-296328/3	106	103	109	106
	LCSD 160-295720/6	99	86	104	95
	LCSD 160-296328/4	103	101	112	109

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

QC LIMITS
81-124
75-129
87-128
81-130

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: ZLCS1616.D

Lab ID: LCS 160-295720/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.0	100	85-116	
1,1,2,2-Tetrachloroethane	10.0	9.05	90	80-120	
1,1,2-Trichloroethane	10.0	8.64	86	80-120	
1,1-Dichloroethene	10.0	10.2	102	80-120	
1,1-Dichloroethane	10.0	10.1	101	80-120	
1,2,4-Trichlorobenzene	10.0	8.91	89	75-121	
1,2-Dibromo-3-Chloropropane	10.0	7.98	80	73-123	
1,2-Dichloroethane	10.0	8.52	85	80-115	
1,2-Dichloroethene, Total	20.0	19.5	97	80-120	
1,2-Dichloropropane	10.0	10.1	101	80-120	
2-Butanone	10.0	8.40	84	67-127	
2-Hexanone	10.0	8.80	88	70-123	
4-Methyl-2-pentanone	10.0	8.87	89	75-126	
Acetone	10.0	10.3	103	69-129	
Benzene	10.0	10.6	106	80-120	
Bromoform	10.0	8.93	89	80-120	
Methyl bromide	10.0	9.38	94	70-124	
Carbon disulfide	10.0	9.85	99	80-121	
Carbon tetrachloride	10.0	10.2	102	83-125	
Chlorobenzene	10.0	10.3	103	80-120	
Chlorodibromomethane	10.0	9.20	92	80-120	
Chloroethane	10.0	10.3	103	73-119	
Chloroform	10.0	9.49	95	80-120	
Chloromethane	10.0	9.11	91	72-124	
cis-1,2-Dichloroethene	10.0	9.70	97	80-120	
cis-1,3-Dichloropropene	10.0	9.75	97	80-120	
Bromodichloromethane	10.0	9.16	92	80-120	
Ethylbenzene	10.0	10.6	106	80-120	
1,2-Dibromoethane	10.0	8.91	89	80-120	
Methylene Chloride	10.0	9.24	92	80-120	
n-Butanol	250	230	92	62-128	
Styrene	10.0	10.7	107	81-133	
Tetrachloroethene	10.0	10.1	101	83-123	
Toluene	10.0	10.6	106	80-120	
trans-1,2-Dichloroethene	10.0	9.79	98	80-120	
trans-1,3-Dichloropropene	10.0	9.80	98	82-124	
Trichloroethene	10.0	10.1	101	80-120	
Vinyl acetate	10.0	9.21	92	63-140	
Vinyl chloride	10.0	10.2	102	77-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: LLCS7800.D

Lab ID: LCS 160-296328/3

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.9	109	85-116	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	80-120	
1,1,2-Trichloroethane	10.0	10.3	103	80-120	
1,1-Dichloroethene	10.0	10.7	107	80-120	
1,1-Dichloroethane	10.0	10.9	109	80-120	
1,2,4-Trichlorobenzene	10.0	10.7	107	75-121	
1,2-Dibromo-3-Chloropropane	10.0	10.9	109	73-123	
1,2-Dichloroethane	10.0	10.7	107	80-115	
1,2-Dichloroethene, Total	20.0	21.2	106	80-120	
1,2-Dichloropropane	10.0	10.9	109	80-120	
2-Butanone	10.0	10.4	104	67-127	
2-Hexanone	10.0	9.98	100	70-123	
4-Methyl-2-pentanone	10.0	9.39	94	75-126	
Acetone	10.0	10.9	109	69-129	
Benzene	10.0	10.5	105	80-120	
Bromoform	10.0	10.4	104	80-120	
Methyl bromide	10.0	10.6	106	70-124	
Carbon disulfide	10.0	11.1	111	80-121	
Carbon tetrachloride	10.0	10.9	109	83-125	
Chlorobenzene	10.0	10.3	103	80-120	
Chlorodibromomethane	10.0	10.5	105	80-120	
Chloroethane	10.0	11.1	111	73-119	
Chloroform	10.0	10.6	106	80-120	
Chloromethane	10.0	10.8	108	72-124	
cis-1,2-Dichloroethene	10.0	10.5	105	80-120	
cis-1,3-Dichloropropene	10.0	11.8	118	80-120	
Bromodichloromethane	10.0	10.8	108	80-120	
Ethylbenzene	10.0	10.9	109	80-120	
1,2-Dibromoethane	10.0	10.5	105	80-120	
Methylene Chloride	10.0	10.3	103	80-120	
n-Butanol	250	253	101	62-128	
Styrene	10.0	11.7	117	81-133	
Tetrachloroethene	10.0	10.7	107	83-123	
Toluene	10.0	11.1	111	80-120	
trans-1,2-Dichloroethene	10.0	10.7	107	80-120	
trans-1,3-Dichloropropene	10.0	11.9	119	82-124	
Trichloroethene	10.0	10.4	104	80-120	
Vinyl acetate	10.0	14.8	148	63-140	*
Vinyl chloride	10.0	10.9	109	77-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: ZLCS1617.D

Lab ID: LCSD 160-295720/6

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	10.0	9.93	99	1	20	85-116	
1,1,2,2-Tetrachloroethane	10.0	8.78	88	3	20	80-120	
1,1,2-Trichloroethane	10.0	8.70	87	1	20	80-120	
1,1-Dichloroethene	10.0	9.93	99	3	20	80-120	
1,1-Dichloroethane	10.0	9.97	100	1	20	80-120	
1,2,4-Trichlorobenzene	10.0	8.68	87	3	20	75-121	
1,2-Dibromo-3-Chloropropane	10.0	8.05	80	1	20	73-123	
1,2-Dichloroethane	10.0	8.52	85	0	20	80-115	
1,2-Dichloroethene, Total	20.0	19.1	96	2	20	80-120	
1,2-Dichloropropane	10.0	9.79	98	3	20	80-120	
2-Butanone	10.0	8.15	82	3	20	67-127	
2-Hexanone	10.0	8.81	88	0	20	70-123	
4-Methyl-2-pentanone	10.0	8.47	85	5	20	75-126	
Acetone	10.0	8.55	85	18	20	69-129	
Benzene	10.0	10.4	104	2	20	80-120	
Bromoform	10.0	8.79	88	2	20	80-120	
Methyl bromide	10.0	9.20	92	2	20	70-124	
Carbon disulfide	10.0	9.69	97	2	20	80-121	
Carbon tetrachloride	10.0	10.1	101	2	20	83-125	
Chlorobenzene	10.0	10.1	101	2	20	80-120	
Chlorodibromomethane	10.0	9.15	92	1	20	80-120	
Chloroethane	10.0	10.5	105	2	20	73-119	
Chloroform	10.0	9.49	95	0	20	80-120	
Chloromethane	10.0	9.11	91	0	20	72-124	
cis-1,2-Dichloroethene	10.0	9.52	95	2	20	80-120	
cis-1,3-Dichloropropene	10.0	9.51	95	2	20	80-120	
Bromodichloromethane	10.0	9.33	93	2	20	80-120	
Ethylbenzene	10.0	10.4	104	2	20	80-120	
1,2-Dibromoethane	10.0	8.75	87	2	20	80-120	
Methylene Chloride	10.0	9.41	94	2	20	80-120	
n-Butanol	250	216	86	6	20	62-128	
Styrene	10.0	10.3	103	4	20	81-133	
Tetrachloroethene	10.0	9.89	99	2	20	83-123	
Toluene	10.0	10.4	104	1	20	80-120	
trans-1,2-Dichloroethene	10.0	9.59	96	2	20	80-120	
trans-1,3-Dichloropropene	10.0	9.75	97	1	20	82-124	
Trichloroethene	10.0	9.94	99	1	20	80-120	
Vinyl acetate	10.0	9.21	92	0	20	63-140	
Vinyl chloride	10.0	10.3	103	1	20	77-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: LLCS7801.D

Lab ID: LCS D 160-296328/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS D CONCENTRATION (ug/L)	LCS D % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	10.0	10.8	108	1	20	85-116	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	3	20	80-120	
1,1,2-Trichloroethane	10.0	10.2	102	2	20	80-120	
1,1-Dichloroethene	10.0	10.9	109	2	20	80-120	
1,1-Dichloroethane	10.0	10.8	108	1	20	80-120	
1,2,4-Trichlorobenzene	10.0	10.6	106	1	20	75-121	
1,2-Dibromo-3-Chloropropane	10.0	10.3	103	6	20	73-123	
1,2-Dichloroethane	10.0	10.4	104	3	20	80-115	
1,2-Dichloroethene, Total	20.0	21.2	106	0	20	80-120	
1,2-Dichloropropane	10.0	10.9	109	0	20	80-120	
2-Butanone	10.0	9.88	99	5	20	67-127	
2-Hexanone	10.0	9.69	97	3	20	70-123	
4-Methyl-2-pentanone	10.0	9.25	92	2	20	75-126	
Acetone	10.0	11.0	110	0	20	69-129	
Benzene	10.0	10.4	104	1	20	80-120	
Bromoform	10.0	10.3	103	1	20	80-120	
Methyl bromide	10.0	9.90	99	7	20	70-124	
Carbon disulfide	10.0	11.1	111	0	20	80-121	
Carbon tetrachloride	10.0	10.9	109	0	20	83-125	
Chlorobenzene	10.0	10.4	104	1	20	80-120	
Chlorodibromomethane	10.0	10.4	104	2	20	80-120	
Chloroethane	10.0	10.8	108	2	20	73-119	
Chloroform	10.0	10.5	105	1	20	80-120	
Chloromethane	10.0	10.9	109	1	20	72-124	
cis-1,2-Dichloroethene	10.0	10.5	105	0	20	80-120	
cis-1,3-Dichloropropene	10.0	11.6	116	2	20	80-120	
Bromodichloromethane	10.0	10.6	106	2	20	80-120	
Ethylbenzene	10.0	11.1	111	1	20	80-120	
1,2-Dibromoethane	10.0	10.4	104	1	20	80-120	
Methylene Chloride	10.0	10.1	101	2	20	80-120	
n-Butanol	250	232	93	8	20	62-128	
Styrene	10.0	11.7	117	0	20	81-133	
Tetrachloroethene	10.0	10.9	109	2	20	83-123	
Toluene	10.0	11.3	113	2	20	80-120	
trans-1,2-Dichloroethene	10.0	10.7	107	0	20	80-120	
trans-1,3-Dichloropropene	10.0	11.7	117	2	20	82-124	
Trichloroethene	10.0	10.3	103	1	20	80-120	
Vinyl acetate	10.0	14.1	141	5	20	63-140	*
Vinyl chloride	10.0	10.9	109	0	20	77-122	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab File ID: ZBLK1619.D Lab Sample ID: MB 160-295720/8
 Matrix: Water Heated Purge: (Y/N) Y
 Instrument ID: VMSZ Date Analyzed: 03/03/2017 08:33
 GC Column: RTX-VMS40 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 160-295720/5	ZLCS1616.D	03/03/2017 07:21
	LCSD 160-295720/6	ZLCS1617.D	03/03/2017 07:45
TB-022817	160-21259-1	ZSMP1636.D	03/03/2017 15:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab File ID: LBLK7803.D Lab Sample ID: MB 160-296328/6
 Matrix: Water Heated Purge: (Y/N) Y
 Instrument ID: VMSL Date Analyzed: 03/07/2017 10:42
 GC Column: RTX-VMS40 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 160-296328/3	LLCS7800.D	03/07/2017 09:27
	LCSD 160-296328/4	LLCS7801.D	03/07/2017 09:52
GW-BR09JC-022817	160-21259-2	LSMP7812.D	03/07/2017 14:30
GW-BR09JC-022817	160-21259-2	LSMP7819.D	03/07/2017 17:27

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab File ID: LBFB7556.D BFB Injection Date: 02/14/2017
 Instrument ID: VMSL BFB Injection Time: 11:34
 Analysis Batch No.: 292232

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.6
75	30.0 - 60.0 % of mass 95	47.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	83.2
175	5.0 - 9.0 % of mass 174	6.2 (7.4) 1
176	95.0 - 101.0 % of mass 174	80.3 (96.5) 1
177	5.0 - 9.0 % of mass 176	5.3 (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
	IC 160-292232/6	LICL7558.D	02/14/2017	12:23
	IC 160-292232/7	LICL7559.D	02/14/2017	12:49
	IC 160-292232/8	LICL7560.D	02/14/2017	13:14
	IC 160-292232/9	LICL7561.D	02/14/2017	13:39
	ICIS 160-292232/10	LICL7562.D	02/14/2017	14:05
	IC 160-292232/11	LICL7563.D	02/14/2017	14:30
	IC 160-292232/12	LICL7564.D	02/14/2017	14:56
	ICV 160-292232/14	LICV7566.D	02/14/2017	15:47

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab File ID: LBFB7798.D BFB Injection Date: 03/07/2017
 Instrument ID: VMSL BFB Injection Time: 08:38
 Analysis Batch No.: 296328

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.0	
75	30.0 - 60.0 % of mass 95	48.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	87.1	
175	5.0 - 9.0 % of mass 174	6.3	(7.2) 1
176	95.0 - 101.0 % of mass 174	83.7	(96.1) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 160-296328/2	LCCV7799.D	03/07/2017	09:01
	LCS 160-296328/3	LLCS7800.D	03/07/2017	09:27
	LCSD 160-296328/4	LLCS7801.D	03/07/2017	09:52
	MB 160-296328/6	LBLK7803.D	03/07/2017	10:42
GW-BR09JC-022817	160-21259-2	LSMP7812.D	03/07/2017	14:30
GW-BR09JC-022817	160-21259-2	LSMP7819.D	03/07/2017	17:27

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab File ID: ZBFB1150.D BFB Injection Date: 01/30/2017
 Instrument ID: VMSZ BFB Injection Time: 09:22
 Analysis Batch No.: 290044

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.0
75	30.0 - 60.0 % of mass 95	54.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.1
173	Less than 2.0 % of mass 174	0.5 (0.5) 1
174	50.0 - 120.00 % of mass 95	103.6
175	5.0 - 9.0 % of mass 174	7.7 (7.4) 1
176	95.0 - 101.0 % of mass 174	101.0 (97.5) 1
177	5.0 - 9.0 % of mass 176	6.8 (6.8) 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
	IC 160-290044/5	ZICL1152.D	01/30/2017	10:06
	IC 160-290044/6	ZICL1153.D	01/30/2017	10:30
	IC 160-290044/7	ZICL1154.D	01/30/2017	10:53
	IC 160-290044/8	ZICL1155.D	01/30/2017	11:17
	ICIS 160-290044/9	ZICL1156.D	01/30/2017	11:41
	IC 160-290044/10	ZICL1157.D	01/30/2017	12:06
	IC 160-290044/11	ZICL1158.D	01/30/2017	12:30
	ICV 160-290044/13	ZICV1160.D	01/30/2017	13:18

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab File ID: ZBFB1614.D BFB Injection Date: 03/03/2017
 Instrument ID: VMSZ BFB Injection Time: 06:41
 Analysis Batch No.: 295720

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	51.3	
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	0.7	(0.7) 1
174	50.0 - 120.00 % of mass 95	106.6	
175	5.0 - 9.0 % of mass 174	7.6	(7.1) 1
176	95.0 - 101.0 % of mass 174	104.6	(98.1) 1
177	5.0 - 9.0 % of mass 176	6.7	(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
	CCVIS 160-295720/4	ZCCV1615.D	03/03/2017	06:57
	LCS 160-295720/5	ZLCS1616.D	03/03/2017	07:21
	LCSD 160-295720/6	ZLCS1617.D	03/03/2017	07:45
	MB 160-295720/8	ZBLK1619.D	03/03/2017	08:33
TB-022817	160-21259-1	ZSMP1636.D	03/03/2017	15:24

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Sample No.: ICIS 160-292232/10 Date Analyzed: 02/14/2017 14:05
 Instrument ID: VMSL GC Column: RTX-VMS40 ID: 0.18 (mm)
 Lab File ID (Standard): LICL7562.D Heated Purge: (Y/N) Y
 Calibration ID: 12338

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	1825688	8.91	1220244	11.75	601374	13.92
UPPER LIMIT	3651376	9.41	2440488	12.25	1202748	14.42
LOWER LIMIT	912844	8.41	610122	11.25	300687	13.42
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 160-292232/14	1824048	8.91	1183461	11.75	562114	13.92

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Sample No.: CCVIS 160-296328/2 Date Analyzed: 03/07/2017 09:01
 Instrument ID: VMSL GC Column: RTX-VMS40 ID: 0.18 (mm)
 Lab File ID (Standard): LCCV7799.D Heated Purge: (Y/N) Y
 Calibration ID: 12368

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	1763080	8.90	1188097	11.75	574471	13.92	
UPPER LIMIT	3526160	9.40	2376194	12.25	1148942	14.42	
LOWER LIMIT	881540	8.40	594049	11.25	287236	13.42	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 160-296328/3	1799587	8.91	1204996	11.75	591508	13.92	
LCSD 160-296328/4	1834369	8.90	1199232	11.75	576140	13.92	
MB 160-296328/6	1631856	8.90	1027577	11.75	471730	13.92	
160-21259-2	GW-BR09JC-022817	1431936	8.90	887296	11.75	393657	13.92
160-21259-2	GW-BR09JC-022817	1455111	8.91	918148	11.75	391163	13.92

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Sample No.: ICIS 160-290044/9 Date Analyzed: 01/30/2017 11:41
 Instrument ID: VMSZ GC Column: RTX-VMS40 ID: 0.18 (mm)
 Lab File ID (Standard): ZICL1156.D Heated Purge: (Y/N) Y
 Calibration ID: 12255

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	1756518	8.86	1396520	11.70	750001	13.88
UPPER LIMIT	3513036	9.36	2793040	12.20	1500002	14.38
LOWER LIMIT	878259	8.36	698260	11.20	375001	13.38
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 160-290044/13	1797562	8.86	1386308	11.70	733009	13.88

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Sample No.: CCVIS 160-295720/4 Date Analyzed: 03/03/2017 06:57
 Instrument ID: VMSZ GC Column: RTX-VMS40 ID: 0.18 (mm)
 Lab File ID (Standard): ZCCV1615.D Heated Purge: (Y/N) Y
 Calibration ID: 12255

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	1239188	8.85	971893	11.70	514485	13.88	
UPPER LIMIT	2478376	9.35	1943786	12.20	1028970	14.38	
LOWER LIMIT	619594	8.35	485947	11.20	257243	13.38	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 160-295720/5	1328753	8.84	1046312	11.70	543189	13.88	
LCSD 160-295720/6	1375993	8.84	1072633	11.70	569185	13.88	
MB 160-295720/8	1251839	8.84	900346	11.70	438359	13.88	
160-21259-1	TB-022817	1054882	8.84	778989	11.70	362720	13.88

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: TB-022817 Lab Sample ID: 160-21259-1
 Matrix: Water Lab File ID: ZSMP1636.D
 Analysis Method: 8260C Date Collected: 02/28/2017 07:00
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 15:24
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.17
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.10
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.13
75-35-4	1,1-Dichloroethene	ND		1.0	0.10
75-34-3	1,1-Dichloroethane	ND		1.0	0.070
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.41
107-06-2	1,2-Dichloroethane	ND		1.0	0.22
540-59-0	1,2-Dichloroethene, Total	ND		2.0	0.14
78-87-5	1,2-Dichloropropane	ND		1.0	0.10
78-93-3	2-Butanone	ND		5.0	0.47
591-78-6	2-Hexanone	ND		5.0	0.25
108-10-1	4-Methyl-2-pentanone	ND		5.0	0.22
67-64-1	Acetone	ND		2.0	0.55
71-43-2	Benzene	ND		1.0	0.10
75-25-2	Bromoform	ND		1.0	0.17
74-83-9	Methyl bromide	ND		2.0	0.25
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		1.0	0.18
108-90-7	Chlorobenzene	ND		1.0	0.11
124-48-1	Chlorodibromomethane	ND		1.0	0.14
75-00-3	Chloroethane	ND		2.0	0.16
67-66-3	Chloroform	ND		1.0	0.10
74-87-3	Chloromethane	ND		2.0	0.10
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
75-27-4	Bromodichloromethane	ND		1.0	0.14
100-41-4	Ethylbenzene	ND		1.0	0.12
106-93-4	1,2-Dibromoethane	ND		1.0	0.13
75-09-2	Methylene Chloride	ND		1.0	0.27
71-36-3	n-Butanol	ND		50	12
100-42-5	Styrene	ND		1.0	0.13
127-18-4	Tetrachloroethene	ND		1.0	0.18
108-88-3	Toluene	ND		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: TB-022817 Lab Sample ID: 160-21259-1
 Matrix: Water Lab File ID: ZSMP1636.D
 Analysis Method: 8260C Date Collected: 02/28/2017 07:00
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 15:24
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		1.0	0.25
108-05-4	Vinyl acetate	ND		2.0	0.18
75-01-4	Vinyl chloride	ND		2.0	0.19
1330-20-7	Xylenes, Total	ND		3.0	0.27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		75-129
460-00-4	4-Bromofluorobenzene (Surr)	110		81-130
1868-53-7	Dibromofluoromethane (Surr)	101		81-124
2037-26-5	Toluene-d8 (Surr)	113		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZSMP1636.D
 Lims ID: 160-21259-B-1
 Client ID: TB-022817
 Sample Type: Client
 Inject. Date: 03-Mar-2017 15:24:30 ALS Bottle#: 22 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-025
 Misc. Info.: 160-21259-b-1
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 06-Mar-2017 07:26:01 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: fishere

Date: 06-Mar-2017 07:26:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		3.254				ND	
4 Vinyl chloride	62		3.422				ND	
6 Bromomethane	94		4.008				ND	
7 Chloroethane	64		4.232				ND	
12 1,1-Dichloroethene	96		5.279				ND	
13 Carbon disulfide	76		5.321				ND	
S 16 1,2-Dichloroethene, Total	96		5.816				ND	
20 Methylene Chloride	84		6.089				ND	
21 Acetone	43		6.145				ND	
22 trans-1,2-Dichloroethene	96		6.284				ND	
30 1,1-Dichloroethane	63		7.024				ND	
33 Vinyl acetate	43		7.275				ND	
34 cis-1,2-Dichloroethene	96		7.611				ND	
38 Chloroform	83		7.876				ND	
40 Carbon tetrachloride	117		8.029				ND	
\$ 42 Dibromofluoromethane (Surr	113	8.058	8.057	0.001	94	231865	10.1	
43 1,1,1-Trichloroethane	97		8.099				ND	
44 2-Butanone (MEK)	43		8.169				ND	
48 Benzene	78		8.462				ND	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.589	8.588	0.001	89	188947	9.10	
54 1,2-Dichloroethane	62		8.658				ND	
* 55 Fluorobenzene	96	8.840	8.853	-0.013	99	1054882	10.0	
56 Trichloroethene	95		9.007				ND	
59 n-Butanol	56		9.230				ND	
62 1,2-Dichloropropane	63		9.495				ND	
63 Dichlorobromomethane	83		9.537				ND	
67 cis-1,3-Dichloropropene	75		10.110				ND	
\$ 68 Toluene-d8 (Surr)	98	10.278	10.277	0.001	93	1081872	11.3	
69 Toluene	92		10.319				ND	
71 4-Methyl-2-pentanone (MIBK	43		10.626				ND	
73 Tetrachloroethene	164		10.682				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
72 trans-1,3-Dichloropropene	75		10.682				ND	
75 1,1,2-Trichloroethane	83		10.836				ND	
76 Chlorodibromomethane	129		11.017				ND	
79 Ethylene Dibromide	107		11.269				ND	
80 2-Hexanone	43		11.380				ND	
82 Ethylbenzene	91		11.701				ND	
* 83 Chlorobenzene-d5	117	11.702	11.701	0.001	83	778989	10.0	
84 Chlorobenzene	112		11.715				ND	
86 m-Xylene & p-Xylene	106		11.827				ND	
88 o-Xylene	106		12.232				ND	
89 Styrene	104		12.288				ND	
90 Bromoform	173		12.358				ND	
\$ 92 4-Bromofluorobenzene (Surr	95	12.805	12.804	0.001	96	283064	11.0	
95 1,1,2,2-Tetrachloroethane	83		12.958				ND	
* 108 1,4-Dichlorobenzene-d4	152	13.880	13.879	0.001	92	362720	10.0	
114 1,2-Dibromo-3-Chloropropan	157		15.094				ND	
117 1,2,4-Trichlorobenzene	180		15.764				ND	
S 119 Xylenes, Total	106		16.500				ND	

Reagents:

8260 Surr 25_00071

Amount Added: 10.00

Units: uL

Run Reagent

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZSMP1636.D

Injection Date: 03-Mar-2017 15:24:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: 160-21259-B-1

Lab Sample ID: 160-21259-1

Worklist Smp#: 25

Client ID: TB-022817

Purge Vol: 25.000 mL

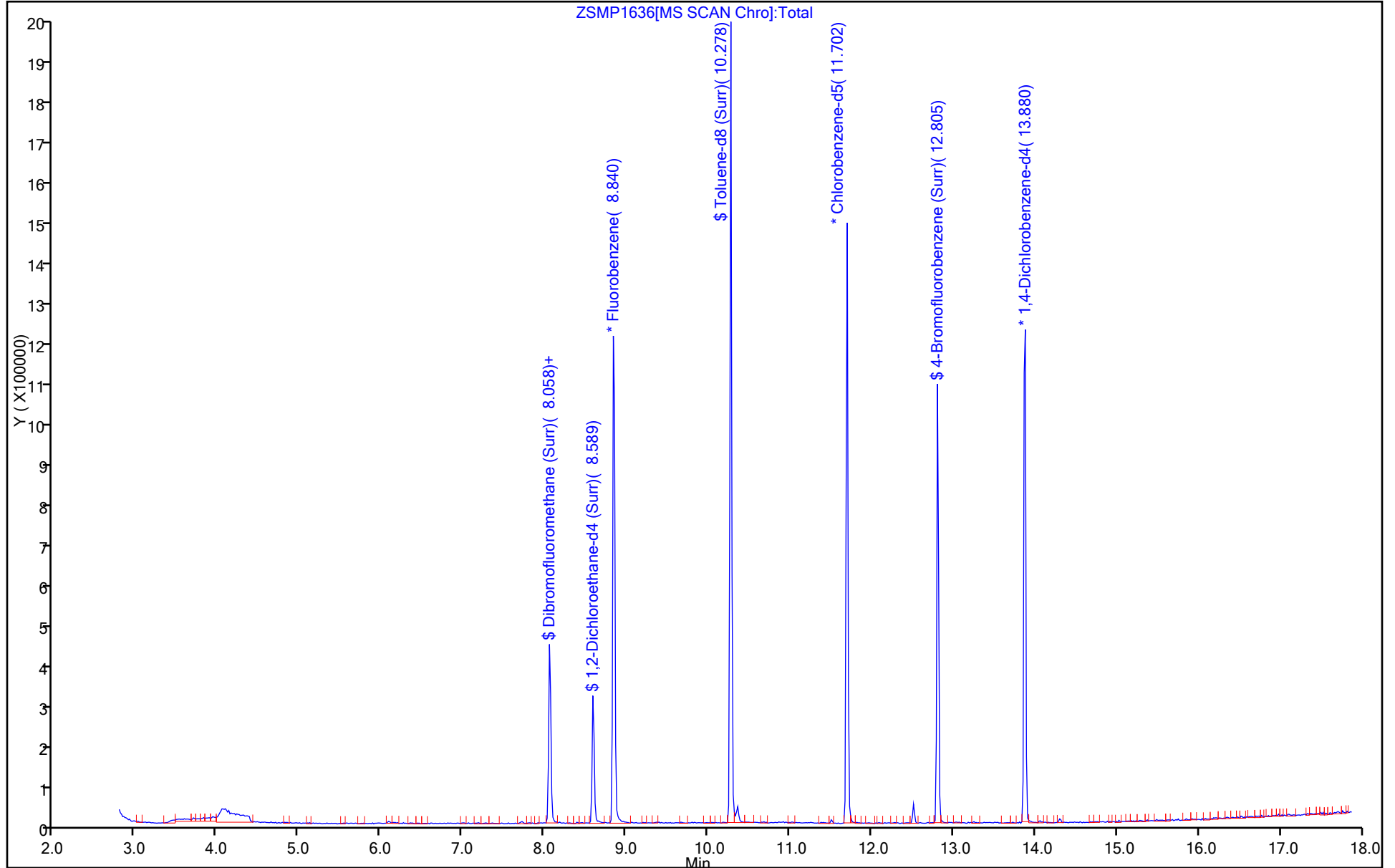
Dil. Factor: 1.0000

ALS Bottle#: 22

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZSMP1636.D
 Lims ID: 160-21259-B-1
 Client ID: TB-022817
 Sample Type: Client
 Inject. Date: 03-Mar-2017 15:24:30 ALS Bottle#: 22 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-025
 Misc. Info.: 160-21259-b-1
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 06-Mar-2017 07:26:01 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: fishere Date: 06-Mar-2017 07:26:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	10.1	100.55
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.10	91.01
\$ 68 Toluene-d8 (Surr)	10.0	11.3	112.82
\$ 92 4-Bromofluorobenzene (Surr)	10.0	11.0	110.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: GW-BR09JC-022817 Lab Sample ID: 160-21259-2
 Matrix: Water Lab File ID: LSMP7819.D
 Analysis Method: 8260C Date Collected: 02/28/2017 09:00
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 17:27
 Soil Aliquot Vol: _____ Dilution Factor: 20
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		20	3.4
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	2.0
79-00-5	1,1,2-Trichloroethane	ND		20	2.6
75-35-4	1,1-Dichloroethene	70		20	2.0
75-34-3	1,1-Dichloroethane	180		20	1.4
120-82-1	1,2,4-Trichlorobenzene	ND		20	2.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		20	8.2
107-06-2	1,2-Dichloroethane	ND		20	4.3
78-87-5	1,2-Dichloropropane	ND		20	2.0
78-93-3	2-Butanone	ND		100	9.4
591-78-6	2-Hexanone	ND		100	5.0
108-10-1	4-Methyl-2-pentanone	ND		100	4.3
67-64-1	Acetone	ND		40	11
71-43-2	Benzene	ND		20	2.0
75-25-2	Bromoform	ND		20	3.4
74-83-9	Methyl bromide	ND		40	5.0
75-15-0	Carbon disulfide	ND		20	2.0
56-23-5	Carbon tetrachloride	ND		20	3.6
108-90-7	Chlorobenzene	ND		20	2.2
124-48-1	Chlorodibromomethane	ND		20	2.9
75-00-3	Chloroethane	ND		40	3.3
67-66-3	Chloroform	ND		20	2.0
74-87-3	Chloromethane	ND		40	2.0
10061-01-5	cis-1,3-Dichloropropene	ND		20	3.2
75-27-4	Bromodichloromethane	ND		20	2.8
100-41-4	Ethylbenzene	ND		20	2.4
106-93-4	1,2-Dibromoethane	ND		20	2.6
75-09-2	Methylene Chloride	ND		20	5.4
71-36-3	n-Butanol	ND		1000	250
100-42-5	Styrene	ND		20	2.7
108-88-3	Toluene	ND		20	2.8
156-60-5	trans-1,2-Dichloroethene	9.3	J	20	2.1
10061-02-6	trans-1,3-Dichloropropene	ND		20	2.0
108-05-4	Vinyl acetate	ND	*	40	3.6
75-01-4	Vinyl chloride	180		40	3.9
1330-20-7	Xylenes, Total	ND		60	5.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: GW-BR09JC-022817 Lab Sample ID: 160-21259-2
 Matrix: Water Lab File ID: LSMP7819.D
 Analysis Method: 8260C Date Collected: 02/28/2017 09:00
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 17:27
 Soil Aliquot Vol: _____ Dilution Factor: 20
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		75-129
460-00-4	4-Bromofluorobenzene (Surr)	109		81-130
1868-53-7	Dibromofluoromethane (Surr)	107		81-124
2037-26-5	Toluene-d8 (Surr)	117		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSP7819.D
 Lims ID: 160-21259-A-2
 Client ID: GW-BR09JC-022817
 Sample Type: Client
 Inject. Date: 07-Mar-2017 17:27:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 20.0000
 Sample Info: 160-0009939-022
 Misc. Info.: 160-21259-a-2
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:57:46 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess Date: 08-Mar-2017 09:53:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		3.346				ND	
4 Vinyl chloride	62	3.514	3.500	0.014	99	489697	8.91	
6 Bromomethane	94		4.100				ND	
7 Chloroethane	64		4.324				ND	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	96	134259	3.52	
13 Carbon disulfide	76		5.413				ND	
S 15 1,2-Dichloroethene, Total	96				0		90.0	
20 Methylene Chloride	84		6.167				ND	
21 Acetone	43		6.251				ND	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	95	18481	0.4636	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	98	657460	9.07	
33 Vinyl acetate	43		7.340				ND	
34 cis-1,2-Dichloroethene	96	7.676	7.675	0.001	83	3378803	89.6	E
38 Chloroform	83		7.941				ND	
40 Carbon tetrachloride	117		8.094				ND	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.122	0.000	93	288100	10.7	
43 1,1,1-Trichloroethane	97		8.164				ND	
45 2-Butanone (MEK)	43		8.248				ND	
48 Benzene	78		8.527				ND	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	93	285529	10.8	
54 1,2-Dichloroethane	62		8.723				ND	
* 55 Fluorobenzene	96	8.905	8.904	0.001	98	1455111	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	98	9377173	214.5	E
59 n-Butanol	56		9.296				ND	
62 1,2-Dichloropropane	63		9.561				ND	
63 Dichlorobromomethane	83		9.603				ND	
67 cis-1,3-Dichloropropene	75		10.161				ND	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	1451752	11.7	
69 Toluene	92		10.371				ND	
71 4-Methyl-2-pentanone (MIBK	43		10.692				ND	
73 Tetrachloroethene	164	10.734	10.734	0.000	97	3031260	86.5	E

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
72 trans-1,3-Dichloropropene	75		10.734				ND	
75 1,1,2-Trichloroethane	83		10.888				ND	
76 Chlorodibromomethane	129		11.069				ND	
79 Ethylene Dibromide	107		11.321				ND	
80 2-Hexanone	43		11.418				ND	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	88	918148	10.0	
82 Ethylbenzene	91		11.754				ND	
84 Chlorobenzene	112		11.768				ND	
86 m-Xylene & p-Xylene	106		11.879				ND	
88 o-Xylene	106		12.284				ND	
89 Styrene	104		12.326				ND	
90 Bromoform	173		12.396				ND	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	362868	10.9	
95 1,1,2,2-Tetrachloroethane	83		13.011				ND	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.918	0.000	96	391163	10.0	
115 1,2-Dibromo-3-Chloropropan	157		15.133				ND	
117 1,2,4-Trichlorobenzene	180		15.804				ND	
S 119 Xylenes, Total	106		16.500				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

8260 Surr 25_00072

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7819.D

Injection Date: 07-Mar-2017 17:27:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: 160-21259-A-2

Lab Sample ID: 160-21259-2

Worklist Smp#: 22

Client ID: GW-BR09JC-022817

Purge Vol: 25.000 mL

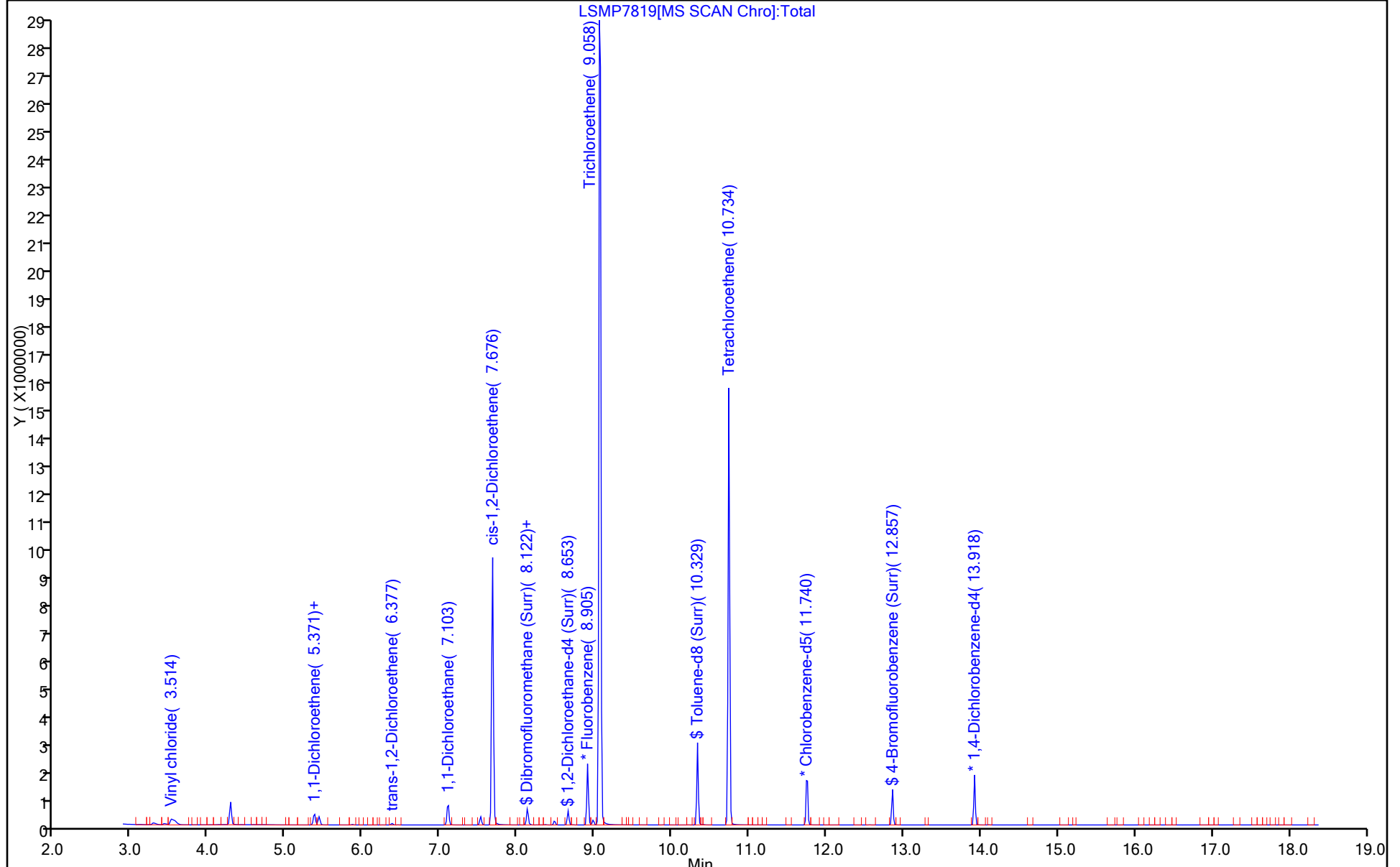
Dil. Factor: 20.0000

ALS Bottle#: 21

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7819.D
 Lims ID: 160-21259-A-2
 Client ID: GW-BR09JC-022817
 Sample Type: Client
 Inject. Date: 07-Mar-2017 17:27:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 20.0000
 Sample Info: 160-0009939-022
 Misc. Info.: 160-21259-a-2
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:57:46 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

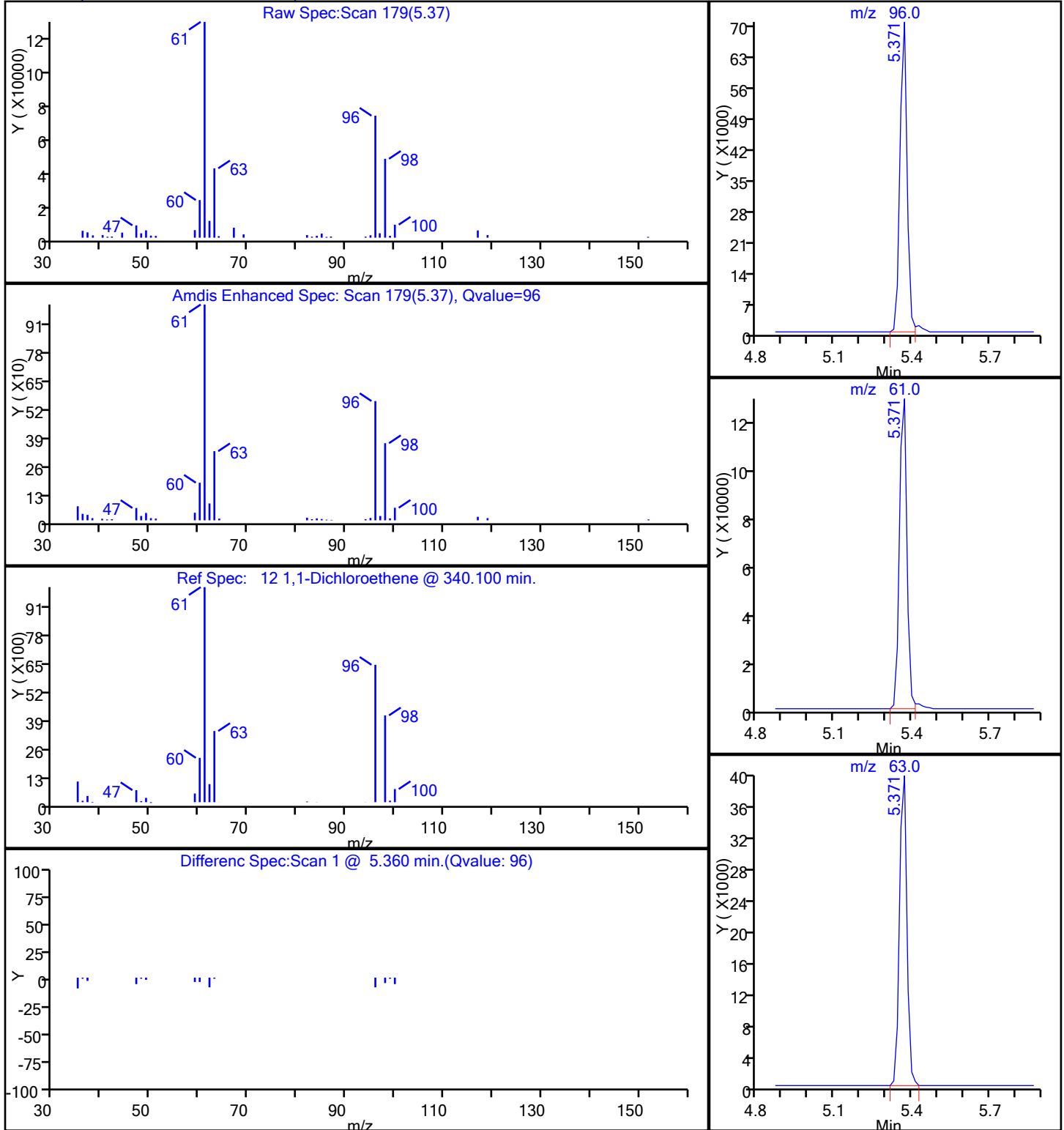
First Level Reviewer: rhoadess Date: 08-Mar-2017 09:53:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	10.7	107.01
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.61
\$ 68 Toluene-d8 (Surr)	10.0	11.7	117.38
\$ 92 4-Bromofluorobenzene (Surr)	10.0	10.9	109.01

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7819.D
Injection Date: 07-Mar-2017 17:27:30 Instrument ID: VMSL
Lims ID: 160-21259-A-2 Lab Sample ID: 160-21259-2
Client ID: GW-BR09JC-022817
Operator ID: SMCR ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 20.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

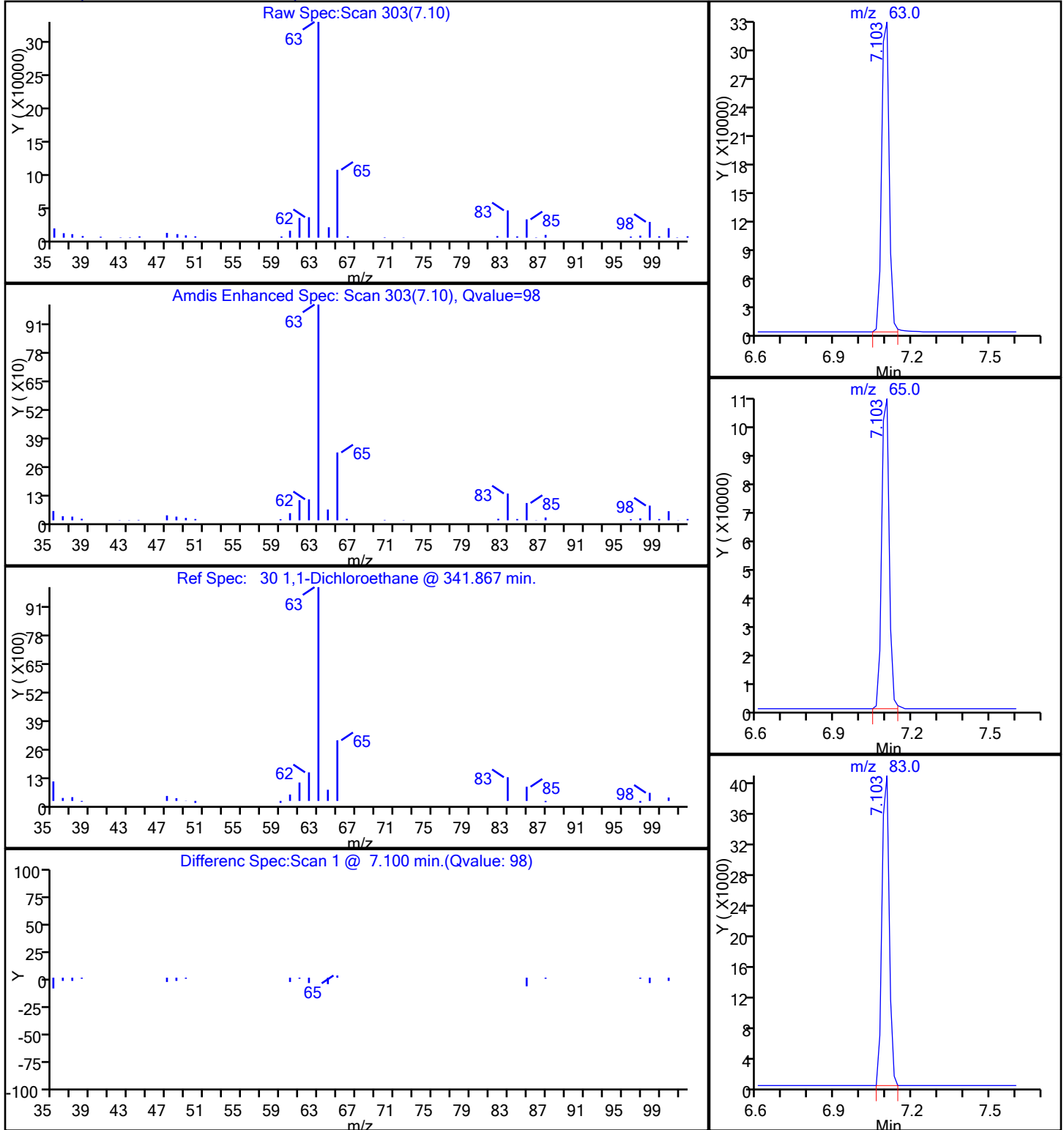
12 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7819.D
Injection Date: 07-Mar-2017 17:27:30 Instrument ID: VMSL
Lims ID: 160-21259-A-2 Lab Sample ID: 160-21259-2
Client ID: GW-BR09JC-022817
Operator ID: SMCR ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 20.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

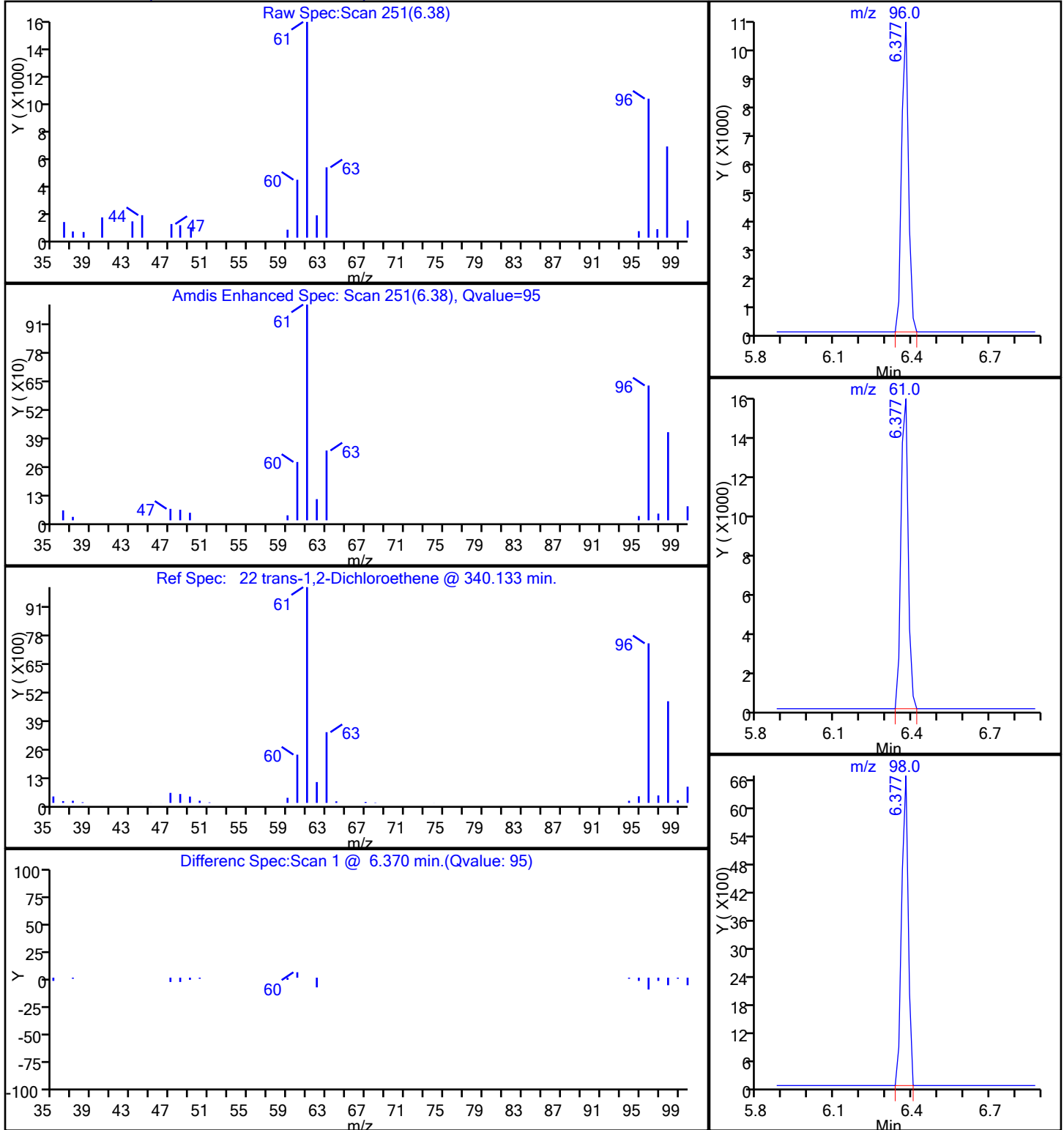
30 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7819.D
Injection Date: 07-Mar-2017 17:27:30 Instrument ID: VMSL
Lims ID: 160-21259-A-2 Lab Sample ID: 160-21259-2
Client ID: GW-BR09JC-022817
Operator ID: SMCR ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 20.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

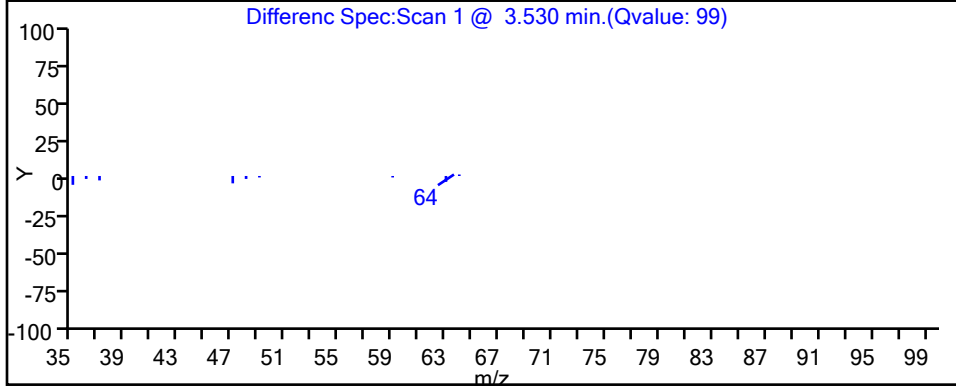
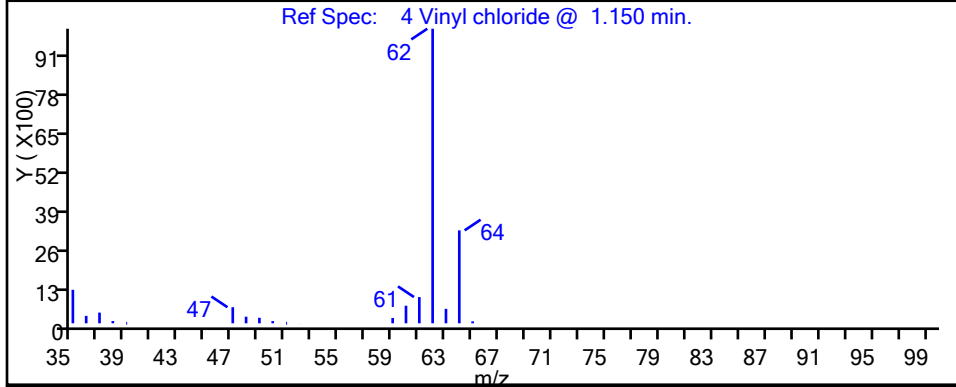
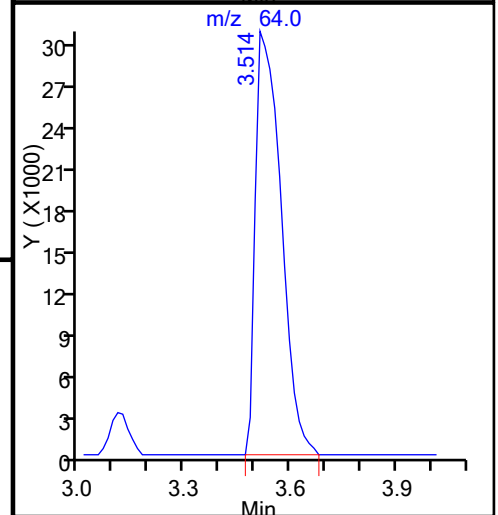
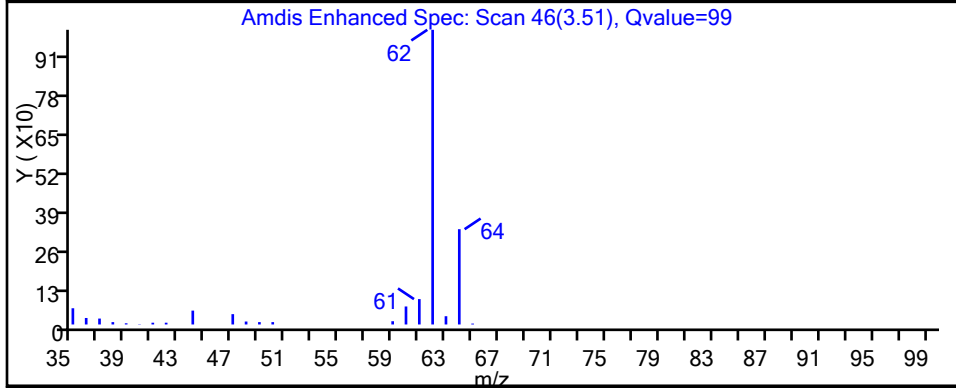
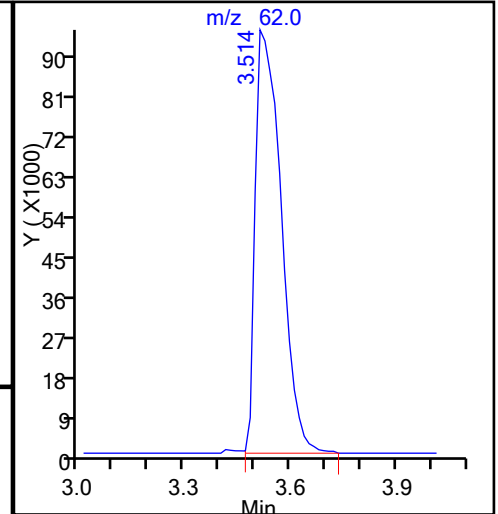
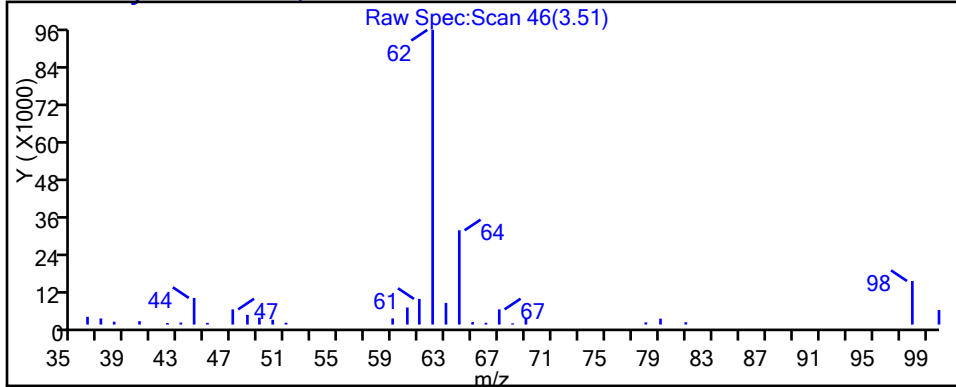
22 trans-1,2-Dichloroethene, CAS: 156-60-5



TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7819.D
Injection Date: 07-Mar-2017 17:27:30 Instrument ID: VMSL
Lims ID: 160-21259-A-2 Lab Sample ID: 160-21259-2
Client ID: GW-BR09JC-022817
Operator ID: SMCR ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 20.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

4 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: GW-BR09JC-022817 Lab Sample ID: 160-21259-2
 Matrix: Water Lab File ID: LSMP7812.D
 Analysis Method: 8260C Date Collected: 02/28/2017 09:00
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 14:30
 Soil Aliquot Vol: _____ Dilution Factor: 200
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
540-59-0	1,2-Dichloroethene, Total	1500		400	27
156-59-2	cis-1,2-Dichloroethene	1500		200	20
127-18-4	Tetrachloroethene	1600		200	36
79-01-6	Trichloroethene	4200		200	50

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		75-129
460-00-4	4-Bromofluorobenzene (Surr)	107		81-130
1868-53-7	Dibromofluoromethane (Surr)	107		81-124
2037-26-5	Toluene-d8 (Surr)	117		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSP7812.D
 Lims ID: 160-21259-A-2
 Client ID: GW-BR09JC-022817
 Sample Type: Client
 Inject. Date: 07-Mar-2017 14:30:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 200.0000
 Sample Info: 160-0009939-015
 Misc. Info.: 160-21259-a-2
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:57:46 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 08-Mar-2017 09:50:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		3.346				ND	
4 Vinyl chloride	62	3.513	3.500	0.013	97	47297	0.8742	
6 Bromomethane	94		4.100				ND	
7 Chloroethane	64		4.324				ND	
12 1,1-Dichloroethene	96		5.371				ND	
13 Carbon disulfide	76		5.413				ND	
S 15 1,2-Dichloroethene, Total	96				0		7.42	
20 Methylene Chloride	84		6.167				ND	
21 Acetone	43		6.251				ND	
22 trans-1,2-Dichloroethene	96		6.377				ND	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	63747	0.8933	
33 Vinyl acetate	43		7.340				ND	
34 cis-1,2-Dichloroethene	96	7.675	7.675	0.000	85	275412	7.42	
38 Chloroform	83		7.941				ND	
40 Carbon tetrachloride	117		8.094				ND	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.122	0.000	93	282684	10.7	
43 1,1,1-Trichloroethane	97		8.164				ND	
45 2-Butanone (MEK)	43		8.248				ND	
48 Benzene	78		8.527				ND	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	93	286037	11.0	
54 1,2-Dichloroethane	62		8.723				ND	
* 55 Fluorobenzene	96	8.904	8.904	0.000	98	1431936	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	97	904138	21.0	
59 n-Butanol	56		9.296				ND	
62 1,2-Dichloropropane	63		9.561				ND	
63 Dichlorobromomethane	83		9.603				ND	
67 cis-1,3-Dichloropropene	75		10.161				ND	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	1393883	11.7	
69 Toluene	92		10.371				ND	
71 4-Methyl-2-pentanone (MIBK	43		10.692				ND	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	273256	8.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
72 trans-1,3-Dichloropropene	75		10.734				ND	
75 1,1,2-Trichloroethane	83		10.888				ND	
76 Chlorodibromomethane	129		11.069				ND	
79 Ethylene Dibromide	107		11.321				ND	
80 2-Hexanone	43		11.418				ND	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	88	887296	10.0	
82 Ethylbenzene	91		11.754				ND	
84 Chlorobenzene	112		11.768				ND	
86 m-Xylene & p-Xylene	106		11.879				ND	
88 o-Xylene	106		12.284				ND	
89 Styrene	104		12.326				ND	
90 Bromoform	173		12.396				ND	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	92	358170	10.7	
95 1,1,2,2-Tetrachloroethane	83		13.011				ND	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.918	0.000	96	393657	10.0	
115 1,2-Dibromo-3-Chloropropan	157		15.133				ND	
117 1,2,4-Trichlorobenzene	180		15.804				ND	
S 119 Xylenes, Total	106		16.500				ND	

Reagents:

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

8260 Surr 25_00072

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7812.D

Injection Date: 07-Mar-2017 14:30:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: 160-21259-A-2

Lab Sample ID: 160-21259-2

Worklist Smp#: 15

Client ID: GW-BR09JC-022817

Purge Vol: 25.000 mL

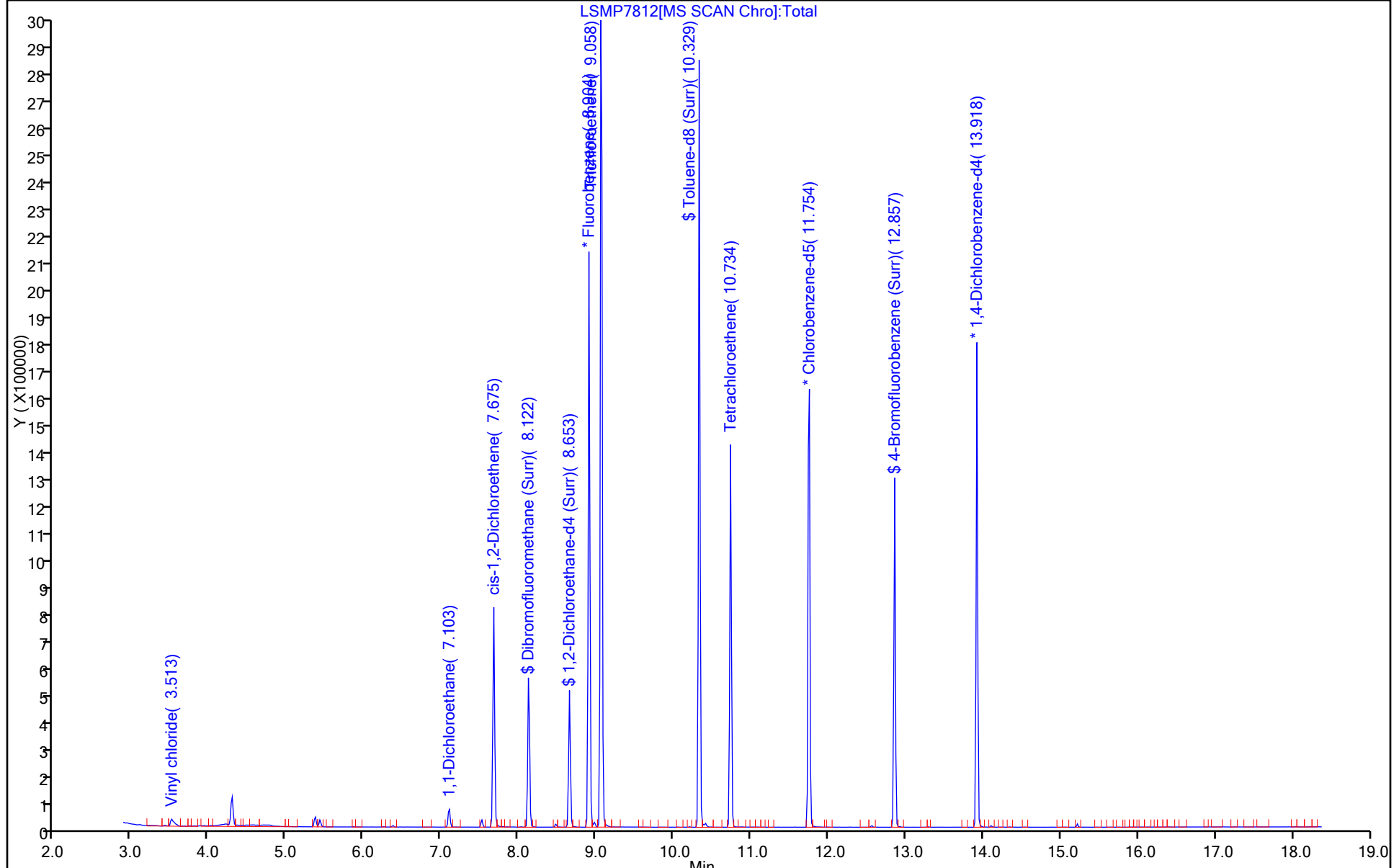
Dil. Factor: 200.0000

ALS Bottle#: 14

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7812.D
 Lims ID: 160-21259-A-2
 Client ID: GW-BR09JC-022817
 Sample Type: Client
 Inject. Date: 07-Mar-2017 14:30:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 200.0000
 Sample Info: 160-0009939-015
 Misc. Info.: 160-21259-a-2
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:57:46 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess Date: 08-Mar-2017 09:50:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	10.7	106.70
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.54
\$ 68 Toluene-d8 (Surr)	10.0	11.7	116.62
\$ 92 4-Bromofluorobenzene (Surr)	10.0	10.7	106.91

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7812.D

Injection Date: 07-Mar-2017 14:30:30

Instrument ID: VMSL

Lims ID: 160-21259-A-2

Lab Sample ID: 160-21259-2

Client ID: GW-BR09JC-022817

Operator ID: SMCR

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 200.0000

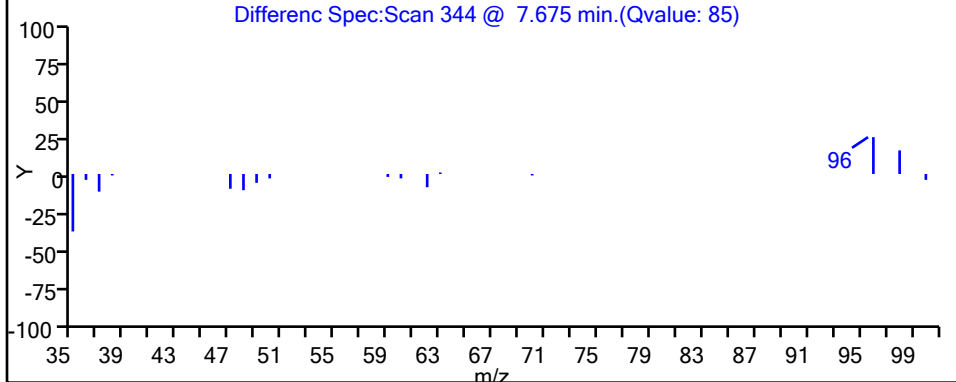
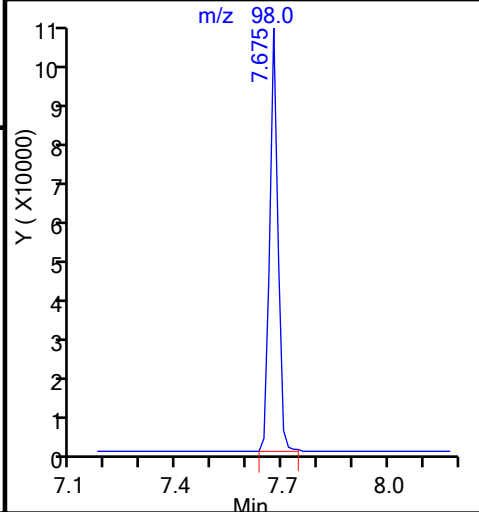
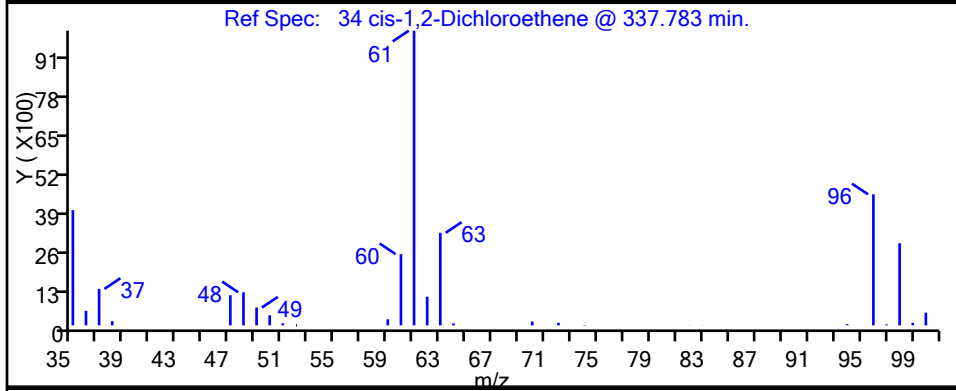
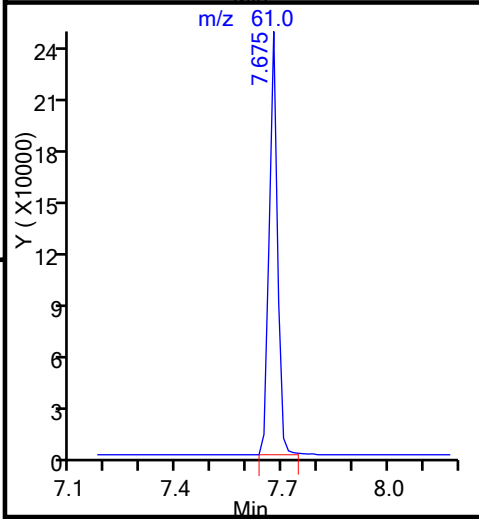
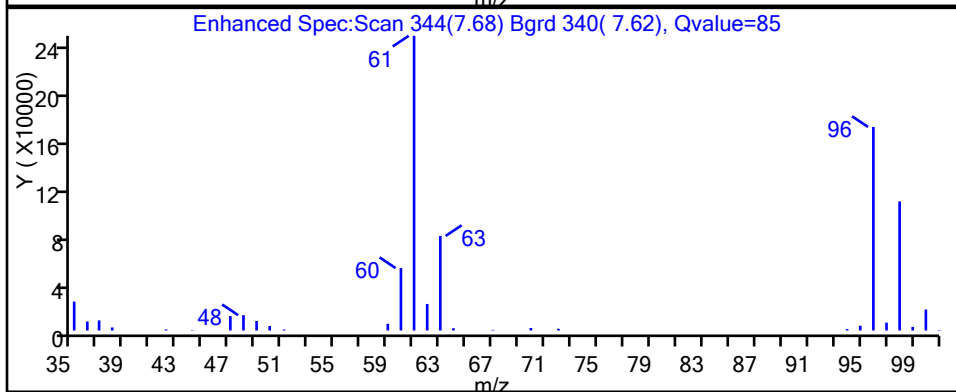
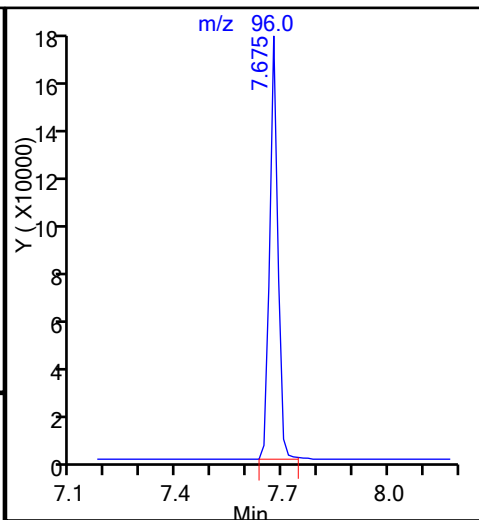
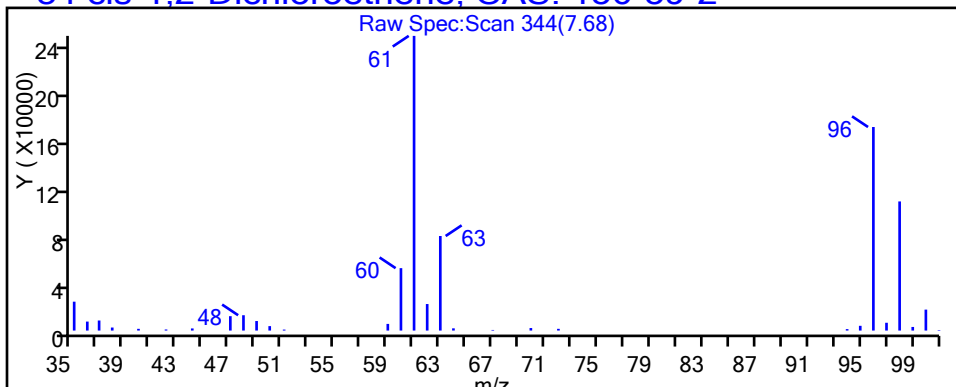
Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)

Detector: MS SCAN

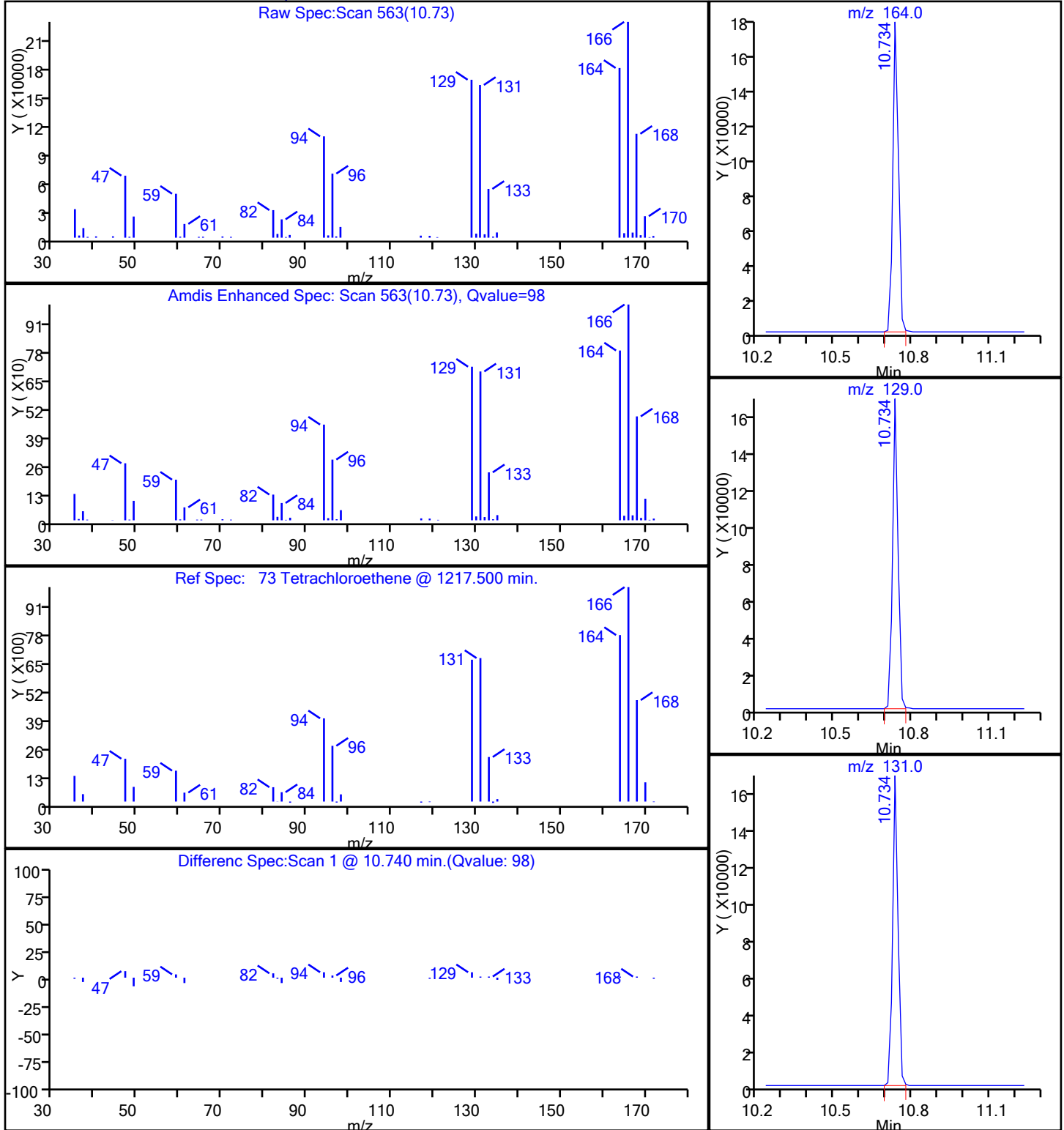
34 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7812.D
Injection Date: 07-Mar-2017 14:30:30 Instrument ID: VMSL
Lims ID: 160-21259-A-2 Lab Sample ID: 160-21259-2
Client ID: GW-BR09JC-022817
Operator ID: SMCR ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 200.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

73 Tetrachloroethene, CAS: 127-18-4



TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LSMP7812.D

Injection Date: 07-Mar-2017 14:30:30

Instrument ID: VMSL

Lims ID: 160-21259-A-2

Lab Sample ID: 160-21259-2

Client ID: GW-BR09JC-022817

Operator ID: SMCR

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 200.0000

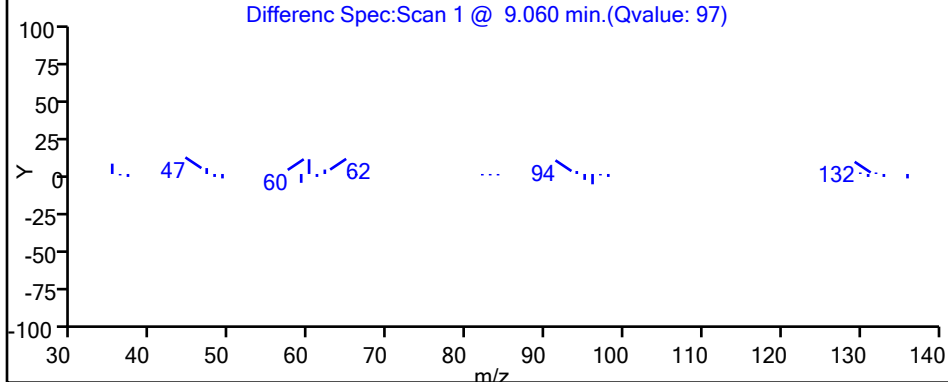
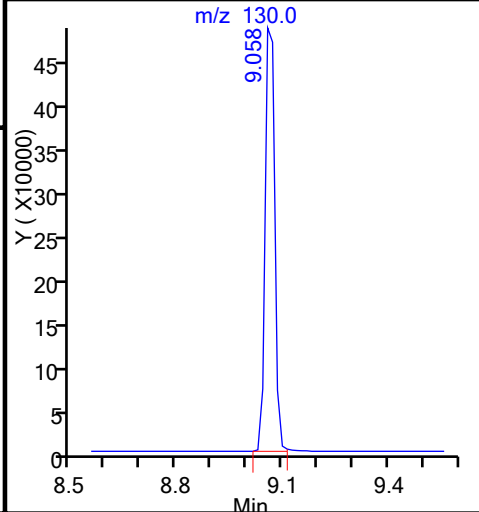
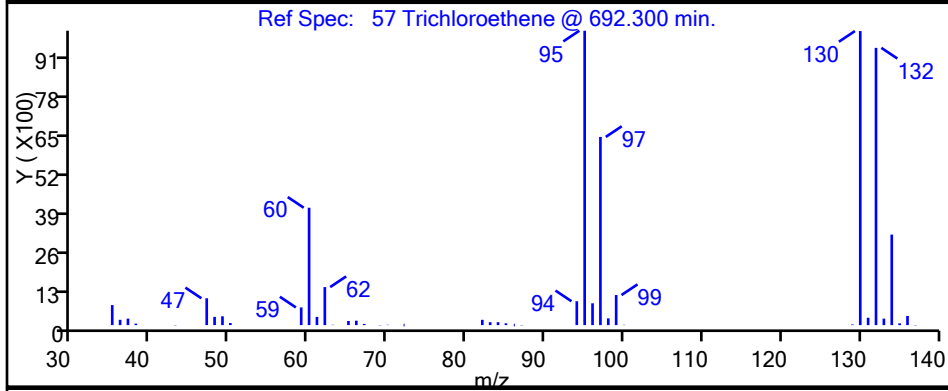
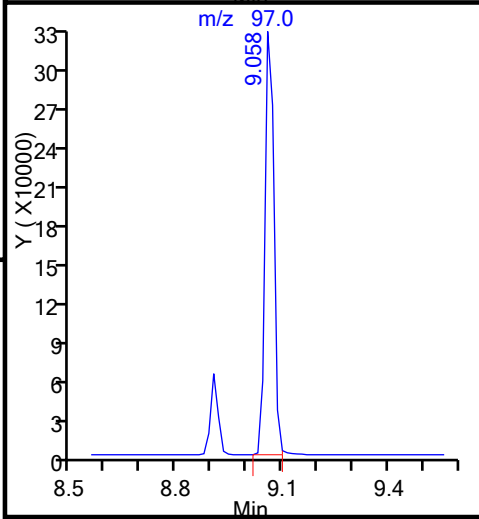
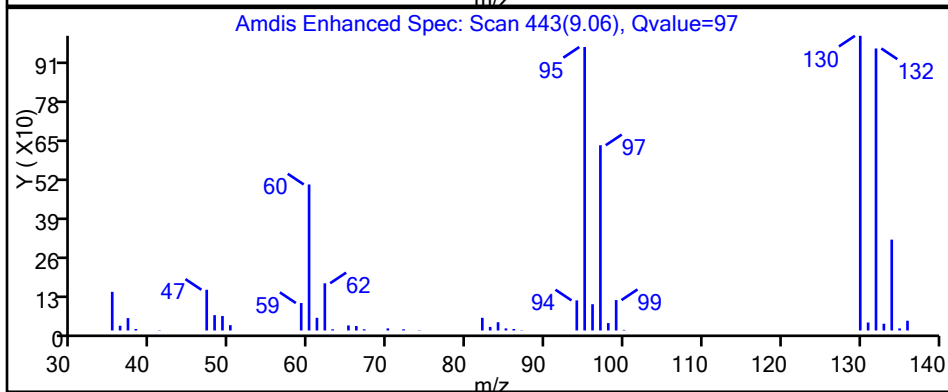
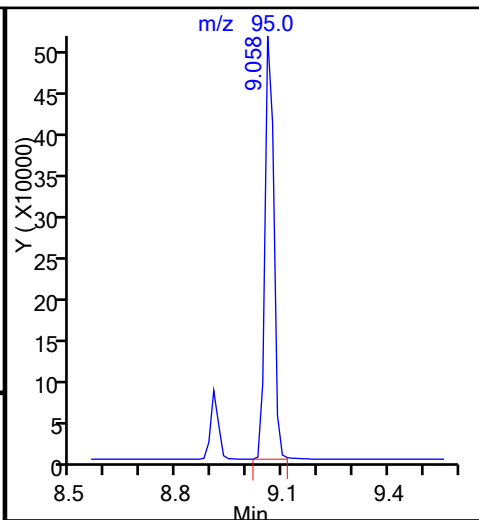
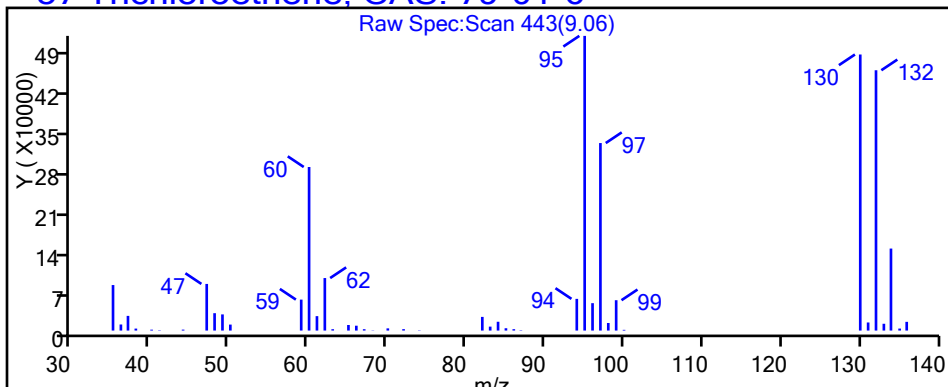
Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)

Detector: MS SCAN

57 Trichloroethene, CAS: 79-01-6



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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1 Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23 Calibration End Date: 02/14/2017 14:56 Calibration ID: 12338

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-292232/6	LICL7558.D
Level 2	IC 160-292232/7	LICL7559.D
Level 3	IC 160-292232/8	LICL7560.D
Level 4	IC 160-292232/9	LICL7561.D
Level 5	ICIS 160-292232/10	LICL7562.D
Level 6	IC 160-292232/11	LICL7563.D
Level 7	IC 160-292232/12	LICL7564.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.3766 0.3608	0.3591 0.3358	0.3387	0.3536	0.3477	Ave		0.3532			0.1000	4.0	20.0				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.1791 0.1838	0.1712 0.1743	0.1694	0.1782	0.1781	Ave		0.1763			0.0100	2.8	20.0				
Chloromethane	0.4184 0.3788	0.3897 0.3612	0.3705	0.3683	0.3494	Ave		0.3766			0.1000	5.9	20.0				
Vinyl chloride	0.3964 0.3898	0.3790 0.3687	0.3604	0.3752	0.3753	Ave		0.3778			0.1000	3.2	20.0				
Butadiene	0.4235 0.4153	0.4050 0.3832	0.3987	0.4109	0.4015	Ave		0.4055			0.0100	3.2	20.0				
Methyl bromide	0.1910 0.1594	0.1807 0.1593	0.1808	0.1678	0.1623	Ave		0.1716			0.1000	7.3	20.0				
Chloroethane	0.2480 0.2164	0.2302 0.2022	0.2141	0.2249	0.2136	Ave		0.2214			0.1000	6.7	20.0				
Trichlorofluoromethane	0.5092 0.4534	0.4800 0.4426	0.4475	0.4670	0.4529	Ave		0.4647			0.1000	5.0	20.0				
Dichlorofluoromethane	0.5410 0.4872	0.5116 0.4552	0.4955	0.4975	0.4815	Ave		0.4956			0.0100	5.4	20.0				
Ethyl ether	0.0817 0.0945	0.0737 0.0902	0.0787	0.0821	0.0844	Ave		0.0836			0.0100	8.3	20.0				
Ethanol	0.0010 0.0007	0.0007 0.0007	0.0008	0.0007	0.0007	Ave		0.0008		*	0.0010	12.2	20.0				
1,1-Dichloroethene	0.2688 0.2733	0.2501 0.2700	0.2482	0.2601	0.2661	Ave		0.2624			0.1000	3.8	20.0				
Carbon disulfide	0.9421 0.9486	0.9121 0.9265	0.8857	0.9333	0.9475	Ave		0.9280			0.1000	2.4	20.0				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2696 0.2567	0.2575 0.2458	0.2461	0.2587	0.2523	Ave		0.2552			0.1000	3.2	20.0				

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 St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Iodomethane	0.1604 0.2120	0.1327 0.2155	0.1271	0.1436	0.1848	Lin1	-0.075	0.2100			0.0100			0.9920		0.9900	
Acrolein	0.0096 0.0124	0.0093 0.0121	0.0100	0.0099	0.0111	Ave		0.0106			0.0010	11.7	20.0				
Allyl chloride	0.2945 0.3304	0.2901 0.3105	0.2846	0.3112	0.3181	Ave		0.3056			0.0100	5.4	20.0				
Isopropyl alcohol	0.0035 0.0040	0.0032 0.0038	0.0031	0.0033	0.0034	Ave		0.0035		*	0.0100	9.3	20.0				
Methylene Chloride	0.2332 0.2170	0.2174 0.2054	0.2247	0.2172	0.2104	Ave		0.2179			0.1000	4.2	20.0				
Acetone	0.0850 0.0232	0.0513 0.0204	0.0384	0.0314	0.0242	Lin1	0.0333	0.0204		*	0.1000			0.9970		0.9900	
trans-1,2-Dichloroethene	0.2679 0.2809	0.2711 0.2746	0.2709	0.2738	0.2784	Ave		0.2739			0.1000	1.7	20.0				
Methyl acetate	0.0105 0.0125	0.0096 0.0116	0.0108	0.0112	0.0113	Ave		0.0111		*	0.1000	8.1	20.0				
Hexane	0.0841 0.1034	0.0853 0.1030	0.0849	0.0982	0.1037	Ave		0.0946			0.0100	10.0	20.0				
Methyl tert-butyl ether	0.2705 0.3235	0.2593 0.3158	0.2717	0.2830	0.2852	Ave		0.2870			0.1000	8.4	20.0				
tert-Butyl alcohol	0.0040 0.0046	0.0038 0.0047	0.0038	0.0041	0.0040	Ave		0.0041		*	0.0100	8.5	20.0				
Acetonitrile	0.0117 0.0092	0.0098 0.0085	0.0098	0.0090	0.0085	Ave		0.0095			0.0010	11.6	20.0				
Isopropyl ether	0.5537 0.7370	0.5533 0.6993	0.5881	0.6314	0.6636	Ave		0.6323			0.0100	11.3	20.0				
2-Chloro-1,3-butadiene	0.3973 0.5300	0.4153 0.5223	0.4224	0.4811	0.5130	Ave		0.4688			0.0100	12.0	20.0				
1,1-Dichloroethane	0.5215 0.5043	0.4988 0.4785	0.4963	0.4965	0.4924	Ave		0.4983			0.2000	2.6	20.0				
Acrylonitrile	0.0277 0.0308	0.0275 0.0285	0.0300	0.0292	0.0288	Ave		0.0289			0.0100	4.2	20.0				
Tert-butyl ethyl ether	0.3860 0.5140	0.3610 0.5081	0.3856	0.4170	0.4432	Ave		0.4307			0.0100	14.1	20.0				
Vinyl acetate	0.1726 0.2303	0.1716 0.2262	0.2043	0.1999	0.2088	Ave		0.2020			0.0100	11.5	20.0				
cis-1,2-Dichloroethene	0.2616 0.2726	0.2451 0.2634	0.2506	0.2578	0.2634	Ave		0.2592			0.1000	3.5	20.0				
2,2-Dichloropropane	0.3364 0.3544	0.3278 0.3644	0.3091	0.3320	0.3429	Ave		0.3381			0.0100	5.3	20.0				

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 St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Bromochloromethane	0.0856 0.0843	0.0829 0.0784	0.0858	0.0835	0.0814	Ave		0.0831			0.0100	3.1	20.0				
Cyclohexane	0.4223 0.5125	0.4407 0.5062	0.4370	0.4930	0.5193	Ave		0.4759			0.1000	8.6	20.0				
Chloroform	0.4539 0.4407	0.4306 0.4185	0.4327	0.4325	0.4322	Ave		0.4344			0.2000	2.5	20.0				
Ethyl acetate	0.0063 0.0113	0.0073 0.0111	0.0078	0.0088	0.0098	Lin1	-0.007	0.0110			0.0100			0.9970		0.9900	
Carbon tetrachloride	0.3874 0.3997	0.3862 0.3960	0.3746	0.3949	0.4024	Ave		0.3916			0.1000	2.4	20.0				
Tetrahydrofuran	0.0045 0.0082	0.0054 0.0081	0.0058	0.0060	0.0071	Lin1	-0.006	0.0080			0.0010			0.9960		0.9900	
1,1,1-Trichloroethane	0.4471 0.4603	0.4366 0.4498	0.4273	0.4517	0.4572	Ave		0.4471			0.1000	2.6	20.0				
2-Butanone	0.1179 0.0353	0.0703 0.0337	0.0525	0.0422	0.0359	Lin1	0.0405	0.0327		*	0.1000			1.0000		0.9900	
1,1-Dichloropropene	0.3619 0.4052	0.3655 0.4007	0.3618	0.3869	0.4110	Ave		0.3847			0.0100	5.6	20.0				
Isooctane	1.1689 1.4376	1.2201 1.3885	1.2377	1.3973	1.4360	Ave		1.3266			0.0100	8.6	20.0				
n-Heptane	0.4934 0.5731	0.5383 0.5693	0.5369	0.5816	0.6110	Ave		0.5576			0.0100	6.8	20.0				
Benzene	1.1494 1.0727	1.1040 1.0250	1.0951	1.0815	1.0777	Ave		1.0865			0.5000	3.4	20.0				
Propionitrile	0.0113 0.0116	0.0106 0.0107	0.0113	0.0110	0.0107	Ave		0.0110			0.0010	3.5	20.0				
Methacrylonitrile	0.0573 0.0638	0.0574 0.0570	0.0613	0.0600	0.0597	Ave		0.0595			0.0100	4.2	20.0				
Tert-amyl methyl ether	0.2521 0.3338	0.2409 0.3358	0.2511	0.2721	0.2858	Ave		0.2817			0.0100	13.9	20.0				
Isobutanol	0.0012 0.0018	0.0013 0.0019	0.0014	0.0015	0.0016	Ave		0.0015			0.0010	16.8	20.0				
1,2-Dichloroethane	0.2274 0.2207	0.2221 0.2043	0.2260	0.2169	0.2130	Ave		0.2186			0.1000	3.7	20.0				
Methylcyclohexane	0.4849 0.4912	0.4861 0.4838	0.4686	0.4991	0.5170	Ave		0.4901			0.1000	3.1	20.0				
Trichloroethene	0.3175 0.2929	0.3061 0.2849	0.2983	0.3014	0.3018	Ave		0.3004			0.2000	3.4	20.0				
n-Butanol	0.0010 0.0018	0.0009 0.0019	0.0011	0.0012	0.0014	Lin	-0.054	0.0019		*	0.0100			0.9970		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
CURVE EVALUATION

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dibromomethane	0.0807 0.0803	0.0773 0.0755	0.0800	0.0766	0.0760	Ave		0.0781			0.0100	2.8	20.0				
Ethyl acrylate	0.0649 0.1123	0.0633 0.1119	0.0694	0.0799	0.0905	Lin1	-0.045	0.1096			0.0100			0.9920		0.9900	
1,2-Dichloropropane	0.2233 0.2338	0.2130 0.2239	0.2225	0.2213	0.2244	Ave		0.2232			0.1000	2.7	20.0				
Bromodichloromethane	0.2385 0.2615	0.2339 0.2535	0.2415	0.2407	0.2477	Ave		0.2453			0.2000	3.9	20.0				
Methyl methacrylate	0.0405 0.0685	0.0396 0.0663	0.0433	0.0501	0.0575	Lin1	-0.049	0.0660			0.0100			0.9950		0.9900	
1,4-Dioxane	0.0002 0.0008	0.0005 0.0007	0.0005	0.0006	0.0007	Lin1	-0.006	0.0007		*	0.0010			0.9980		0.9900	
2-Chloroethyl vinyl ether	0.0246 0.0433	0.0256 0.0419	0.0310	0.0325	0.0393	Lin1	-0.015	0.0422			0.0100			0.9970		0.9900	
cis-1,3-Dichloropropene	0.2235 0.3052	0.2206 0.3015	0.2394	0.2576	0.2826	Ave		0.2615			0.2000	13.6	20.0				
Toluene	0.9223 1.0423	0.9397 1.0218	0.9456	1.0209	1.0426	Ave		0.9907			0.4000	5.3	20.0				
2-Nitropropane	0.0215 0.0320	0.0189 0.0336	0.0210	0.0223	0.0247	Lin	-0.070	0.0340			0.0100			0.9970		0.9900	
4-Methyl-2-pentanone	0.0637 0.1049	0.0660 0.1092	0.0729	0.0736	0.0840	Lin1	-0.041	0.1049			0.1000			0.9900		0.9900	
Tetrachloroethene	0.3976 0.3726	0.3896 0.3710	0.3665	0.3790	0.3944	Ave		0.3815			0.2000	3.2	20.0				
trans-1,3-Dichloropropene	0.2532 0.3562	0.2423 0.3390	0.2552	0.2930	0.3173	Ave		0.2937			0.1000	15.4	20.0				
Ethyl methacrylate	0.0950 0.2171	0.1037 0.2188	0.1068	0.1464	0.1767	Lin1	-0.110	0.2140			0.0100			0.9910		0.9900	
1,1,2-Trichloroethane	0.1515 0.1551	0.1450 0.1450	0.1456	0.1469	0.1447	Ave		0.1477			0.1000	2.7	20.0				
Chlorodibromomethane	0.1853 0.2262	0.1771 0.2211	0.1872	0.1965	0.2039	Ave		0.1996			0.1000	9.3	20.0				
1,3-Dichloropropane	0.3260 0.3415	0.3066 0.3214	0.3039	0.3187	0.3158	Ave		0.3191			0.0100	3.9	20.0				
n-Butyl acetate	0.1055 0.2020	0.1055 0.2116	0.1087	0.1238	0.1507	Qua	-0.145	0.1813	0.0008714		0.0100			0.9980		0.9900	
1,2-Dibromoethane	0.1473 0.1656	0.1384 0.1578	0.1422	0.1481	0.1511	Ave		0.1501			0.1000	6.1	20.0				
2-Hexanone	0.0497 0.0816	0.0486 0.0789	0.0547	0.0655	0.0717	Lin1	-0.026	0.0792		*	0.1000			0.9970		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
CURVE EVALUATION

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Ethylbenzene	1.9946 1.9139	2.0112 1.8454	1.9175	1.9523	2.0380	Ave		1.9533			0.1000	3.4	20.0				
Chlorobenzene	1.1058 0.9945	1.0410 0.9710	1.0166	1.0092	1.0112	Ave		1.0213			0.5000	4.2	20.0				
1,1,1,2-Tetrachloroethane	0.3090 0.3269	0.2873 0.3222	0.2895	0.3072	0.3129	Ave		0.3079			0.0100	4.9	20.0				
m-Xylene & p-Xylene	0.6621 0.7542	0.6855 0.7741	0.6868	0.7337	0.7950	Ave		0.7273			0.1000	6.9	20.0				
o-Xylene	0.4971 0.6894	0.5396 0.7059	0.5611	0.6334	0.6932	Ave		0.6171			0.3000	13.7	20.0				
Styrene	0.7106 1.0469	0.7693 1.0621	0.8422	0.9454	1.0419	Ave		0.9169			0.3000	15.7	20.0				
Bromoform	0.2007 0.2419	0.1781 0.2343	0.1832	0.1983	0.1996	Ave		0.2052			0.1000	11.8	20.0				
Isopropylbenzene	3.2522 4.0882	3.5263 4.0520	3.5303	3.9401	4.2615	Ave		3.8072			0.1000	9.7	20.0				
N-Propylbenzene	3.5942 4.5835	4.1031 4.4044	4.1343	4.5162	4.9238	Ave		4.3228			0.0100	9.9	20.0				
Bromobenzene	0.7801 0.7981	0.7582 0.7809	0.7427	0.7756	0.7708	Ave		0.7723			0.0100	2.3	20.0				
1,1,2,2-Tetrachloroethane	0.3601 0.3681	0.3295 0.3367	0.3260	0.3380	0.3253	Ave		0.3405			0.3000	5.0	20.0				
1,3,5-Trimethylbenzene	2.2920 3.2413	2.6489 3.2416	2.7272	3.0541	3.3586	Ave		2.9377			0.0100	13.3	20.0				
2-Chlorotoluene	2.7177 2.9574	2.9311 2.9237	2.8598	2.9759	3.0354	Ave		2.9144			0.0100	3.5	20.0				
1,2,3-Trichloropropane	0.1320 0.1218	0.1067 0.1089	0.1058	0.1118	0.1071	Ave		0.1134			0.0100	8.7	20.0				
trans-1,4-Dichloro-2-butene	0.1015 0.1157	0.0928 0.1063	0.0886	0.1034	0.0968	Ave		0.1007			0.0100	9.0	20.0				
Cyclohexanone	0.0106 0.0069	0.0058 0.0072	0.0048	0.0049	0.0054	Lin	-0.061	0.0073			0.0010			0.9960		0.9900	
4-Chlorotoluene	2.2270 2.6132	2.3480 2.6157	2.3621	2.5374	2.6751	Ave		2.4826			0.0100	6.8	20.0				
tert-Butylbenzene	2.3116 2.9114	2.5712 2.9910	2.6177	2.8548	3.1118	Ave		2.7671			0.0100	10.1	20.0				
1,2,4-Trimethylbenzene	2.4529 3.2089	2.8187 3.2010	2.9038	3.1370	3.3178	Ave		3.0057			0.0100	10.0	20.0				
sec-Butylbenzene	3.7404 4.4564	4.2692 4.4299	4.2354	4.4413	4.8751	Ave		4.3497			0.0100	7.8	20.0				

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 St. Louis Job No.: 160-21259-1 Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23 Calibration End Date: 02/14/2017 14:56 Calibration ID: 12338

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
4-Isopropyltoluene	2.7240 3.6714	3.2437 3.6819	3.3453	3.5999	3.9900	Ave		3.4652			0.0100	11.8		20.0			
1,3-Dichlorobenzene	1.7112 1.6313	1.6401 1.6372	1.5940	1.6161	1.6441	Ave		1.6391			0.6000	2.2		20.0			
1,2,3-Trimethylbenzene	2.6958 2.9983	2.7746 2.9472	2.7171	2.8809	2.9732	Ave		2.8553			0.0100	4.4		20.0			
1,4-Dichlorobenzene	1.8089 1.5982	1.6726 1.5562	1.6085	1.6394	1.6078	Ave		1.6417			0.5000	5.0		20.0			
n-Butylbenzene	0.7507 0.9639	0.8454 1.0112	0.8667	0.9214	1.0441	Ave		0.9148			0.0100	11.2		20.0			
Benzyl chloride	0.0851 0.1216	0.0760 0.1279	0.0736	0.0851	0.1000	Lin	-0.127	0.1296			0.0100				0.9980		0.9900
1,2-Dichlorobenzene	1.3319 1.3346	1.2906 1.3117	1.2520	1.2878	1.3054	Ave		1.3020			0.4000	2.2		20.0			
Nonanal	0.0812 0.2714	0.0659 0.3269	0.0575	0.0903	0.1522	Qua	-0.271	0.1928	0.0035677		0.0100				0.9960		0.9900
1,2-Dibromo-3-Chloropropane	0.0525 0.0681	0.0420 0.0648	0.0454	0.0520	0.0551	Ave		0.0543			0.0500	17.5		20.0			
1,3,5-Trichlorobenzene	1.2500 1.3246	1.2593 1.3287	1.2344	1.2970	1.3334	Ave		1.2896			0.0100	3.2		20.0			
Hexachlorobutadiene	0.8008 0.7325	0.8157 0.7898	0.7716	0.7500	0.8106	Ave		0.7815			0.0100	4.0		20.0			
1,2,4-Trichlorobenzene	0.9307 1.0174	0.8770 1.0163	0.8742	0.9338	0.9771	Ave		0.9466			0.2000	6.3		20.0			
Naphthalene	0.8167 1.2337	0.7215 1.2059	0.7620	0.9364	1.0493	Lin1	-0.421	1.1967			0.0100				0.9950		0.9900
1,2,3-Trichlorobenzene	0.7550 0.8023	0.7040 0.7957	0.7155	0.7454	0.7625	Ave		0.7544			0.0100	4.9		20.0			
Dibromofluoromethane (Surr)	0.1827 0.1841	0.1869 0.2017	0.1794	0.1780	0.1824	Ave		0.1850			0.0100	4.3		20.0			
1,2-Dichloroethane-d4 (Surr)	0.1934 0.1721	0.1933 0.1832	0.1877	0.1755	0.1713	Ave		0.1824			0.0100	5.2		20.0			
Toluene-d8 (Surr)	1.2437 1.3606	1.3166 1.5126	1.2477	1.3487	1.3994	Ave		1.3470			0.0100	6.9		20.0			
4-Bromofluorobenzene (Surr)	0.7898 0.8802	0.8095 1.0122	0.7761	0.8259	0.8636	Ave		0.8510			0.0100	9.4		20.0			

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 St. Louis Job No.: 160-21259-1 Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23 Calibration End Date: 02/14/2017 14:56 Calibration ID: 12338

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-292232/6	LICL7558.D
Level 2	IC 160-292232/7	LICL7559.D
Level 3	IC 160-292232/8	LICL7560.D
Level 4	IC 160-292232/9	LICL7561.D
Level 5	ICIS 160-292232/10	LICL7562.D
Level 6	IC 160-292232/11	LICL7563.D
Level 7	IC 160-292232/12	LICL7564.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	32317 1256427	62965 2636692	94786	251708	634852	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	FB	Ave	15370 639957	30017 1368515	47424	126813	325126	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Chloromethane	FB	Ave	35904 1318934	68333 2836166	103698	262120	637841	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Vinyl chloride	FB	Ave	34020 1357335	66452 2894691	100871	267048	685127	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Butadiene	FB	Ave	36342 1446021	71008 3009031	111598	292450	733049	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl bromide	FB	Ave	16388 555055	31686 1250968	50603	119430	296249	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Chloroethane	FB	Ave	21278 753649	40368 1587780	59909	160105	389941	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Trichlorofluoromethane	FB	Ave	43698 1578822	84155 3474861	125236	332352	826896	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Dichlorofluoromethane	FB	Ave	46428 1696388	89693 3574242	138674	354094	879082	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl ether	FB	Ave	7007 329022	12925 708611	22026	58409	154033	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethanol	FB	Ave	3265 102897	5143 225956	8956	20248	48991	20.0 800	40.0 1600	80.0	160	400
1,1-Dichloroethene	FB	Ave	23067 951766	43846 2119756	69478	185093	485900	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Carbon disulfide	FB	Ave	80844 3302911	159923 7274693	247896	664241	1729860	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	23136 893873	45151 1929989	68871	184159	460534	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Iodomethane	FB	Lin1	13767 738223	23270 1692176	35578	102207	337296	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acrolein	FB	Ave	4127 216721	8152 474485	14001	35197	100915	2.50 100	5.00 200	10.0	20.0	50.0
Allyl chloride	FB	Ave	25271 1150529	50856 2437693	79649	221460	580706	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isopropyl alcohol	FB	Ave	3020 137823	5659 302224	8671	23172	62222	5.00 200	10.0 400	20.0	40.0	100
Methylene Chloride	FB	Ave	20015 755598	38117 1612750	62888	154556	384047	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Acetone	FB	Lin1	7297 80703	8994 160101	10735	22339	44176	0.500 20.0	1.00 40.0	2.00	4.00	10.0
trans-1,2-Dichloroethene	FB	Ave	22988 978176	47530 2156075	75819	194844	508224	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl acetate	FB	Ave	4493 217091	8455 455488	15092	39770	103417	2.50 100	5.00 200	10.0	20.0	50.0
Hexane	FB	Ave	7213 360150	14950 808431	23768	69908	189282	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl tert-butyl ether	FB	Ave	23212 1126507	45467 2479651	76044	201413	520732	0.500 20.0	1.00 40.0	2.00	4.00	10.0
tert-Butyl alcohol	FB	Ave	3392 160322	6655 365472	10695	29002	73903	5.00 200	10.0 400	20.0	40.0	100
Acetonitrile	FB	Ave	10011 320302	17254 664114	27352	64145	155641	5.00 200	10.0 400	20.0	40.0	100
Isopropyl ether	FB	Ave	47515 2566082	97005 5490596	164592	449409	1211476	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Chloro-1,3-butadiene	FB	Ave	34093 1845351	72819 4101400	118219	342420	936515	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1-Dichloroethane	FB	Ave	44748 1756056	87461 3757018	138900	353362	898980	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Acrylonitrile	FB	Ave	23742 1073527	48173 2237698	84073	208110	526284	5.00 200	10.0 400	20.0	40.0	100
Tert-butyl ethyl ether	FB	Ave	33120 1789705	63297 3989127	107921	296816	809225	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Vinyl acetate	FB	Ave	14813 801797	30088 1775934	57193	142286	381135	0.500 20.0	1.00 40.0	2.00	4.00	10.0
cis-1,2-Dichloroethene	FB	Ave	22445 949313	42976 2068435	70138	183466	480896	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2,2-Dichloropropane	FB	Ave	28867 1233952	57472 2860984	86524	236272	625960	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Bromochloromethane	FB	Ave	7343 293577	14532 615280	24000	59405	148543	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Cyclohexane	FB	Ave	36239 1784571	77268 3974985	122294	350857	948070	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chloroform	FB	Ave	38953 1534405	75489 3286289	121095	307859	789087	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl acetate	FB	Lin1	1086 78629	2556 173553	4384	12522	35763	1.00 40.0	2.00 80.0	4.00	8.00	20.0
Carbon tetrachloride	FB	Ave	33247 1391641	67711 3109164	104850	281071	734608	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Tetrahydrofuran	FB	Lin1	778 56935	1878 126688	3246	8609	25802	1.00 40.0	2.00 80.0	4.00	8.00	20.0
1,1,1-Trichloroethane	FB	Ave	38368 1602853	76552 3531719	119587	321490	834642	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Butanone	FB	Lin1	10117 123054	12327 264324	14693	30021	65567	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1-Dichloropropene	FB	Ave	31059 1410741	64090 3146503	101267	275394	750406	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isooctane	FB	Ave	100302 5005583	213924 10902381	346406	994490	2621621	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Heptane	FB	Ave	42342 1995284	94376 4469957	150266	413938	1115473	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Benzene	FB	Ave	98628 3735154	193558 8047817	306491	769748	1967570	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Propionitrile	FB	Ave	9664 404254	18650 838323	31748	78442	195483	5.00 200	10.0 400	20.0	40.0	100
Methacrylonitrile	FB	Ave	49134 2220679	100688 4476859	171441	427045	1090316	5.00 200	10.0 400	20.0	40.0	100
Tert-amyl methyl ether	FB	Ave	21636 1162260	42236 2636896	70287	193645	521833	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isobutanol	FB	Ave	2487 156359	5703 365507	9832	26365	71036	12.5 500	25.0 1000	50.0	100	250
1,2-Dichloroethane	FB	Ave	19514 768531	38947 1603847	63265	154389	388949	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methylcyclohexane	FB	Ave	41606 1710274	85220 3798739	131162	355259	943803	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Trichloroethene	FB	Ave	27241 1019746	53667 2236904	83494	214501	551055	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Butanol	FB	Lin	2165 152940	3978 370033	7463	20579	64867	12.5 500	25.0 1000	50.0	100	250
Dibromomethane	FB	Ave	6929 279672	13554 593144	22385	54513	138772	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl acrylate	FB	Lin1	5569 390858	11095 878884	19435	56902	165140	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dichloropropane	FB	Ave	19161 813917	37349 1757801	62263	157474	409754	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Bromodichloromethane	FB	Ave	20467 910493	41012 1990323	67584	171312	452220	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl methacrylate	FB	Lin1	6949 477155	13895 1041364	24221	71341	209912	1.00 40.0	2.00 80.0	4.00	8.00	20.0
1,4-Dioxane	FB	Lin1	385 52672	1673 115692	2910	8490	25179	10.0 400	20.0 800	40.0	80.0	200
2-Chloroethyl vinyl ether	FB	Lin1	2111 150856	4488 329263	8671	23130	71667	0.500 20.0	1.00 40.0	2.00	4.00	10.0
cis-1,3-Dichloropropene	FB	Ave	19181 1062639	38685 2367621	66998	183326	515898	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Toluene	CBNZ d5	Ave	50973 2351671	110695 5242977	181421	477515	1272234	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Nitropropane	CBNZ d5	Lin	2381 144356	4451 344381	8040	20833	60307	1.00 40.0	2.00 80.0	4.00	8.00	20.0
4-Methyl-2-pentanone	CBNZ d5	Lin1	3522 236579	7780 560481	13989	34405	102481	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Tetrachloroethene	CBNZ d5	Ave	21973 840730	45895 1903799	70322	177263	481253	0.500 20.0	1.00 40.0	2.00	4.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	13992 803753	28538 1739577	48964	137047	387135	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl methacrylate	CBNZ d5	Lin1	5251 489901	12210 1122615	20484	68461	215566	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	8375 349969	17086 743923	27931	68699	176545	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Chlorodibromomethane	CBNZ d5	Ave	10242 510489	20866 1134461	35923	91923	248800	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	18014 770605	36119 1649148	58317	149063	385361	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Butyl acetate	CBNZ d5	Qua	5833 455679	12423 1085856	20849	57900	183885	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	8142 373536	16303 809705	27278	69274	184418	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Hexanone	CBNZ d5	Lin1	2749 184016	5726 405071	10489	30653	87490	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethylbenzene	CBNZ d5	Ave	110234 4318403	236921 9469134	367902	913138	2486865	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Chlorobenzene	CBNZ d5	Ave	61114 2243827	122627 4982702	195059	472052	1233906	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	17078 737681	33841 1653307	55546	143690	381864	0.500 20.0	1.00 40.0	2.00	4.00	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	36589 1701756	80746 3971961	131779	343185	970153	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23

Calibration End Date: 02/14/2017 14:56

Calibration ID: 12338

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
o-Xylene	CBNZ d5	Ave	27473 1555500	63565 3621957	107660	296261	845841	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Styrene	CBNZ d5	Ave	39272 2362178	90624 5449977	161592	442182	1271324	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Bromoform	DCBd 4	Ave	5169 258142	10162 581518	17245	44391	120062	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isopropylbenzene	DCBd 4	Ave	83777 4361986	201198 10055299	332264	881821	2562749	0.500 20.0	1.00 40.0	2.00	4.00	10.0
N-Propylbenzene	DCBd 4	Ave	92586 4890506	234106 10929700	389117	1010750	2961062	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Bromobenzene	DCBd 4	Ave	20095 851566	43258 1937781	69900	173592	463522	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	9275 392709	18801 835618	30682	75638	195643	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	59041 3458399	151136 8044316	256684	683531	2019769	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Chlorotoluene	DCBd 4	Ave	70008 3155446	167238 7255220	269160	666024	1825409	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	3401 129986	6087 270304	9955	25017	64386	0.500 20.0	1.00 40.0	2.00	4.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	2615 123446	5294 263721	8335	23138	58231	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Cyclohexanone	DCBd 4	Lin	2727 74111	3312 179553	4529	11067	32256	5.00 200	10.0 400	20.0	40.0	100
4-Chlorotoluene	DCBd 4	Ave	57367 2788252	133966 6490968	222316	567876	1608761	0.500 20.0	1.00 40.0	2.00	4.00	10.0
tert-Butylbenzene	DCBd 4	Ave	59546 3106458	146703 7422275	246377	638927	1871331	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	63188 3423809	160823 7943513	273297	702078	1995253	0.500 20.0	1.00 40.0	2.00	4.00	10.0
sec-Butylbenzene	DCBd 4	Ave	96353 4754921	243586 10993079	398627	993992	2931782	0.500 20.0	1.00 40.0	2.00	4.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	70171 3917287	185074 9136770	314853	805672	2399495	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	44081 1740580	93578 4062756	150022	361693	988692	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	69443 3199086	158309 7313522	255734	644762	1787977	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	46597 1705248	95431 3861852	151387	366901	966912	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Butylbenzene	DCBd 4	Ave	19339 1028489	48236 2509452	81572	206207	627877	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1 Analy Batch No.: 292232

SDG No.: _____

Instrument ID: VMSL GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2017 12:23 Calibration End Date: 02/14/2017 14:56 Calibration ID: 12338

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzyl chloride	DCBd 4	Lin	2191 129712	4337 317429	6923	19040	60145	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	34309 1424008	73638 3255106	117835	288210	785043	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Nonanal	DCBd 4	Qua	2092 289588	3759 811232	5409	20217	91559	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1352 72609	2395 160919	4269	11637	33140	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	32201 1413327	71852 3297207	116179	290282	801900	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	20628 781531	46540 1959840	72618	167863	487449	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	23974 1085567	50039 2522059	82275	208981	587581	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Naphthalene	DCBd 4	Lin1	21039 1316312	41165 2992441	71721	209562	631041	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	19450 856069	40169 1974560	67346	166827	458528	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	15675 641092	32765 1583491	50208	126704	332989	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	16596 599365	33889 1438479	52534	124885	312683	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	68731 3070026	155095 7761722	239384	630833	1707588	0.500 20.0	1.00 40.0	2.00	4.00	10.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	20345 939146	46185 2511754	73047	184835	519332	0.500 20.0	1.00 40.0	2.00	4.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7558.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 14-Feb-2017 12:23:30 ALS Bottle#: 2 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 0.5
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17

Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:40:48 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: rhoadess

Date: 15-Feb-2017 10:50:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	32317	0.5000	0.5331	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	98	15370	0.5000	0.5080	M
3 Chloromethane	50	3.346	3.346	0.000	99	35904	0.5000	0.5555	
4 Vinyl chloride	62	3.500	3.500	0.000	98	34020	0.5000	0.5246	
5 Butadiene	39	3.528	3.528	0.000	92	36342	0.5000	0.5223	
6 Bromomethane	94	4.086	4.100	-0.014	90	16388	0.5000	0.5564	
7 Chloroethane	64	4.324	4.324	0.000	99	21278	0.5000	0.5601	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	97	43698	0.5000	0.5480	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	97	46428	0.5000	0.5458	
10 Ethyl ether	74	5.078	5.064	0.014	92	7007	0.5000	0.4883	
11 Ethanol	45	5.301	5.315	-0.014	85	3265	20.0	25.0	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	95	23067	0.5000	0.5123	
13 Carbon disulfide	76	5.413	5.413	0.000	100	80844	0.5000	0.5076	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	90	23136	0.5000	0.5281	
16 Iodomethane	142	5.581	5.581	0.000	98	13767	0.5000	0.7384	
S 15 1,2-Dichloroethene, Total	96				0			0.99	
17 Acrolein	56	5.860	5.860	0.000	97	4127	2.50	2.26	
18 3-Chloro-1-propene	39	6.028	6.028	0.000	90	25271	0.5000	0.4818	
19 Isopropyl alcohol	45	6.069	6.069	0.000	95	3020	5.00	5.07	
20 Methylene Chloride	84	6.167	6.167	0.000	95	20015	0.5000	0.5352	
21 Acetone	43	6.251	6.251	0.000	99	7297	0.5000	0.4501	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	96	22988	0.5000	0.4890	
23 Methyl acetate	74	6.391	6.391	0.000	98	4493	2.50	2.37	
24 Hexane	86	6.447	6.447	-0.001	93	7213	0.5000	0.4440	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	91	23212	0.5000	0.4712	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	83	3392	5.00	4.78	
27 Acetonitrile	41	6.810	6.810	0.000	99	10011	5.00	6.14	
28 Isopropyl ether	45	6.921	6.921	0.000	90	47515	0.5000	0.4378	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	93	34093	0.5000	0.4238	
30 1,1-Dichloroethane	63	7.089	7.103	-0.014	97	44748	0.5000	0.5232	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.159	7.159	0.000	97	23742	5.00	4.78	
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	93	33120	0.5000	0.4481	
33 Vinyl acetate	43	7.340	7.340	0.000	98	14813	0.5000	0.4274	
34 cis-1,2-Dichloroethene	96	7.676	7.676	0.000	80	22445	0.5000	0.5045	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	89	28867	0.5000	0.4974	
37 Chlorobromomethane	128	7.885	7.885	0.000	56	7343	0.5000	0.5149	
36 Cyclohexane	84	7.885	7.885	0.000	92	36239	0.5000	0.4437	
38 Chloroform	83	7.941	7.941	0.000	95	38953	0.5000	0.5224	
39 Ethyl acetate	45	8.039	8.039	0.000	80	1086	1.00	1.25	
40 Carbon tetrachloride	117	8.095	8.095	0.000	98	33247	0.5000	0.4947	
41 Tetrahydrofuran	71	8.122	8.123	-0.001	44	778	1.00	1.26	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.123	-0.001	95	15675	0.5000	0.4936	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	97	38368	0.5000	0.5000	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	99	10117	0.5000	0.5634	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	31059	0.5000	0.4704	
44 Isooctane	57	8.360	8.360	0.000	96	100302	0.5000	0.4406	
46 n-Heptane	43	8.430	8.430	0.000	91	42342	0.5000	0.4424	
48 Benzene	78	8.527	8.528	-0.001	95	98628	0.5000	0.5289	
49 Propionitrile	54	8.555	8.555	0.000	39	9664	5.00	5.10	
50 Methacrylonitrile	41	8.569	8.555	0.014	93	49134	5.00	4.81	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	86	21636	0.5000	0.4476	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	91	16596	0.5000	0.5303	
52 Isobutyl alcohol	42	8.667	8.667	0.000	86	2487	12.5	9.60	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	97	19514	0.5000	0.5200	
* 55 Fluorobenzene	96	8.905	8.905	0.000	99	1716236	10.0	10.0	
58 Methylcyclohexane	55	9.058	9.058	0.000	93	41606	0.5000	0.4947	
57 Trichloroethene	95	9.058	9.058	0.000	69	27241	0.5000	0.5284	
59 n-Butanol	56	9.310	9.296	0.014	82	2165	12.5	34.9	
61 Dibromomethane	93	9.477	9.477	0.000	93	6929	0.5000	0.5171	
60 Ethyl acrylate	55	9.505	9.505	0.000	13	5569	0.5000	0.7028	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	90	19161	0.5000	0.5003	
63 Dichlorobromomethane	83	9.589	9.603	-0.014	98	20467	0.5000	0.4861	
64 Methyl methacrylate	69	9.687	9.687	0.000	94	6949	1.00	1.36	
65 1,4-Dioxane	88	9.784	9.785	0.000	1	385	10.0	11.3	M
66 2-Chloroethyl vinyl ether	63	10.064	10.078	-0.014	12	2111	0.5000	0.6360	M
67 cis-1,3-Dichloropropene	75	10.162	10.162	0.000	93	19181	0.5000	0.4274	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	68731	0.5000	0.4616	
69 Toluene	92	10.371	10.371	0.000	98	50973	0.5000	0.4655	
70 2-Nitropropane	43	10.594	10.595	-0.001	93	2381	1.00	2.70	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	91	3522	0.5000	0.6923	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	68	13992	0.5000	0.4310	
73 Tetrachloroethene	164	10.734	10.734	0.000	97	21973	0.5000	0.5210	
74 Ethyl methacrylate	69	10.818	10.818	0.000	40	5251	0.5000	0.7382	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	94	8375	0.5000	0.5131	
76 Chlorodibromomethane	129	11.069	11.069	0.000	89	10242	0.5000	0.4642	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	95	18014	0.5000	0.5107	
78 n-Butyl acetate	43	11.293	11.307	-0.014	92	5833	0.5000	1.09	
79 Ethylene Dibromide	107	11.321	11.321	0.000	98	8142	0.5000	0.4909	
80 2-Hexanone	43	11.432	11.433	-0.001	38	2749	0.5000	0.6469	
81 1-Chlorohexane	91	11.684	11.684	0.000	89	23479	0.5000	0.3900	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	87	1105305	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	68	110234	0.5000	0.5106	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.768	11.768	0.000	94	61114	0.5000	0.5414	
85 1,1,1,2-Tetrachloroethane	131	11.810	11.810	0.000	93	17078	0.5000	0.5019	
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	36589	0.5000	0.4551	
88 o-Xylene	106	12.284	12.284	0.000	95	27473	0.5000	0.4028	
89 Styrene	104	12.326	12.326	0.000	94	39272	0.5000	0.3875	
90 Bromoform	173	12.396	12.396	0.000	94	5169	0.5000	0.4890	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	83777	0.5000	0.4271	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	94	20345	0.5000	0.4640	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	92586	0.5000	0.4157	
94 Bromobenzene	156	12.983	12.983	0.000	94	20095	0.5000	0.5050	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	95	9275	0.5000	0.5287	
96 1,3,5-Trimethylbenzene	105	13.094	13.108	-0.014	94	59041	0.5000	0.3901	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	70008	0.5000	0.4662	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	88	3401	0.5000	0.5819	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	70	2615	0.5000	0.5039	
100 Cyclohexanone	55	13.248	13.248	0.000	87	2727	5.00	15.6	
101 4-Chlorotoluene	91	13.276	13.276	0.000	98	57367	0.5000	0.4485	
102 tert-Butylbenzene	119	13.430	13.430	0.000	94	59546	0.5000	0.4177	
103 1,2,4-Trimethylbenzene	105	13.485	13.486	-0.001	97	63188	0.5000	0.4080	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	96353	0.5000	0.4300	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	70171	0.5000	0.3931	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	44081	0.5000	0.5220	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.919	0.000	95	515202	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.918	13.919	0.000	52	69443	0.5000	0.4721	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	94	46597	0.5000	0.5509	
111 n-Butylbenzene	134	14.128	14.128	0.000	97	19339	0.5000	0.4103	
110 Benzyl chloride	126	14.156	14.156	0.000	77	2191	0.5000	1.31	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	96	34309	0.5000	0.5115	
113 n-Nonyl Aldehyde	57	15.064	15.078	-0.014	28	2092	0.5000	1.57	
115 1,2-Dibromo-3-Chloropropan	157	15.147	15.148	-0.001	1	1352	0.5000	0.4836	M
114 1,3,5-Trichlorobenzene	180	15.161	15.162	-0.001	96	32201	0.5000	0.4846	
116 Hexachlorobutadiene	225	15.734	15.748	-0.014	98	20628	0.5000	0.5123	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	23974	0.5000	0.4916	
118 Naphthalene	128	16.153	16.153	0.000	96	21039	0.5000	0.6929	
120 1,2,3-Trichlorobenzene	180	16.349	16.349	0.000	96	19450	0.5000	0.5005	
S 119 Xylenes, Total	106				0			0.8579	
S 130 Trihalomethanes, Total	1				0			1.96	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 Surr 25_00071

Amount Added: 0.50

Units: uL

8260 NewWkMix_00206

Amount Added: 0.50

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7558.D

Injection Date: 14-Feb-2017 12:23:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: ic

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

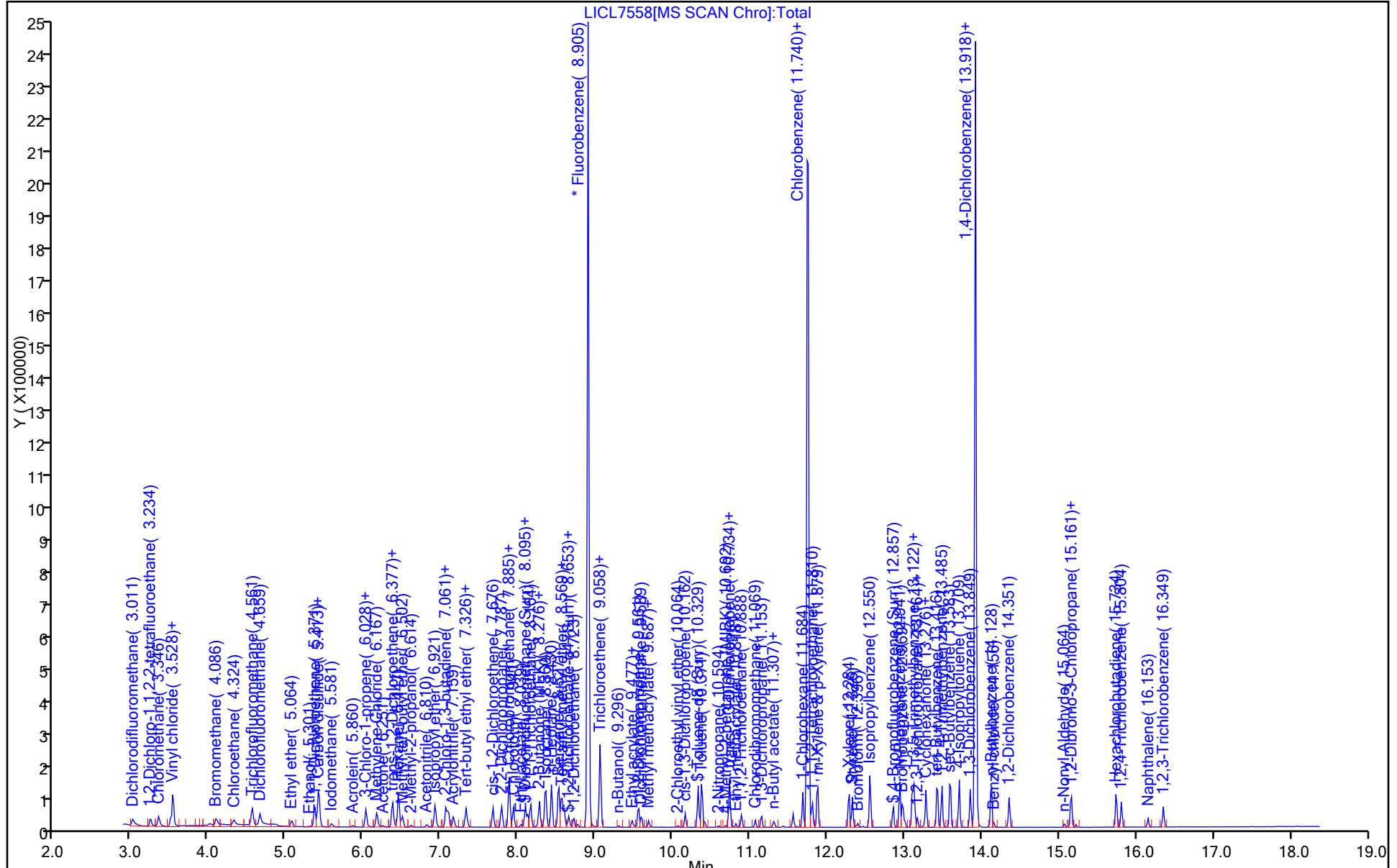
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis

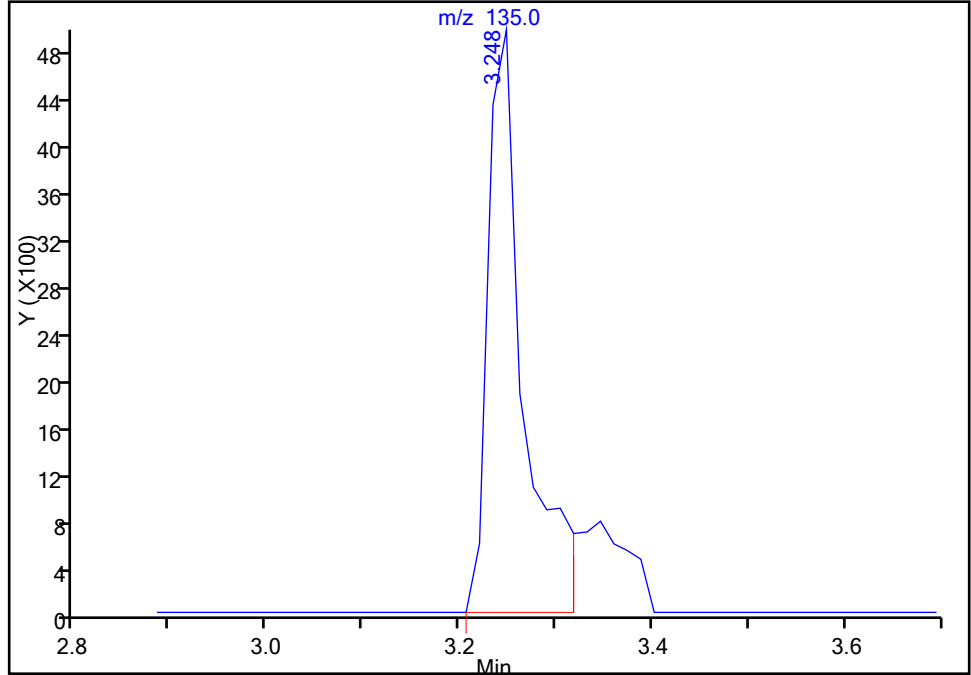
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Injection Date: 14-Feb-2017 12:23:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector: MS SCAN

2 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Signal: 1

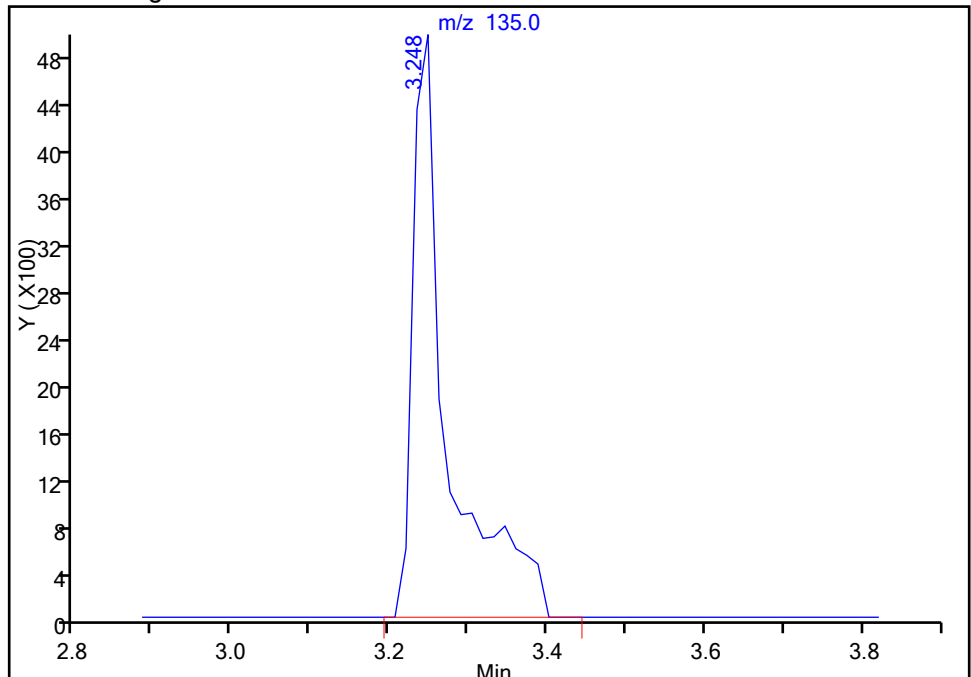
RT: 3.25
Area: 12825
Amount: 0.467627
Amount Units: ug/l

Processing Integration Results



RT: 3.25
Area: 15370
Amount: 0.507975
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:50:05
Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica St. Louis

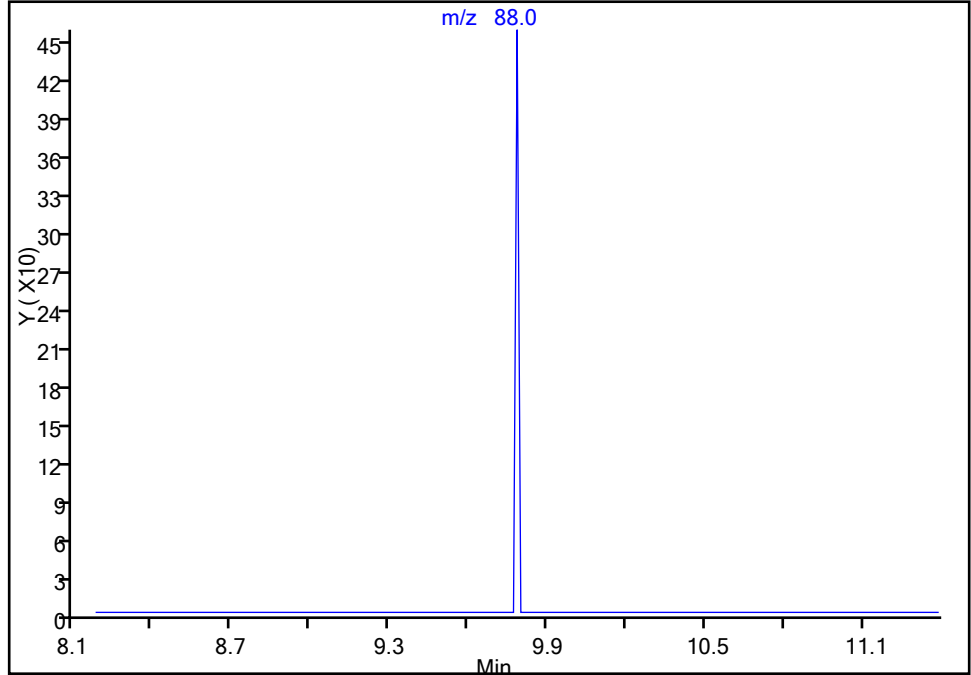
Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7558.D
Injection Date: 14-Feb-2017 12:23:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

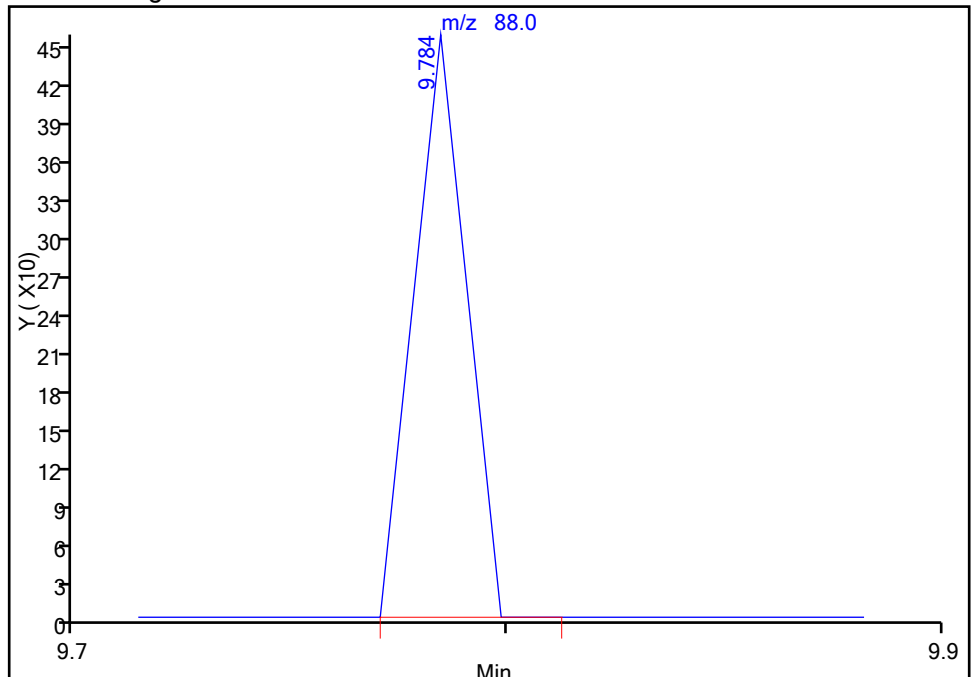
Not Detected
Expected RT: 9.78

Processing Integration Results



RT: 9.78
Area: 385
Amount: 11.286136
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:50:05
Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica St. Louis

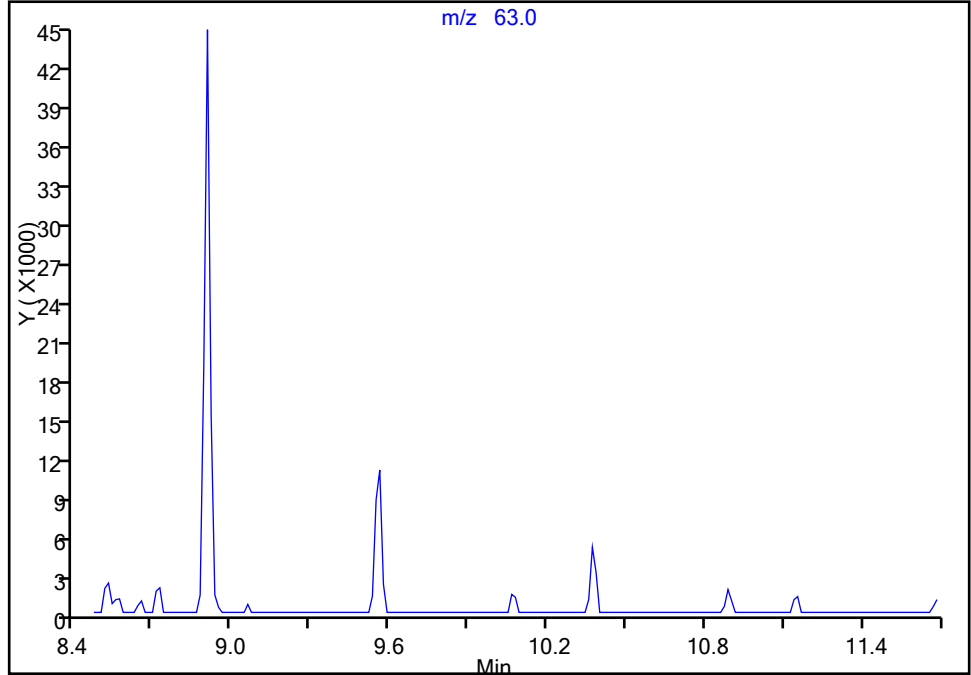
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Injection Date: 14-Feb-2017 12:23:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector: MS SCAN

66 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

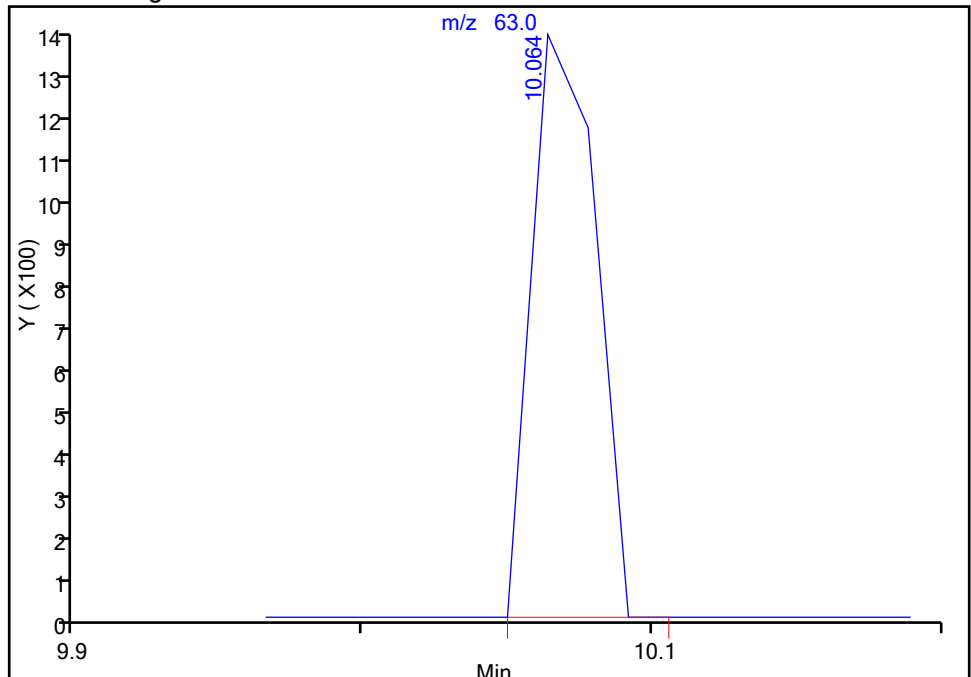
Not Detected
Expected RT: 10.08

Processing Integration Results



RT: 10.06
Area: 2111
Amount: 0.635951
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:50:05
Audit Action: Manually Integrated

TestAmerica St. Louis

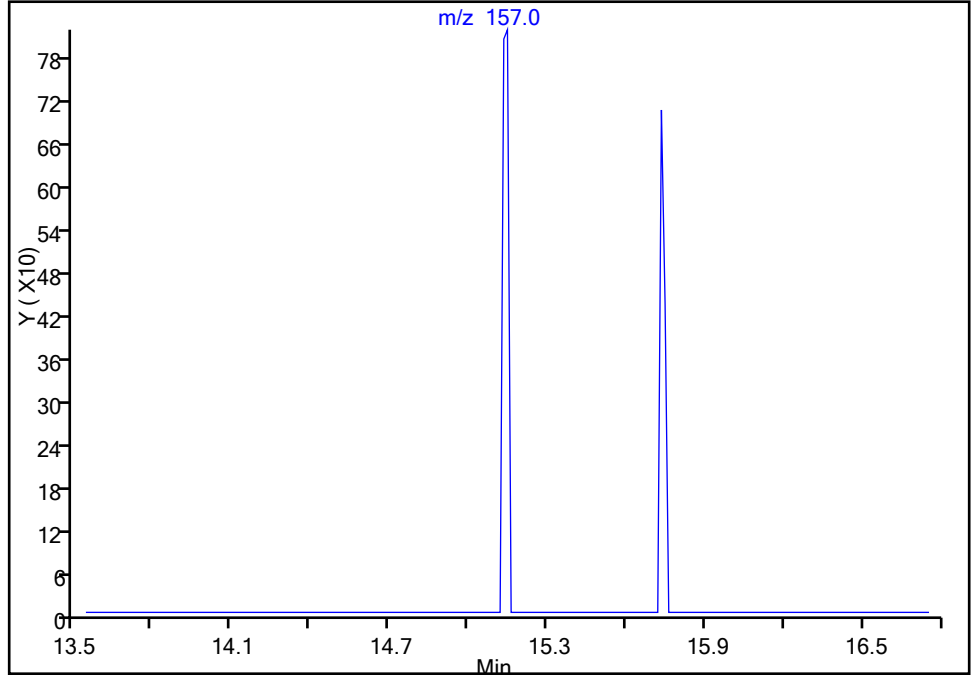
Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7558.D
Injection Date: 14-Feb-2017 12:23:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector: MS SCAN

115 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

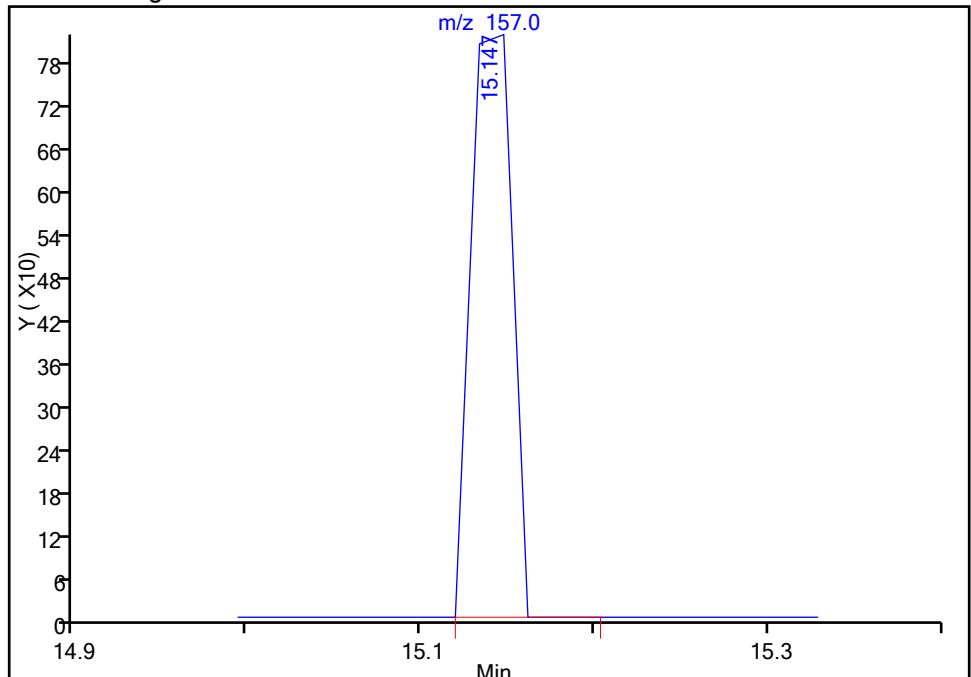
Not Detected
Expected RT: 15.15

Processing Integration Results



RT: 15.15
Area: 1352
Amount: 0.483639
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:50:05
Audit Action: Assigned Compound ID

Audit Reason: Peak Tail

TestAmerica St. Louis

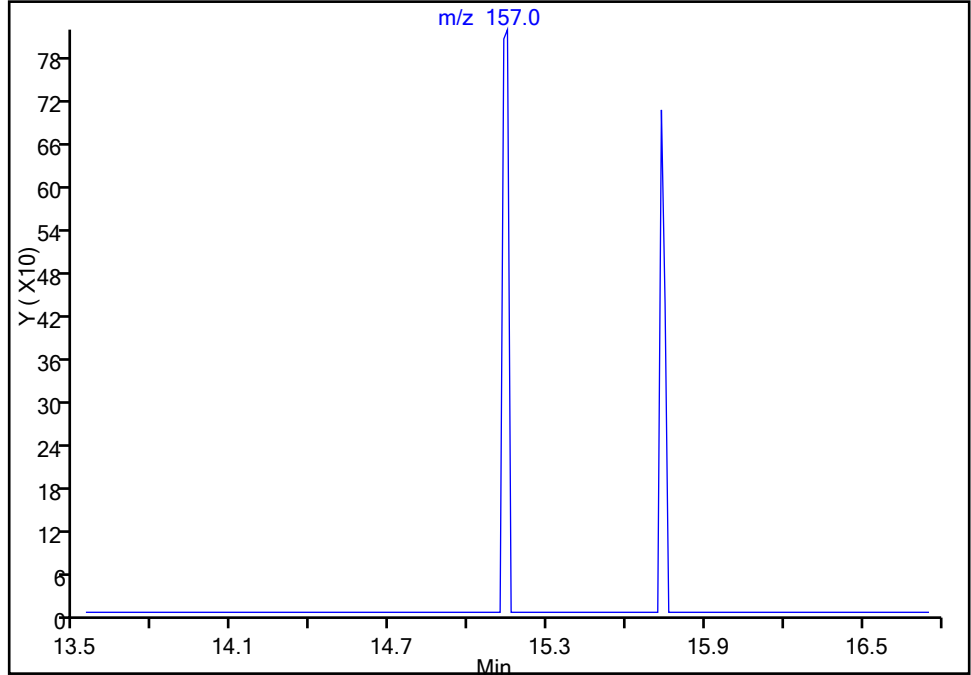
Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7558.D
Injection Date: 14-Feb-2017 12:23:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

115 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

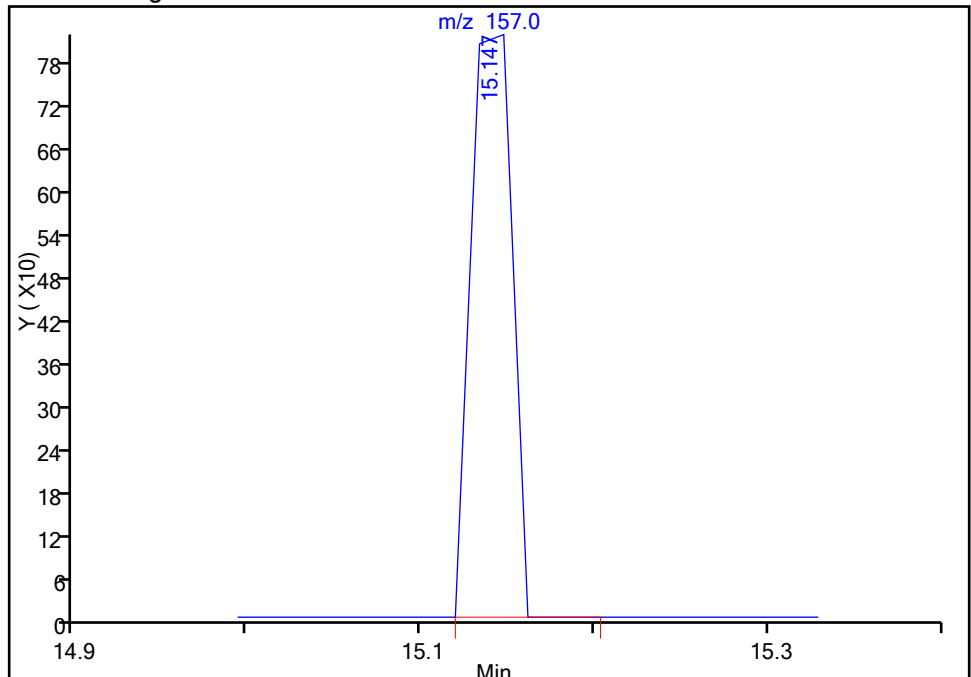
Not Detected
Expected RT: 15.15

Processing Integration Results



Manual Integration Results

RT: 15.15
Area: 1352
Amount: 0.483639
Amount Units: ug/l



Reviewer: rhoadess, 15-Feb-2017 10:50:05

Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7559.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 14-Feb-2017 12:49:30 ALS Bottle#: 3 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:40:49 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: rhoadess

Date: 15-Feb-2017 10:51:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	62965	1.00	1.02	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	98	30017	1.00	0.9711	M
3 Chloromethane	50	3.346	3.346	0.000	99	68333	1.00	1.03	
4 Vinyl chloride	62	3.500	3.500	0.000	98	66452	1.00	1.00	
5 Butadiene	39	3.528	3.528	0.000	91	71008	1.00	1.00	
6 Bromomethane	94	4.100	4.100	0.000	91	31686	1.00	1.05	
7 Chloroethane	64	4.324	4.324	0.000	100	40368	1.00	1.04	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	98	84155	1.00	1.03	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	89693	1.00	1.03	
10 Ethyl ether	74	5.078	5.064	0.014	92	12925	1.00	0.8817	
11 Ethanol	45	5.315	5.315	0.000	97	5143	40.0	38.6	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	95	43846	1.00	0.9531	
13 Carbon disulfide	76	5.413	5.413	0.000	100	159923	1.00	0.9829	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	92	45151	1.00	1.01	
16 Iodomethane	142	5.581	5.581	0.000	99	23270	1.00	0.9884	
S 15 1,2-Dichloroethene, Total	96				0			1.94	
17 Acrolein	56	5.860	5.860	0.000	97	8152	5.00	4.37	
18 3-Chloro-1-propene	39	6.028	6.028	0.000	90	50856	1.00	0.9491	
19 Isopropyl alcohol	45	6.069	6.069	0.000	96	5659	10.0	9.29	
20 Methylene Chloride	84	6.167	6.167	0.000	97	38117	1.00	1.00	
21 Acetone	43	6.251	6.251	0.000	98	8994	1.00	0.8797	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	97	47530	1.00	0.9896	
23 Methyl acetate	74	6.391	6.391	0.000	98	8455	5.00	4.36	
24 Hexane	86	6.461	6.447	0.014	94	14950	1.00	0.9009	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	92	45467	1.00	0.9035	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	81	6655	10.0	9.18	
27 Acetonitrile	41	6.810	6.810	0.000	99	17254	10.0	10.4	
28 Isopropyl ether	45	6.921	6.921	0.000	91	97005	1.00	0.8750	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	94	72819	1.00	0.8860	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	96	87461	1.00	1.00	
31 Acrylonitrile	53	7.159	7.159	0.000	98	48173	10.0	9.49	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	93	63297	1.00	0.8382	
33 Vinyl acetate	43	7.340	7.340	0.000	97	30088	1.00	0.8497	
34 cis-1,2-Dichloroethene	96	7.676	7.676	0.000	82	42976	1.00	0.9456	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	88	57472	1.00	0.9694	
36 Cyclohexane	84	7.885	7.885	0.000	92	77268	1.00	0.9261	
37 Chlorobromomethane	128	7.885	7.885	0.000	54	14532	1.00	1.00	
38 Chloroform	83	7.941	7.941	0.000	95	75489	1.00	0.99	
39 Ethyl acetate	45	8.039	8.039	0.000	99	2556	2.00	2.00	
40 Carbon tetrachloride	117	8.095	8.095	0.000	98	67711	1.00	0.9862	
\$ 42 Dibromofluoromethane (Surr	113	8.123	8.123	0.000	94	32765	1.00	1.01	
41 Tetrahydrofuran	71	8.123	8.123	0.000	43	1878	2.00	2.04	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	97	76552	1.00	0.9765	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	98	12327	1.00	0.9111	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	64090	1.00	0.9501	
44 Isooctane	57	8.360	8.360	0.000	96	213924	1.00	0.9198	
46 n-Heptane	43	8.430	8.430	0.000	91	94376	1.00	0.9653	
48 Benzene	78	8.528	8.528	0.000	97	193558	1.00	1.02	
50 Methacrylonitrile	41	8.569	8.555	0.014	93	100688	10.0	9.65	
49 Propionitrile	54	8.555	8.555	0.000	42	18650	10.0	9.64	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	85	42236	1.00	0.8552	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	91	33889	1.00	1.06	
52 Isobutyl alcohol	42	8.667	8.667	0.000	87	5703	25.0	21.6	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	97	38947	1.00	1.02	
* 55 Fluorobenzene	96	8.905	8.905	0.000	99	1753300	10.0	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	67	53667	1.00	1.02	
58 Methylcyclohexane	55	9.058	9.058	0.000	94	85220	1.00	0.99	
59 n-Butanol	56	9.296	9.296	0.000	88	3978	25.0	40.2	
61 Dibromomethane	93	9.477	9.477	0.000	95	13554	1.00	0.99	
60 Ethyl acrylate	55	9.505	9.505	0.000	53	11095	1.00	0.9841	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	90	37349	1.00	0.9546	
63 Dichlorobromomethane	83	9.603	9.603	0.000	99	41012	1.00	0.9535	
64 Methyl methacrylate	69	9.687	9.687	0.000	93	13895	2.00	1.94	
65 1,4-Dioxane	88	9.798	9.785	0.014	81	1673	20.0	21.1	
66 2-Chloroethyl vinyl ether	63	10.064	10.078	-0.014	1	4488	1.00	0.9513	M
67 cis-1,3-Dichloropropene	75	10.162	10.162	0.000	93	38685	1.00	0.8438	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	93	155095	1.00	0.9774	
69 Toluene	92	10.371	10.371	0.000	98	110695	1.00	0.9485	
70 2-Nitropropane	43	10.595	10.595	0.000	93	4451	2.00	3.18	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	97	7780	1.00	1.02	
73 Tetrachloroethene	164	10.734	10.734	0.000	97	45895	1.00	1.02	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	67	28538	1.00	0.8248	
74 Ethyl methacrylate	69	10.818	10.818	0.000	89	12210	1.00	1.00	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	93	17086	1.00	0.9821	
76 Chlorodibromomethane	129	11.069	11.069	0.000	90	20866	1.00	0.8873	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	94	36119	1.00	0.9608	
78 n-Butyl acetate	43	11.307	11.307	0.000	93	12423	1.00	1.37	
79 Ethylene Dibromide	107	11.321	11.321	0.000	99	16303	1.00	0.9222	
80 2-Hexanone	43	11.433	11.433	-0.001	91	5726	1.00	0.9468	
81 1-Chlorohexane	91	11.684	11.684	0.000	90	57056	1.00	0.8893	
82 Ethylbenzene	91	11.754	11.754	0.000	95	236921	1.00	1.03	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	86	1177993	10.0	10.0	
84 Chlorobenzene	112	11.768	11.768	0.000	97	122627	1.00	1.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131	11.810	11.810	0.000	94	33841	1.00	0.9331	
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	80746	1.00	0.9424	
88 o-Xylene	106	12.284	12.284	0.000	96	63565	1.00	0.8744	
89 Styrene	104	12.326	12.326	0.000	93	90624	1.00	0.8390	
90 Bromoform	173	12.396	12.396	0.000	96	10162	1.00	0.8680	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	201198	1.00	0.9262	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	46185	1.00	0.9512	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	234106	1.00	0.9492	
94 Bromobenzene	156	12.983	12.983	0.000	89	43258	1.00	0.9817	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	96	18801	1.00	0.9677	
96 1,3,5-Trimethylbenzene	105	13.108	13.108	0.000	93	151136	1.00	0.9017	
97 2-Chlorotoluene	91	13.122	13.122	0.000	95	167238	1.00	1.01	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	89	6087	1.00	0.9404	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	73	5294	1.00	0.9212	
100 Cyclohexanone	55	13.248	13.248	0.000	84	3312	10.0	16.3	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	133966	1.00	0.9458	
102 tert-Butylbenzene	119	13.430	13.430	0.000	94	146703	1.00	0.9292	
103 1,2,4-Trimethylbenzene	105	13.486	13.486	0.000	98	160823	1.00	0.9378	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	243586	1.00	0.9815	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	185074	1.00	0.9361	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	93578	1.00	1.00	
107 1,2,3-Trimethylbenzene	105	13.918	13.919	0.000	74	158309	1.00	0.9717	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.919	0.000	95	570564	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	95	95431	1.00	1.02	
111 n-Butylbenzene	134	14.128	14.128	0.000	97	48236	1.00	0.9242	
110 Benzyl chloride	126	14.156	14.156	0.000	87	4337	1.00	1.57	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	73638	1.00	0.99	
113 n-Nonyl Aldehyde	57	15.064	15.078	-0.014	81	3759	1.00	1.69	
115 1,2-Dibromo-3-Chloropropan	157	15.148	15.148	0.000	1	2395	1.00	0.7736	M
114 1,3,5-Trichlorobenzene	180	15.161	15.162	-0.001	98	71852	1.00	0.9765	
116 Hexachlorobutadiene	225	15.748	15.748	0.000	98	46540	1.00	1.04	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	50039	1.00	0.9265	
118 Naphthalene	128	16.153	16.153	0.000	97	41165	1.00	0.9545	
120 1,2,3-Trichlorobenzene	180	16.349	16.349	0.000	95	40169	1.00	0.9333	
S 119 Xylenes, Total	106				0			1.82	
S 130 Trihalomethanes, Total	1				0			3.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 Surr 25_00071

Amount Added: 1.00

Units: uL

8260 NewWkMix_00206

Amount Added: 1.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7559.D

Injection Date: 14-Feb-2017 12:49:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: ic

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

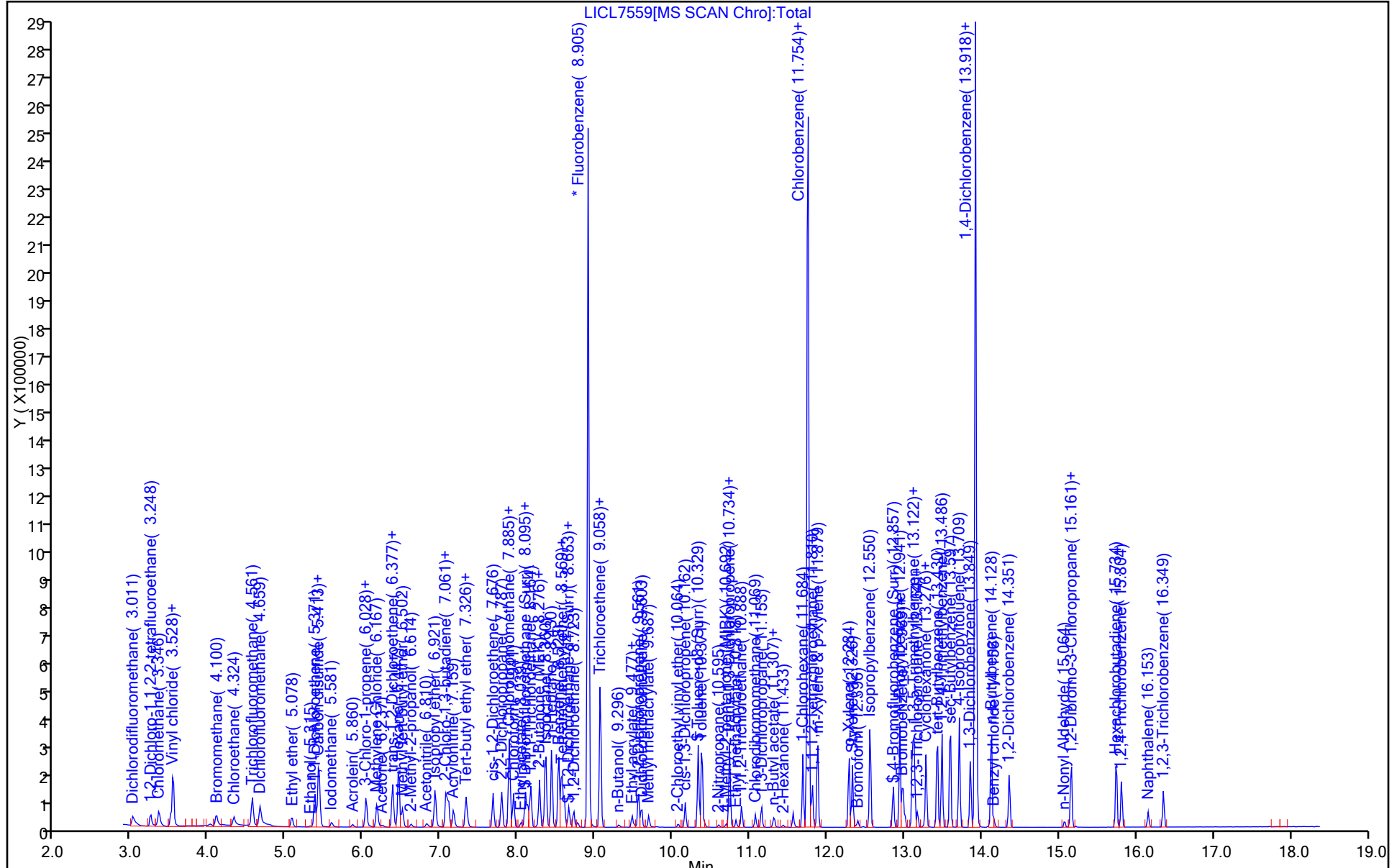
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis

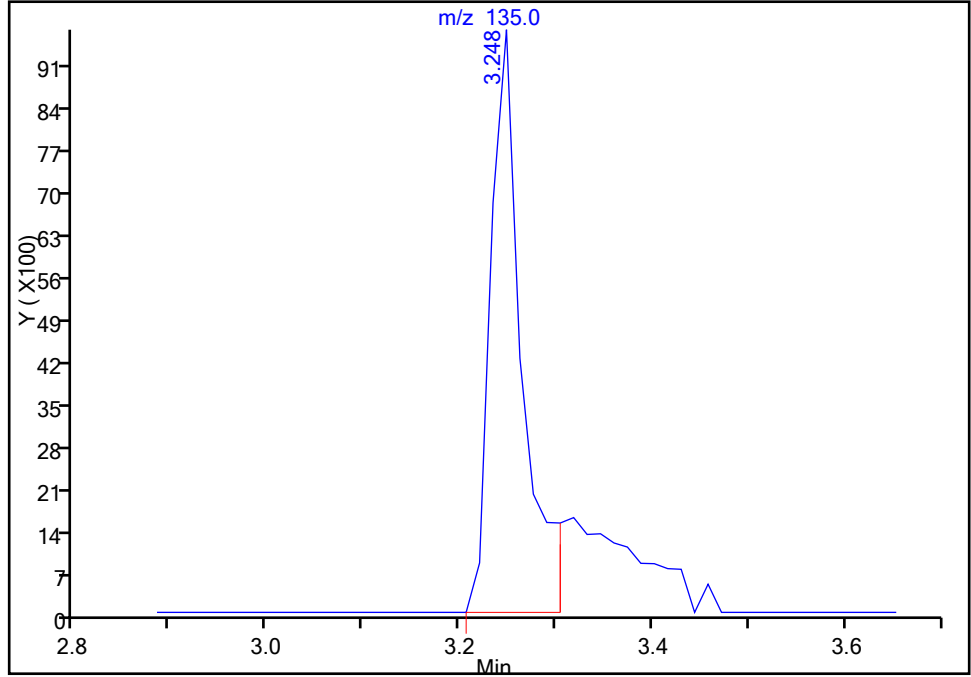
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Injection Date: 14-Feb-2017 12:49:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

2 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Signal: 1

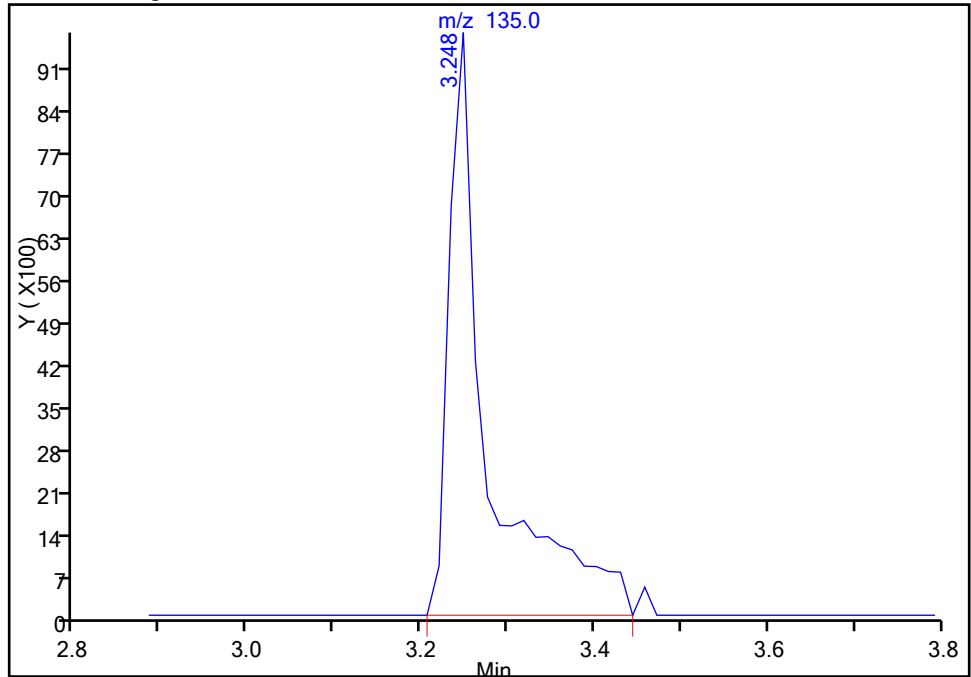
RT: 3.25
Area: 22104
Amount: 0.768545
Amount Units: ug/l

Processing Integration Results



RT: 3.25
Area: 30017
Amount: 0.971083
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:51:32
Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica St. Louis

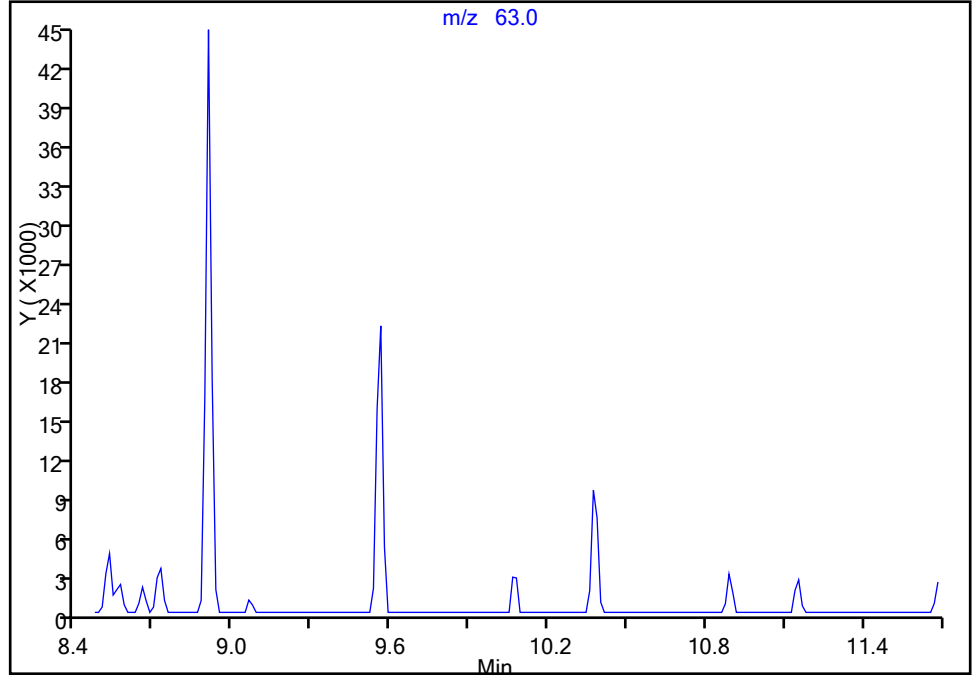
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Injection Date: 14-Feb-2017 12:49:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector: MS SCAN

66 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

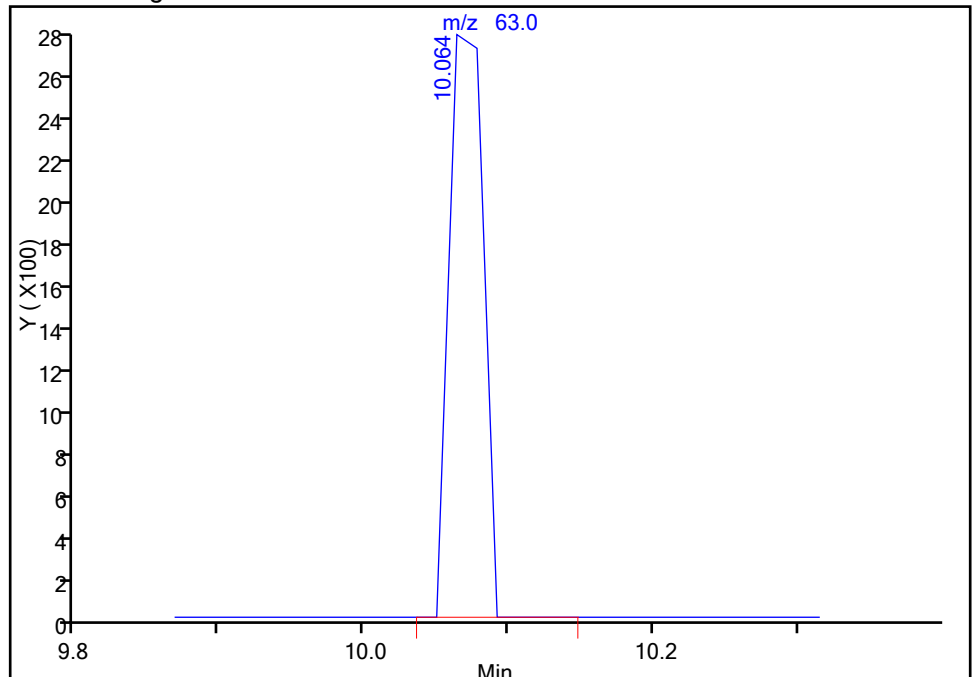
Not Detected
Expected RT: 10.08

Processing Integration Results



RT: 10.06
Area: 4488
Amount: 0.951301
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:51:32
Audit Action: Assigned Compound ID

Audit Reason: Peak Tail

TestAmerica St. Louis

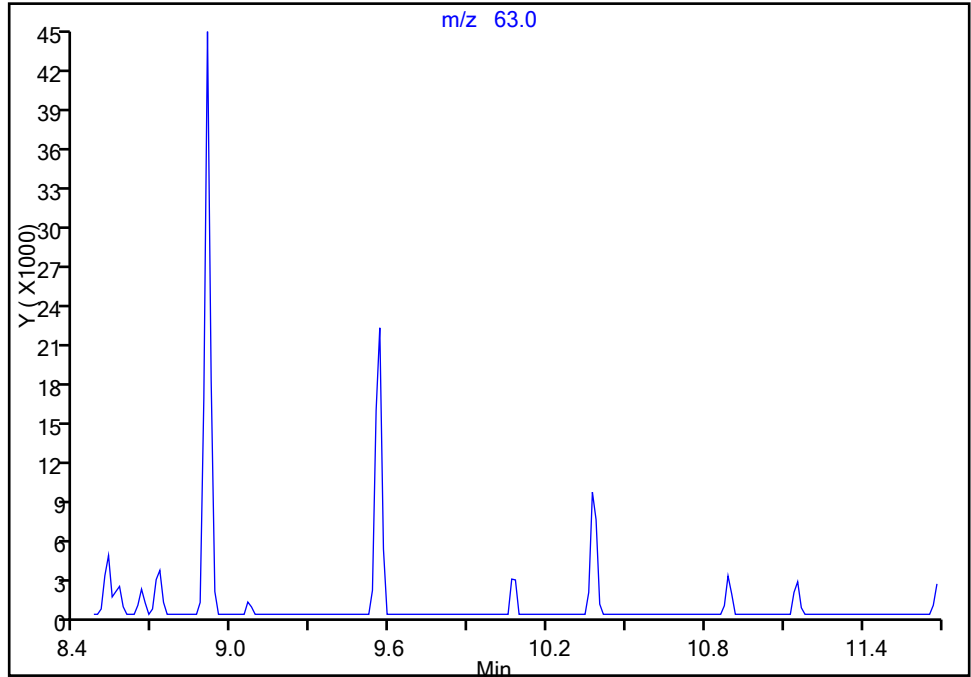
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Injection Date: 14-Feb-2017 12:49:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

66 2-Chloroethyl vinyl ether, CAS: 110-75-8

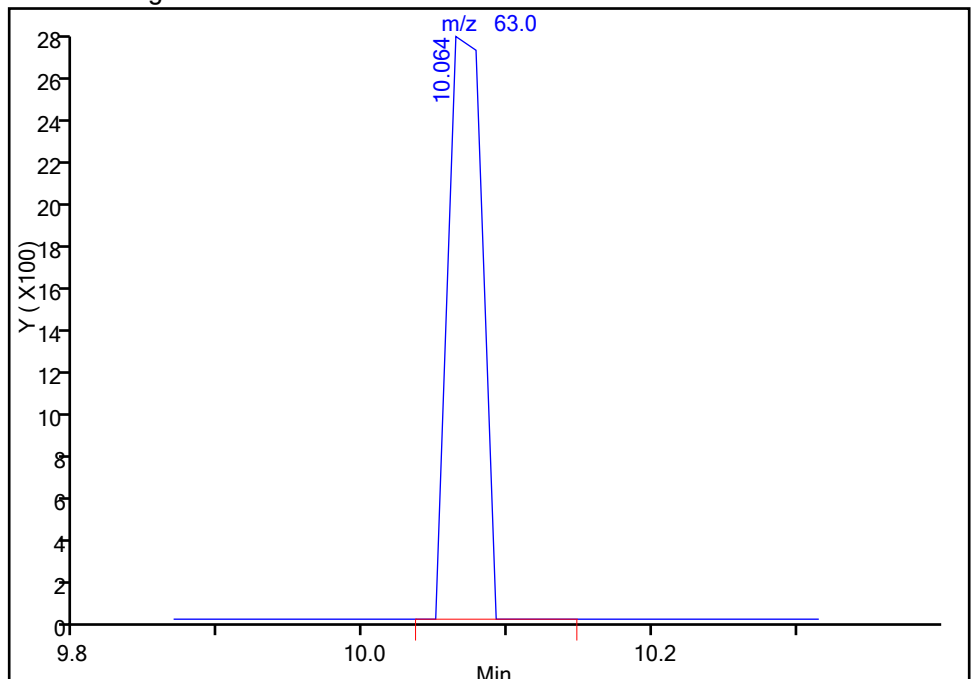
Signal: 1

Not Detected
Expected RT: 10.08

Processing Integration Results



Manual Integration Results



RT: 10.06
Area: 4488
Amount: 0.951301
Amount Units: ug/l

TestAmerica St. Louis

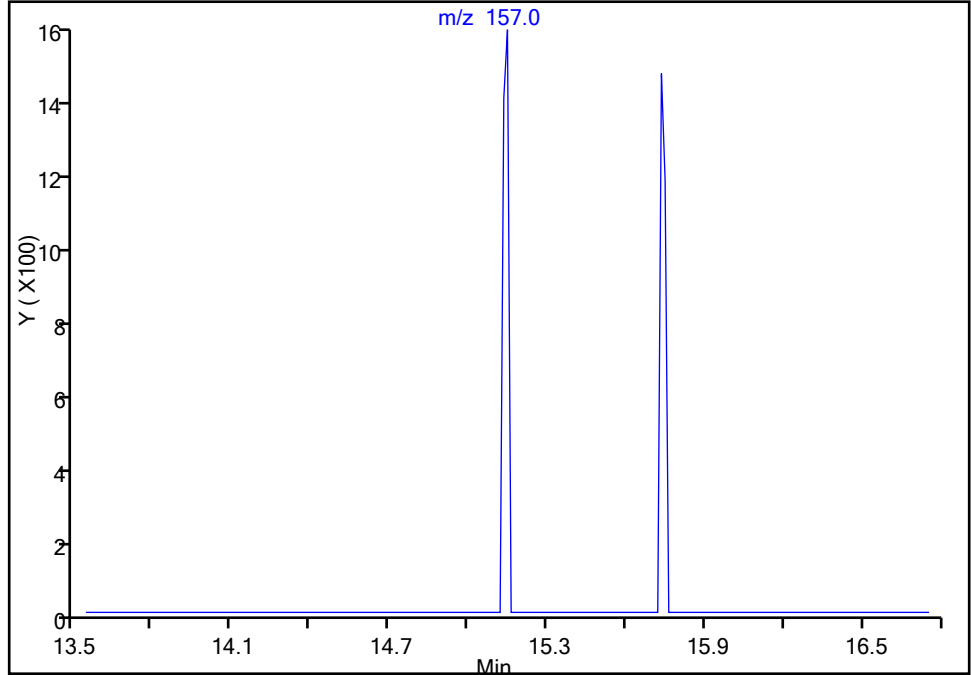
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Injection Date: 14-Feb-2017 12:49:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

115 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

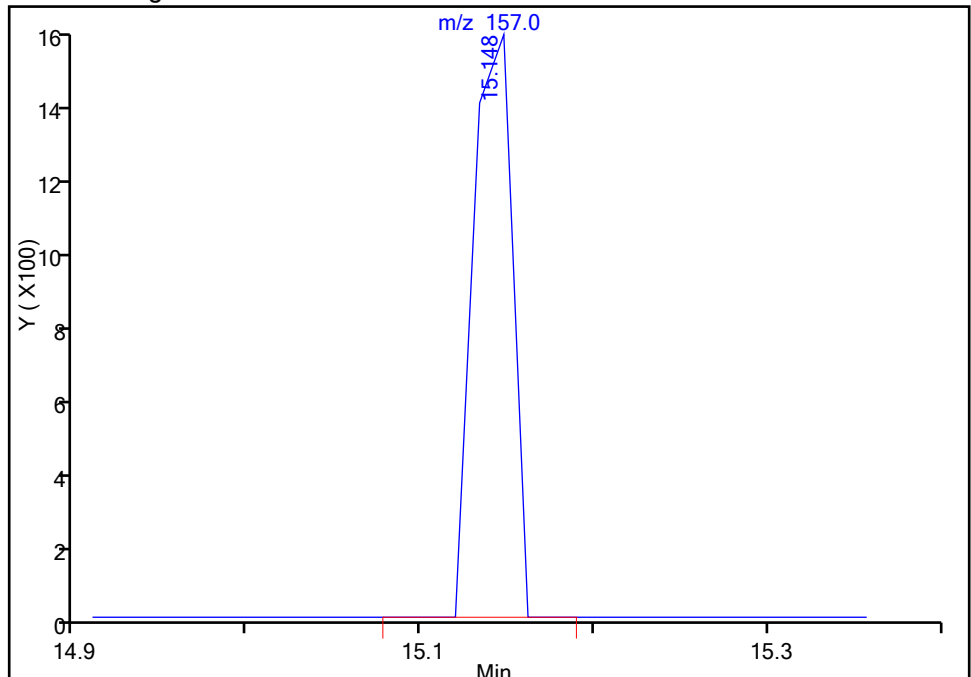
Not Detected
Expected RT: 15.15

Processing Integration Results



Manual Integration Results

RT: 15.15
Area: 2395
Amount: 0.773613
Amount Units: ug/l



Reviewer: rhoadess, 15-Feb-2017 10:51:32
Audit Action: Manually Integrated

Audit Reason: Peak Tail
Page 214 of 372

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7560.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 14-Feb-2017 13:14:30 ALS Bottle#: 4 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:40:52 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: rhoadess

Date: 15-Feb-2017 10:54:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	94786	2.00	1.92	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	47424	2.00	1.92	M
3 Chloromethane	50	3.346	3.346	0.000	99	103698	2.00	1.97	
4 Vinyl chloride	62	3.500	3.500	0.000	98	100871	2.00	1.91	
5 Butadiene	39	3.527	3.528	-0.001	92	111598	2.00	1.97	
6 Bromomethane	94	4.100	4.100	0.000	91	50603	2.00	2.11	
7 Chloroethane	64	4.324	4.324	0.000	99	59909	2.00	1.93	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	99	125236	2.00	1.93	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	138674	2.00	2.00	
10 Ethyl ether	74	5.078	5.064	0.014	91	22026	2.00	1.88	
11 Ethanol	45	5.315	5.315	0.000	97	8956	80.0	84.1	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	96	69478	2.00	1.89	
13 Carbon disulfide	76	5.413	5.413	0.000	100	247896	2.00	1.91	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	90	68871	2.00	1.93	
16 Iodomethane	142	5.581	5.581	0.000	99	35578	2.00	1.57	
S 15 1,2-Dichloroethene, Total	96				0			3.91	
17 Acrolein	56	5.860	5.860	0.000	99	14001	10.0	9.41	
18 3-Chloro-1-propene	39	6.027	6.028	-0.001	91	79649	2.00	1.86	
19 Isopropyl alcohol	45	6.069	6.069	0.000	96	8671	20.0	17.8	
20 Methylene Chloride	84	6.167	6.167	0.000	97	62888	2.00	2.06	
21 Acetone	43	6.251	6.251	0.000	100	10735	2.00	2.12	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	98	75819	2.00	1.98	
23 Methyl acetate	74	6.391	6.391	0.000	98	15092	10.0	9.74	
24 Hexane	86	6.460	6.447	0.013	93	23768	2.00	1.79	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	92	76044	2.00	1.89	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	82	10695	20.0	18.5	
27 Acetonitrile	41	6.824	6.810	0.014	98	27352	20.0	20.6	
28 Isopropyl ether	45	6.921	6.921	0.000	92	164592	2.00	1.86	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	93	118219	2.00	1.80	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	138900	2.00	1.99	
31 Acrylonitrile	53	7.159	7.159	0.000	98	84073	20.0	20.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	93	107921	2.00	1.79	
33 Vinyl acetate	43	7.340	7.340	0.000	98	57193	2.00	2.02	
34 cis-1,2-Dichloroethene	96	7.675	7.676	-0.001	83	70138	2.00	1.93	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	89	86524	2.00	1.83	
37 Chlorobromomethane	128	7.885	7.885	0.000	54	24000	2.00	2.06	
36 Cyclohexane	84	7.885	7.885	0.000	92	122294	2.00	1.84	
38 Chloroform	83	7.941	7.941	0.000	94	121095	2.00	1.99	
39 Ethyl acetate	45	8.039	8.039	0.000	99	4384	4.00	3.53	
40 Carbon tetrachloride	117	8.094	8.095	-0.001	99	104850	2.00	1.91	
41 Tetrahydrofuran	71	8.122	8.123	-0.001	43	3246	4.00	3.60	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.123	-0.001	94	50208	2.00	1.94	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	97	119587	2.00	1.91	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	97	14693	2.00	1.97	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	101267	2.00	1.88	
44 Isooctane	57	8.360	8.360	0.000	96	346406	2.00	1.87	
46 n-Heptane	43	8.430	8.430	0.000	94	150266	2.00	1.93	
48 Benzene	78	8.527	8.528	-0.001	97	306491	2.00	2.02	
49 Propionitrile	54	8.555	8.555	0.000	43	31748	20.0	20.6	
50 Methacrylonitrile	41	8.569	8.555	0.014	93	171441	20.0	20.6	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	85	70287	2.00	1.78	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	91	52534	2.00	2.06	
52 Isobutyl alcohol	42	8.667	8.667	0.000	86	9832	50.0	46.6	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	97	63265	2.00	2.07	
* 55 Fluorobenzene	96	8.904	8.905	-0.001	99	1399392	10.0	10.0	
58 Methylcyclohexane	55	9.058	9.058	0.000	94	131162	2.00	1.91	
57 Trichloroethene	95	9.058	9.058	0.000	67	83494	2.00	1.99	
59 n-Butanol	56	9.296	9.296	0.000	89	7463	50.0	56.2	
61 Dibromomethane	93	9.477	9.477	0.000	94	22385	2.00	2.05	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	19435	2.00	1.67	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	91	62263	2.00	1.99	
63 Dichlorobromomethane	83	9.603	9.603	0.000	99	67584	2.00	1.97	
64 Methyl methacrylate	69	9.687	9.687	0.000	94	24221	4.00	3.37	
65 1,4-Dioxane	88	9.798	9.785	0.014	85	2910	40.0	36.2	
66 2-Chloroethyl vinyl ether	63	10.078	10.078	0.000	92	8671	2.00	1.81	
67 cis-1,3-Dichloropropene	75	10.161	10.162	-0.001	94	66998	2.00	1.83	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	93	239384	2.00	1.85	
69 Toluene	92	10.371	10.371	0.000	98	181421	2.00	1.91	
70 2-Nitropropane	43	10.594	10.595	-0.001	92	8040	4.00	4.53	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	94	13989	2.00	1.78	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	71	48964	2.00	1.74	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	70322	2.00	1.92	
74 Ethyl methacrylate	69	10.818	10.818	0.000	90	20484	2.00	1.51	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	93	27931	2.00	1.97	
76 Chlorodibromomethane	129	11.069	11.069	0.000	90	35923	2.00	1.88	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	95	58317	2.00	1.90	
78 n-Butyl acetate	43	11.307	11.307	0.000	95	20849	2.00	1.98	
79 Ethylene Dibromide	107	11.321	11.321	0.000	98	27278	2.00	1.89	
80 2-Hexanone	43	11.432	11.433	-0.001	95	10489	2.00	1.71	
81 1-Chlorohexane	91	11.684	11.684	0.000	90	90698	2.00	1.74	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	95	959330	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	69	367902	2.00	1.96	
84 Chlorobenzene	112	11.768	11.768	0.000	93	195059	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
85 1,1,1,2-Tetrachloroethane	131	11.809	11.810	-0.001	94	55546	2.00	1.88	
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	131779	2.00	1.89	
88 o-Xylene	106	12.284	12.284	0.000	96	107660	2.00	1.82	
89 Styrene	104	12.326	12.326	0.000	94	161592	2.00	1.84	
90 Bromoform	173	12.396	12.396	0.000	95	17245	2.00	1.79	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	332264	2.00	1.85	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	73047	2.00	1.82	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	389117	2.00	1.91	
94 Bromobenzene	156	12.983	12.983	0.000	93	69900	2.00	1.92	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	97	30682	2.00	1.91	
96 1,3,5-Trimethylbenzene	105	13.108	13.108	0.000	95	256684	2.00	1.86	
97 2-Chlorotoluene	91	13.122	13.122	0.000	95	269160	2.00	1.96	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	89	9955	2.00	1.86	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	69	8335	2.00	1.76	
100 Cyclohexanone	55	13.248	13.248	0.000	90	4529	20.0	21.6	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	222316	2.00	1.90	
102 tert-Butylbenzene	119	13.430	13.430	0.000	94	246377	2.00	1.89	
103 1,2,4-Trimethylbenzene	105	13.485	13.486	-0.001	98	273297	2.00	1.93	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	398627	2.00	1.95	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	314853	2.00	1.93	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	150022	2.00	1.94	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.919	0.000	96	470593	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.918	13.919	0.000	66	255734	2.00	1.90	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	94	151387	2.00	1.96	
111 n-Butylbenzene	134	14.128	14.128	0.000	97	81572	2.00	1.89	
110 Benzyl chloride	126	14.156	14.156	0.000	87	6923	2.00	2.12	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	117835	2.00	1.92	
113 n-Nonyl Aldehyde	57	15.078	15.078	0.000	84	5409	2.00	1.93	
115 1,2-Dibromo-3-Chloropropan	157	15.147	15.148	-0.001	20	4269	2.00	1.67	
114 1,3,5-Trichlorobenzene	180	15.161	15.162	-0.001	98	116179	2.00	1.91	
116 Hexachlorobutadiene	225	15.748	15.748	0.000	97	72618	2.00	1.97	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	82275	2.00	1.85	
118 Naphthalene	128	16.153	16.153	0.000	97	71721	2.00	1.63	
120 1,2,3-Trichlorobenzene	180	16.348	16.349	-0.001	96	67346	2.00	1.90	
S 119 Xylenes, Total	106				0			3.71	
S 130 Trihalomethanes, Total	1				0			7.62	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 Surr 25_00071

Amount Added: 2.00

Units: uL

8260 NewWkMix_00206

Amount Added: 2.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7560.D

Injection Date: 14-Feb-2017 13:14:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: ic

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

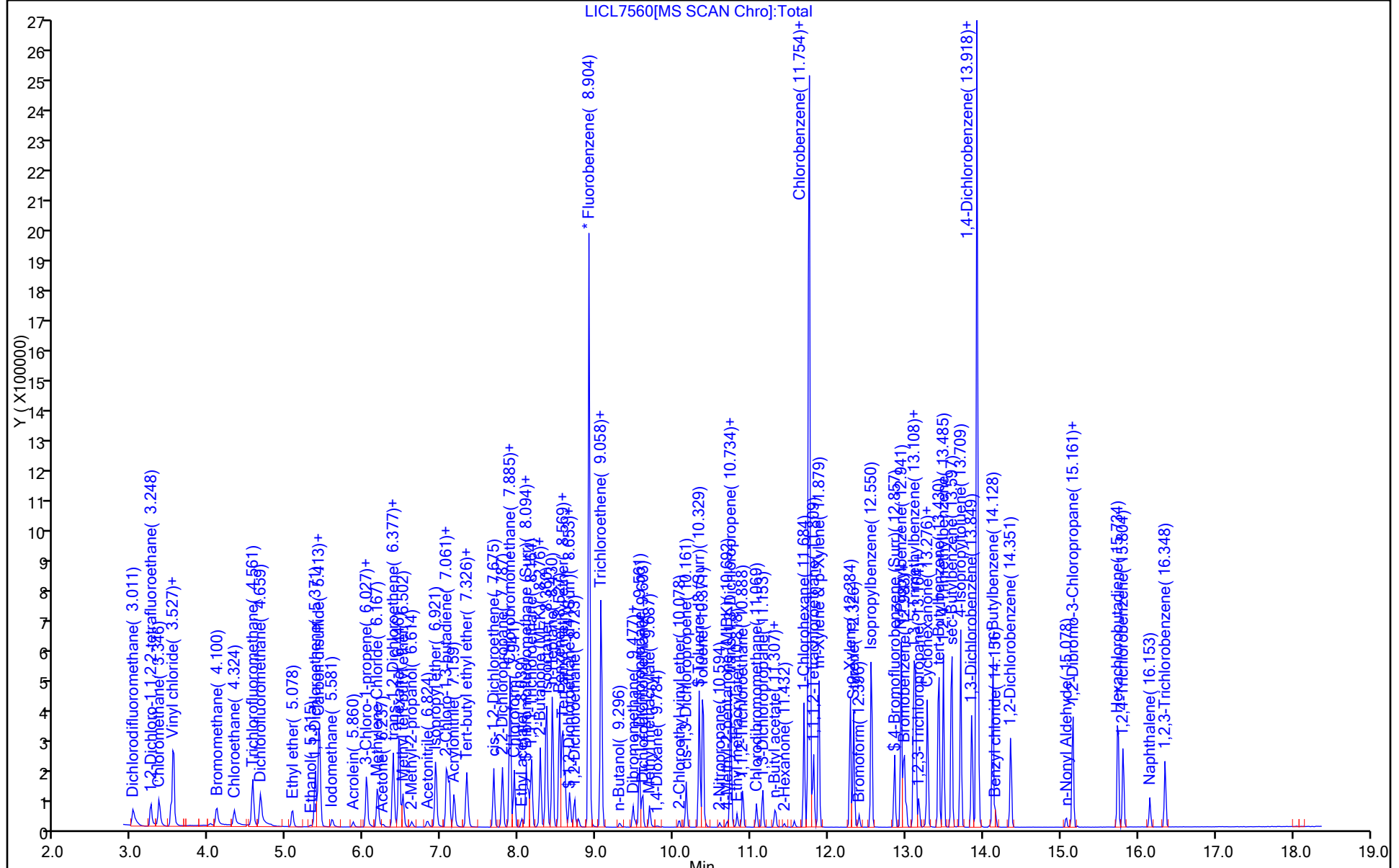
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis

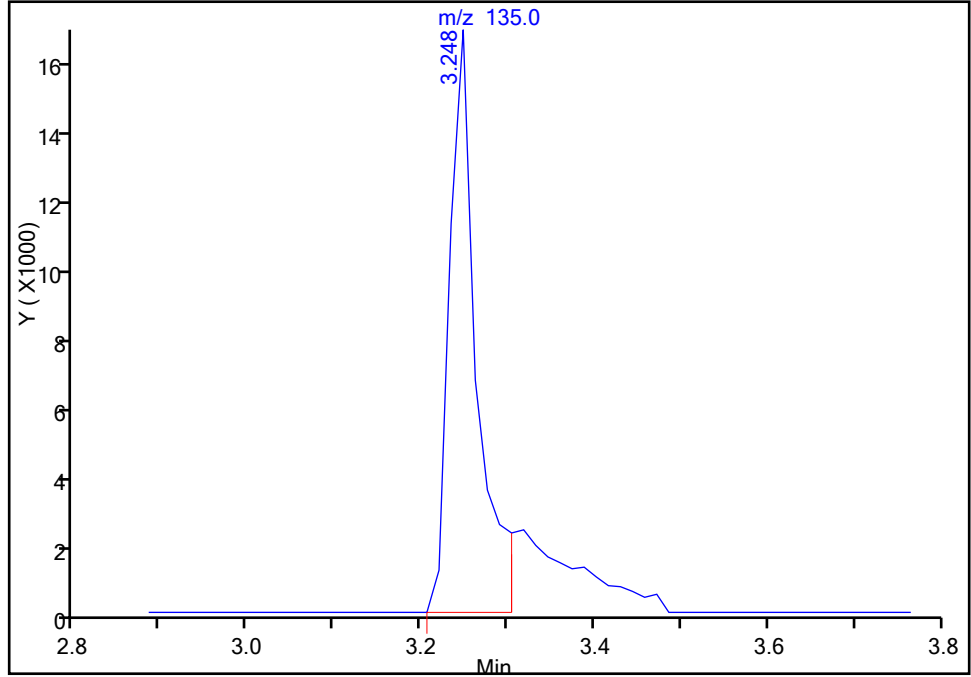
Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7560.D
Injection Date: 14-Feb-2017 13:14:30 Instrument ID: VMSL
Lims ID: ic
Client ID:
Operator ID: SMCR ALS Bottle#: 4 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

2 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Signal: 1

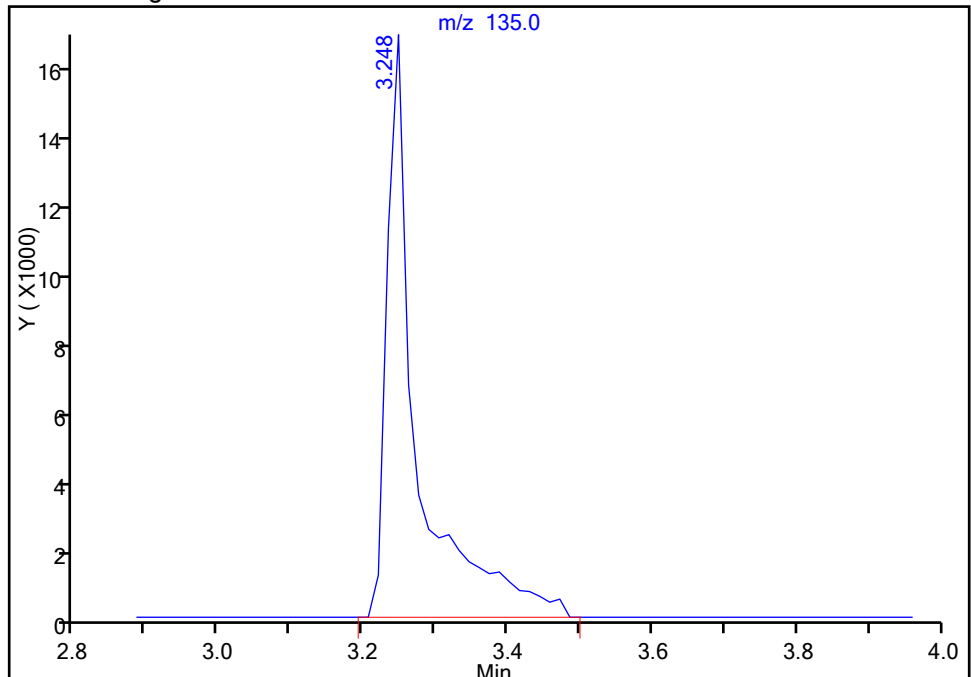
RT: 3.25
Area: 36031
Amount: 1.510250
Amount Units: ug/l

Processing Integration Results



RT: 3.25
Area: 47424
Amount: 1.922224
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:54:25
Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7561.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 14-Feb-2017 13:39:30 ALS Bottle#: 5 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:40:53 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: rhoadess

Date: 15-Feb-2017 10:47:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	100	251708	4.00	4.01	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	126813	4.00	4.04	
3 Chloromethane	50	3.346	3.346	0.000	100	262120	4.00	3.91	
4 Vinyl chloride	62	3.514	3.500	0.014	99	267048	4.00	3.97	
5 Butadiene	39	3.542	3.528	0.014	90	292450	4.00	4.05	
6 Bromomethane	94	4.100	4.100	0.000	90	119430	4.00	3.91	
7 Chloroethane	64	4.324	4.324	0.000	100	160105	4.00	4.06	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	332352	4.00	4.02	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	354094	4.00	4.01	
10 Ethyl ether	74	5.078	5.064	0.014	92	58409	4.00	3.93	
11 Ethanol	45	5.315	5.315	0.000	99	20248	160.0	149.6	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	96	185093	4.00	3.96	
13 Carbon disulfide	76	5.413	5.413	0.000	100	664241	4.00	4.02	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	90	184159	4.00	4.05	
16 Iodomethane	142	5.581	5.581	0.000	98	102207	4.00	3.09	
S 15 1,2-Dichloroethene, Total	96				0			7.98	
17 Acrolein	56	5.860	5.860	0.000	98	35197	20.0	18.6	
18 3-Chloro-1-propene	39	6.028	6.028	0.000	90	221460	4.00	4.07	
19 Isopropyl alcohol	45	6.069	6.069	0.000	96	23172	40.0	37.5	
20 Methylene Chloride	84	6.181	6.167	0.014	96	154556	4.00	3.99	
21 Acetone	43	6.251	6.251	0.000	99	22339	4.00	4.51	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	97	194844	4.00	4.00	
23 Methyl acetate	74	6.391	6.391	0.000	98	39770	20.0	20.2	
24 Hexane	86	6.460	6.447	0.013	92	69908	4.00	4.15	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	91	201413	4.00	3.94	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	84	29002	40.0	39.4	
27 Acetonitrile	41	6.810	6.810	0.000	99	64145	40.0	38.0	
28 Isopropyl ether	45	6.921	6.921	0.000	92	449409	4.00	3.99	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	93	342420	4.00	4.11	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	353362	4.00	3.99	
31 Acrylonitrile	53	7.159	7.159	0.000	99	208110	40.0	40.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	94	296816	4.00	3.87	
33 Vinyl acetate	43	7.340	7.340	0.000	98	142286	4.00	3.96	
34 cis-1,2-Dichloroethene	96	7.676	7.676	0.000	83	183466	4.00	3.98	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	90	236272	4.00	3.93	
36 Cyclohexane	84	7.885	7.885	0.000	92	350857	4.00	4.14	
37 Chlorobromomethane	128	7.885	7.885	0.000	50	59405	4.00	4.02	
38 Chloroform	83	7.941	7.941	0.000	96	307859	4.00	3.98	
39 Ethyl acetate	45	8.039	8.039	0.000	99	12522	8.00	7.07	
40 Carbon tetrachloride	117	8.095	8.095	0.000	99	281071	4.00	4.03	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.123	-0.001	95	126704	4.00	3.85	
41 Tetrahydrofuran	71	8.122	8.123	-0.001	48	8609	8.00	6.75	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	321490	4.00	4.04	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	99	30021	4.00	3.92	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	275394	4.00	4.02	
44 Isooctane	57	8.360	8.360	0.000	96	994490	4.00	4.21	
46 n-Heptane	43	8.430	8.430	0.000	95	413938	4.00	4.17	
48 Benzene	78	8.527	8.528	-0.001	97	769748	4.00	3.98	
50 Methacrylonitrile	41	8.569	8.555	0.014	93	427045	40.0	40.3	
49 Propionitrile	54	8.555	8.555	0.000	42	78442	40.0	39.9	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	88	193645	4.00	3.86	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	92	124885	4.00	3.85	
52 Isobutyl alcohol	42	8.667	8.667	0.000	89	26365	100.0	98.2	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	97	154389	4.00	3.97	
* 55 Fluorobenzene	96	8.905	8.905	0.000	99	1779361	10.0	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	91	214501	4.00	4.01	
58 Methylcyclohexane	55	9.058	9.058	0.000	96	355259	4.00	4.07	
59 n-Butanol	56	9.296	9.296	0.000	93	20579	100.0	88.8	
61 Dibromomethane	93	9.477	9.477	0.000	93	54513	4.00	3.92	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	56902	4.00	3.32	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	92	157474	4.00	3.97	
63 Dichlorobromomethane	83	9.603	9.603	0.000	99	171312	4.00	3.92	
64 Methyl methacrylate	69	9.687	9.687	0.000	94	71341	8.00	6.82	
65 1,4-Dioxane	88	9.784	9.785	0.000	92	8490	80.0	72.4	
66 2-Chloroethyl vinyl ether	63	10.078	10.078	0.000	93	23130	4.00	3.43	
67 cis-1,3-Dichloropropene	75	10.162	10.162	0.000	93	183326	4.00	3.94	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	630833	4.00	4.00	
69 Toluene	92	10.385	10.371	0.014	98	477515	4.00	4.12	
70 2-Nitropropane	43	10.594	10.595	-0.001	98	20833	8.00	7.31	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	96	34405	4.00	3.19	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	177263	4.00	3.97	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	77	137047	4.00	3.99	
74 Ethyl methacrylate	69	10.818	10.818	0.000	91	68461	4.00	3.25	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	95	68699	4.00	3.98	
76 Chlorodibromomethane	129	11.069	11.069	0.000	90	91923	4.00	3.94	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	93	149063	4.00	3.99	
78 n-Butyl acetate	43	11.307	11.307	0.000	96	57900	4.00	3.47	
79 Ethylene Dibromide	107	11.321	11.321	0.000	99	69274	4.00	3.95	
80 2-Hexanone	43	11.432	11.433	-0.001	96	30653	4.00	3.64	
81 1-Chlorohexane	91	11.684	11.684	0.000	92	252136	4.00	3.96	
82 Ethylbenzene	91	11.754	11.754	0.000	95	913138	4.00	4.00	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	87	1169328	10.0	10.0	
84 Chlorobenzene	112	11.768	11.768	0.000	94	472052	4.00	3.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131	11.810	11.810	0.000	95	143690	4.00	3.99	
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	343185	4.00	4.04	
88 o-Xylene	106	12.284	12.284	0.000	96	296261	4.00	4.11	
89 Styrene	104	12.326	12.326	0.000	95	442182	4.00	4.12	
90 Bromoform	173	12.396	12.396	0.000	96	44391	4.00	3.87	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	881821	4.00	4.14	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	184835	4.00	3.88	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	1010750	4.00	4.18	
94 Bromobenzene	156	12.983	12.983	0.000	90	173592	4.00	4.02	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	96	75638	4.00	3.97	
96 1,3,5-Trimethylbenzene	105	13.108	13.108	0.000	95	683531	4.00	4.16	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	666024	4.00	4.08	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	89	25017	4.00	3.94	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	73	23138	4.00	4.11	
100 Cyclohexanone	55	13.248	13.248	0.000	94	11067	40.0	35.5	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	567876	4.00	4.09	
102 tert-Butylbenzene	119	13.430	13.430	0.000	93	638927	4.00	4.13	
103 1,2,4-Trimethylbenzene	105	13.486	13.486	0.000	97	702078	4.00	4.17	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	993992	4.00	4.08	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	805672	4.00	4.16	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	361693	4.00	3.94	
107 1,2,3-Trimethylbenzene	105	13.918	13.919	0.000	83	644762	4.00	4.04	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.919	0.000	96	559512	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	94	366901	4.00	3.99	
111 n-Butylbenzene	134	14.128	14.128	0.000	96	206207	4.00	4.03	
110 Benzyl chloride	126	14.156	14.156	0.000	88	19040	4.00	3.61	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	288210	4.00	3.96	
113 n-Nonyl Aldehyde	57	15.078	15.078	0.000	86	20217	4.00	3.10	
115 1,2-Dibromo-3-Chloropropan	157	15.147	15.148	-0.001	81	11637	4.00	3.83	
114 1,3,5-Trichlorobenzene	180	15.161	15.162	-0.001	98	290282	4.00	4.02	
116 Hexachlorobutadiene	225	15.748	15.748	0.000	97	167863	4.00	3.84	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	208981	4.00	3.95	
118 Naphthalene	128	16.153	16.153	0.000	97	209562	4.00	3.48	
120 1,2,3-Trichlorobenzene	180	16.349	16.349	0.000	96	166827	4.00	3.95	
S 119 Xylenes, Total	106				0			8.14	
S 130 Trihalomethanes, Total	1				0			15.7	

Reagents:

8260 Surr 25_00071

Amount Added: 4.00

Units: uL

8260 NewWkMix_00206

Amount Added: 4.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7561.D

Injection Date: 14-Feb-2017 13:39:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: ic

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

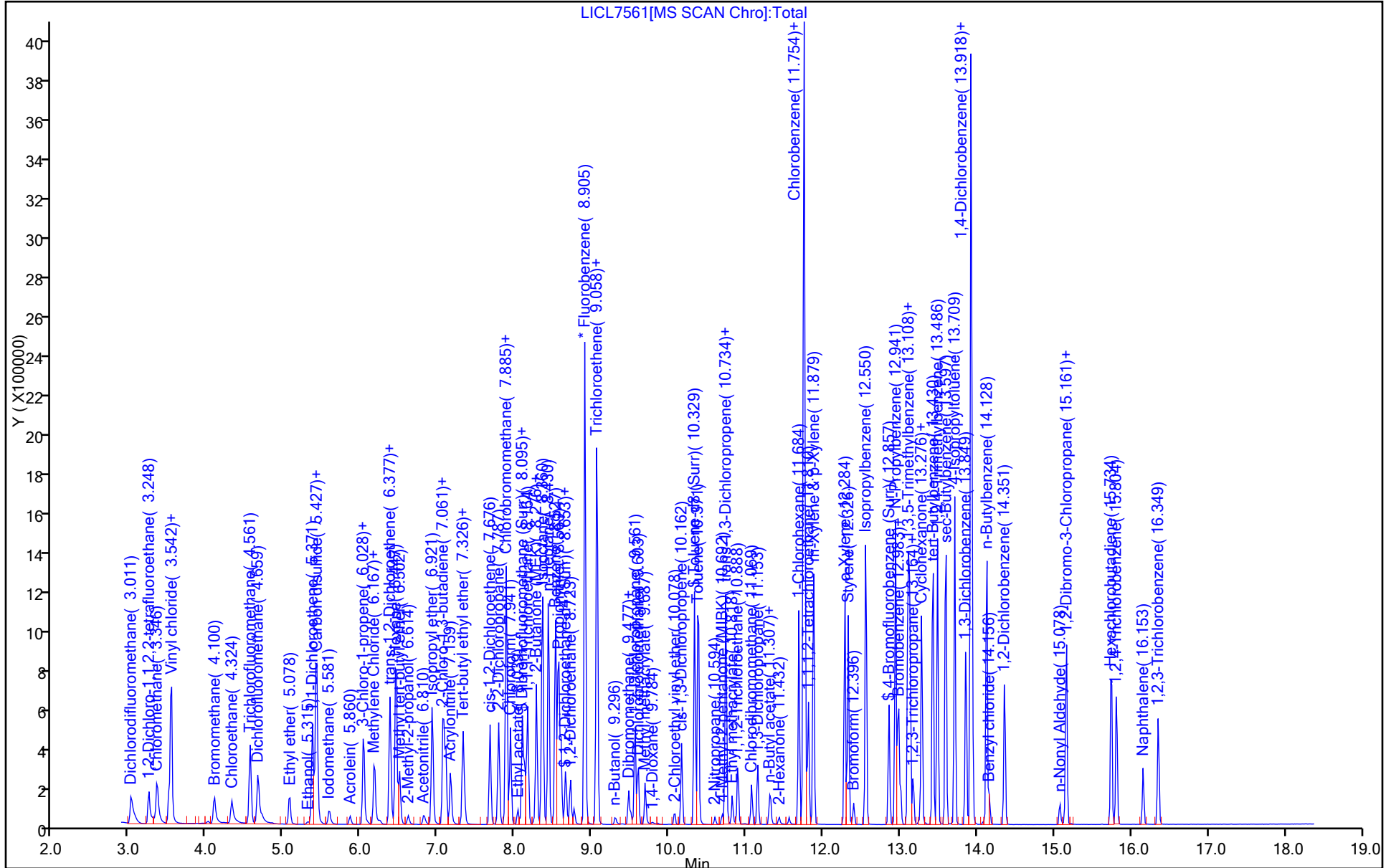
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



LICL7561[MS SCAN Chrom]:Total

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7562.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 14-Feb-2017 14:05:30 ALS Bottle#: 6 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS
 Misc. Info.: 10
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:40:55 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: rhoadess

Date: 15-Feb-2017 10:55:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	634852	10.0	9.85	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	100	325126	10.0	10.1	
3 Chloromethane	50	3.346	3.346	0.000	99	637841	10.0	9.28	
4 Vinyl chloride	62	3.500	3.500	0.000	98	685127	10.0	9.93	
5 Butadiene	39	3.528	3.528	0.000	92	733049	10.0	9.90	
6 Bromomethane	94	4.100	4.100	0.000	91	296249	10.0	9.46	
7 Chloroethane	64	4.324	4.324	0.000	100	389941	10.0	9.65	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	826896	10.0	9.75	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	879082	10.0	9.71	
10 Ethyl ether	74	5.064	5.064	0.000	94	154033	10.0	10.1	
11 Ethanol	45	5.315	5.315	0.000	100	48991	400.0	352.8	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	97	485900	10.0	10.1	
13 Carbon disulfide	76	5.413	5.413	0.000	100	1729860	10.0	10.2	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	91	460534	10.0	9.88	
16 Iodomethane	142	5.581	5.581	0.000	99	337296	10.0	9.15	
17 Acrolein	56	5.860	5.860	0.000	99	100915	50.0	52.0	
18 3-Chloro-1-propene	39	6.028	6.028	0.000	91	580706	10.0	10.4	
19 Isopropyl alcohol	45	6.069	6.069	0.000	97	62222	100.0	98.1	
20 Methylene Chloride	84	6.167	6.167	0.000	98	384047	10.0	9.65	
21 Acetone	43	6.251	6.251	0.000	99	44176	10.0	10.2	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	98	508224	10.0	10.2	
23 Methyl acetate	74	6.391	6.391	0.000	98	103417	50.0	51.2	
24 Hexane	86	6.447	6.447	0.000	91	189282	10.0	11.0	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	94	520732	10.0	9.94	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	85	73903	100.0	97.9	
27 Acetonitrile	41	6.810	6.810	0.000	99	155641	100.0	89.8	
28 Isopropyl ether	45	6.921	6.921	0.000	94	1211476	10.0	10.5	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	94	936515	10.0	10.9	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	898980	10.0	9.88	
31 Acrylonitrile	53	7.159	7.159	0.000	99	526284	100.0	99.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	96	809225	10.0	10.3	
33 Vinyl acetate	43	7.340	7.340	0.000	98	381135	10.0	10.3	
34 cis-1,2-Dichloroethene	96	7.676	7.676	0.000	83	480896	10.0	10.2	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	92	625960	10.0	10.1	
37 Chlorobromomethane	128	7.885	7.885	0.000	49	148543	10.0	9.79	
36 Cyclohexane	84	7.885	7.885	0.000	91	948070	10.0	10.9	
38 Chloroform	83	7.941	7.941	0.000	95	789087	10.0	9.95	
39 Ethyl acetate	45	8.039	8.039	0.000	99	35763	20.0	18.5	
40 Carbon tetrachloride	117	8.095	8.095	0.000	99	734608	10.0	10.3	
41 Tetrahydrofuran	71	8.123	8.123	0.000	44	25802	20.0	18.4	
\$ 42 Dibromofluoromethane (Surr	113	8.123	8.123	0.000	95	332989	10.0	9.86	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	834642	10.0	10.2	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	98	65567	10.0	9.75	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	750406	10.0	10.7	
44 Isooctane	57	8.360	8.360	0.000	96	2621621	10.0	10.8	
46 n-Heptane	43	8.430	8.430	0.000	95	1115473	10.0	11.0	
48 Benzene	78	8.528	8.528	0.000	96	1967570	10.0	9.92	
49 Propionitrile	54	8.555	8.555	0.000	38	195483	100.0	97.0	
50 Methacrylonitrile	41	8.555	8.555	0.000	95	1090316	100.0	100.4	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	90	521833	10.0	10.1	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	91	312683	10.0	9.39	
52 Isobutyl alcohol	42	8.667	8.667	0.000	90	71036	250.0	257.9	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	98	388949	10.0	9.74	
* 55 Fluorobenzene	96	8.905	8.905	0.000	99	1825688	10.0	10.0	
58 Methylcyclohexane	55	9.058	9.058	0.000	93	943803	10.0	10.5	
57 Trichloroethene	95	9.058	9.058	0.000	64	551055	10.0	10.0	
59 n-Butanol	56	9.296	9.296	0.000	91	64867	250.0	214.3	
61 Dibromomethane	93	9.477	9.477	0.000	93	138772	10.0	9.74	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	165140	10.0	8.66	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	93	409754	10.0	10.1	
63 Dichlorobromomethane	83	9.603	9.603	0.000	100	452220	10.0	10.1	
64 Methyl methacrylate	69	9.687	9.687	0.000	93	209912	20.0	18.2	
65 1,4-Dioxane	88	9.785	9.785	0.000	94	25179	200.0	193.6	
66 2-Chloroethyl vinyl ether	63	10.078	10.078	0.000	94	71667	10.0	9.65	
67 cis-1,3-Dichloropropene	75	10.162	10.162	0.000	94	515898	10.0	10.8	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	93	1707588	10.0	10.4	
69 Toluene	92	10.371	10.371	0.000	98	1272234	10.0	10.5	
70 2-Nitropropane	43	10.595	10.595	0.000	98	60307	20.0	16.6	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	97	102481	10.0	8.40	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	79	387135	10.0	10.8	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	481253	10.0	10.3	
74 Ethyl methacrylate	69	10.818	10.818	0.000	91	215566	10.0	8.77	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	94	176545	10.0	9.80	
76 Chlorodibromomethane	129	11.069	11.069	0.000	90	248800	10.0	10.2	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	93	385361	10.0	9.90	
78 n-Butyl acetate	43	11.307	11.307	0.000	97	183885	10.0	8.75	
79 Ethylene Dibromide	107	11.321	11.321	0.000	99	184418	10.0	10.1	
80 2-Hexanone	43	11.433	11.433	0.000	96	87490	10.0	9.39	
81 1-Chlorohexane	91	11.684	11.684	0.000	95	778681	10.0	11.7	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	95	1220244	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	98	2486865	10.0	10.4	
84 Chlorobenzene	112	11.768	11.768	0.000	94	1233906	10.0	9.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131	11.810	11.810	0.000	94	381864	10.0	10.2	
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	970153	10.0	10.9	
88 o-Xylene	106	12.284	12.284	0.000	96	845841	10.0	11.2	
89 Styrene	104	12.326	12.326	0.000	95	1271324	10.0	11.4	
90 Bromoform	173	12.396	12.396	0.000	97	120062	10.0	9.73	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	2562749	10.0	11.2	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	519332	10.0	10.1	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	2961062	10.0	11.4	
94 Bromobenzene	156	12.983	12.983	0.000	95	463522	10.0	9.98	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	96	195643	10.0	9.55	
96 1,3,5-Trimethylbenzene	105	13.108	13.108	0.000	95	2019769	10.0	11.4	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	1825409	10.0	10.4	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	88	64386	10.0	9.44	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	86	58231	10.0	9.61	
100 Cyclohexanone	55	13.248	13.248	0.000	91	32256	100.0	81.9	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	1608761	10.0	10.8	
102 tert-Butylbenzene	119	13.430	13.430	0.000	93	1871331	10.0	11.2	
103 1,2,4-Trimethylbenzene	105	13.486	13.486	0.000	97	1995253	10.0	11.0	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	2931782	10.0	11.2	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	2399495	10.0	11.5	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	988692	10.0	10.0	
* 108 1,4-Dichlorobenzene-d4	152	13.919	13.919	0.000	72	601374	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.919	13.919	0.000	97	1787977	10.0	10.4	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	93	966912	10.0	9.79	
111 n-Butylbenzene	134	14.128	14.128	0.000	96	627877	10.0	11.4	
110 Benzyl chloride	126	14.156	14.156	0.000	98	60145	10.0	8.70	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	785043	10.0	10.0	
113 n-Nonyl Aldehyde	57	15.078	15.078	0.000	90	91559	10.0	8.09	
115 1,2-Dibromo-3-Chloropropan	157	15.148	15.148	0.000	83	33140	10.0	10.2	
114 1,3,5-Trichlorobenzene	180	15.162	15.162	0.000	98	801900	10.0	10.3	
116 Hexachlorobutadiene	225	15.748	15.748	0.000	97	487449	10.0	10.4	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	587581	10.0	10.3	
118 Naphthalene	128	16.153	16.153	0.000	97	631041	10.0	9.12	
120 1,2,3-Trichlorobenzene	180	16.349	16.349	0.000	96	458528	10.0	10.1	

Reagents:

8260 Surr 25_00071

Amount Added: 10.00

Units: uL

8260 NewWkMix_00206

Amount Added: 10.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7562.D

Injection Date: 14-Feb-2017 14:05:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: icis

Worklist Smp#: 10

Client ID:

Purge Vol: 25.000 mL

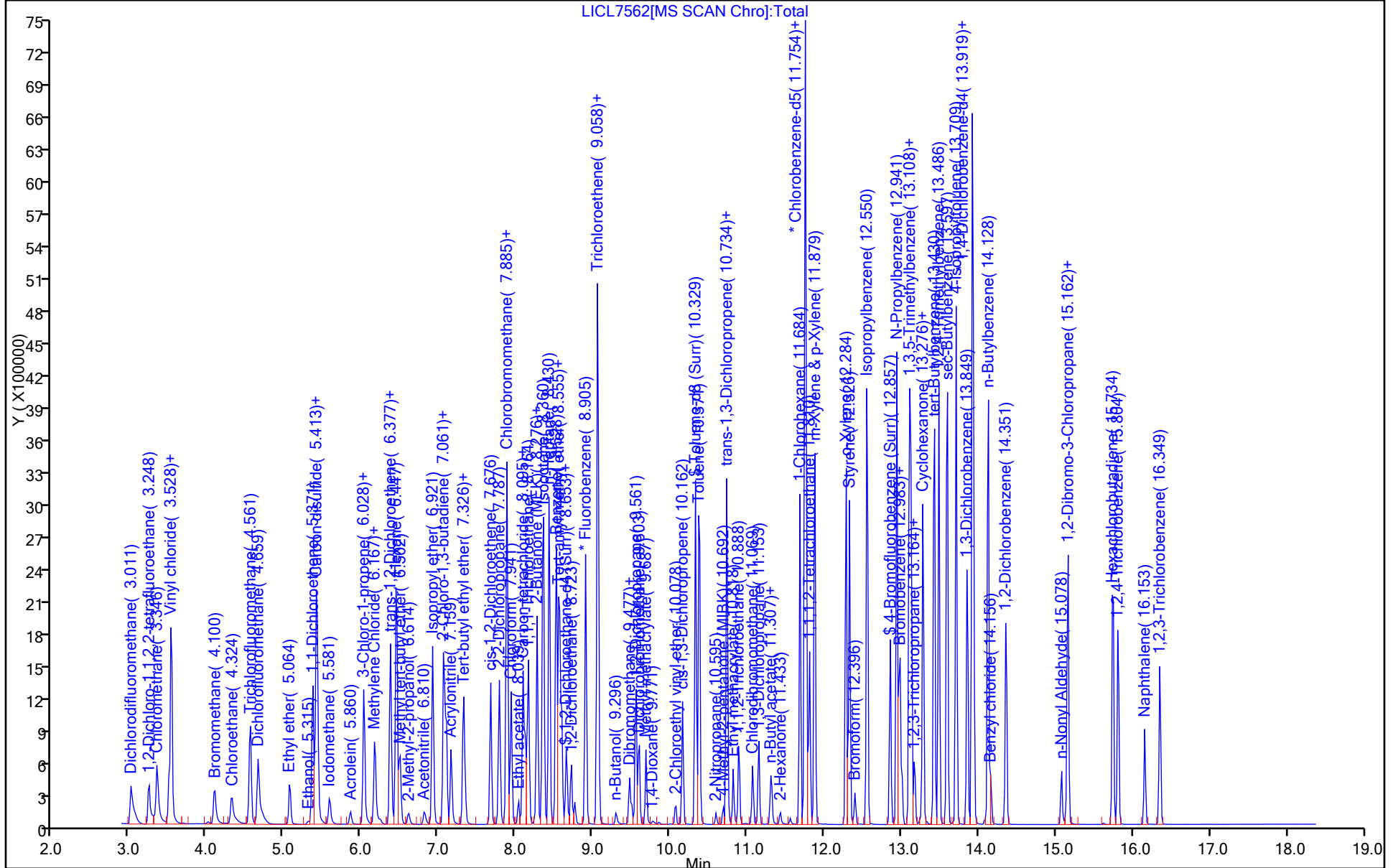
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7563.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 14-Feb-2017 14:30:30 ALS Bottle#: 7 Worklist Smp#: 11
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 20
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17

Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:40:57 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: rhoadess

Date: 15-Feb-2017 10:56:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	1256427	20.0	20.4	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	639957	20.0	20.9	
3 Chloromethane	50	3.346	3.346	0.000	99	1318934	20.0	20.1	
4 Vinyl chloride	62	3.500	3.500	0.000	98	1357335	20.0	20.6	
5 Butadiene	39	3.528	3.528	0.000	91	1446021	20.0	20.5	
6 Bromomethane	94	4.100	4.100	0.000	90	555055	20.0	18.6	
7 Chloroethane	64	4.324	4.324	0.000	100	753649	20.0	19.6	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	1578822	20.0	19.5	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	1696388	20.0	19.7	
10 Ethyl ether	74	5.064	5.064	0.000	94	329022	20.0	22.6	
11 Ethanol	45	5.315	5.315	0.000	100	102897	800.0	777.0	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	97	951766	20.0	20.8	
13 Carbon disulfide	76	5.413	5.413	0.000	100	3302911	20.0	20.4	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	90	893873	20.0	20.1	
16 Iodomethane	142	5.581	5.581	0.000	99	738223	20.0	20.6	
S 15 1,2-Dichloroethene, Total	96				0			41.5	
17 Acrolein	56	5.860	5.860	0.000	99	216721	100.0	117.1	
18 3-Chloro-1-propene	39	6.028	6.028	0.000	91	1150529	20.0	21.6	
19 Isopropyl alcohol	45	6.069	6.069	0.000	97	137823	200.0	227.9	
20 Methylene Chloride	84	6.167	6.167	0.000	98	755598	20.0	19.9	
21 Acetone	43	6.251	6.251	0.000	99	80703	20.0	21.1	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	97	978176	20.0	20.5	
23 Methyl acetate	74	6.391	6.391	0.000	98	217091	100.0	112.7	
24 Hexane	86	6.461	6.447	0.014	90	360150	20.0	21.9	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	95	1126507	20.0	22.5	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	87	160322	200.0	222.7	
27 Acetonitrile	41	6.810	6.810	0.000	99	320302	200.0	193.7	
28 Isopropyl ether	45	6.921	6.921	0.000	94	2566082	20.0	23.3	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	93	1845351	20.0	22.6	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	1756056	20.0	20.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.159	7.159	0.000	99	1073527	200.0	213.1	
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	97	1789705	20.0	23.9	
33 Vinyl acetate	43	7.340	7.340	0.000	98	801797	20.0	22.8	
34 cis-1,2-Dichloroethene	96	7.676	7.676	0.000	83	949313	20.0	21.0	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	93	1233952	20.0	21.0	
36 Cyclohexane	84	7.885	7.885	0.000	91	1784571	20.0	21.5	
37 Chlorobromomethane	128	7.885	7.885	0.000	52	293577	20.0	20.3	
38 Chloroform	83	7.941	7.941	0.000	96	1534405	20.0	20.3	
39 Ethyl acetate	45	8.039	8.039	0.000	99	78629	40.0	41.7	
40 Carbon tetrachloride	117	8.095	8.095	0.000	98	1391641	20.0	20.4	
\$ 42 Dibromofluoromethane (Surr	113	8.123	8.123	0.000	95	641092	20.0	19.9	
41 Tetrahydrofuran	71	8.123	8.123	0.000	89	56935	40.0	41.6	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	1602853	20.0	20.6	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	99	123054	20.0	20.4	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	96	1410741	20.0	21.1	
44 Isooctane	57	8.360	8.360	0.000	96	5005583	20.0	21.7	
46 n-Heptane	43	8.430	8.430	0.000	95	1995284	20.0	20.6	
48 Benzene	78	8.528	8.528	0.000	97	3735154	20.0	19.7	
50 Methacrylonitrile	41	8.555	8.555	0.000	94	2220679	200.0	214.4	
49 Propionitrile	54	8.555	8.555	0.000	39	404254	200.0	210.4	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	92	1162260	20.0	23.7	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	91	599365	20.0	18.9	
52 Isobutyl alcohol	42	8.667	8.667	0.000	93	156359	500.0	595.2	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	98	768531	20.0	20.2	
* 55 Fluorobenzene	96	8.905	8.905	0.000	99	1740931	10.0	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	64	1019746	20.0	19.5	
58 Methylcyclohexane	55	9.058	9.058	0.000	93	1710274	20.0	20.0	
59 n-Butanol	56	9.296	9.296	0.000	91	152940	500.0	488.1	
61 Dibromomethane	93	9.477	9.477	0.000	93	279672	20.0	20.6	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	390858	20.0	20.9	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	94	813917	20.0	21.0	
63 Dichlorobromomethane	83	9.603	9.603	0.000	99	910493	20.0	21.3	
64 Methyl methacrylate	69	9.687	9.687	0.000	93	477155	40.0	42.3	
65 1,4-Dioxane	88	9.784	9.785	0.000	97	52672	400.0	414.9	
66 2-Chloroethyl vinyl ether	63	10.078	10.078	0.000	93	150856	20.0	20.9	
67 cis-1,3-Dichloropropene	75	10.162	10.162	0.000	94	1062639	20.0	23.3	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	93	3070026	20.0	20.2	
69 Toluene	92	10.385	10.371	0.014	99	2351671	20.0	21.0	
70 2-Nitropropane	43	10.595	10.595	0.000	99	144356	40.0	39.7	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	97	236579	20.0	20.4	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	840730	20.0	19.5	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	84	803753	20.0	24.3	
74 Ethyl methacrylate	69	10.818	10.818	0.000	90	489901	20.0	20.8	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	93	349969	20.0	21.0	
76 Chlorodibromomethane	129	11.069	11.069	0.000	91	510489	20.0	22.7	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	93	770605	20.0	21.4	
78 n-Butyl acetate	43	11.307	11.307	0.000	97	455679	20.0	21.0	
79 Ethylene Dibromide	107	11.321	11.321	0.000	98	373536	20.0	22.1	
80 2-Hexanone	43	11.433	11.433	-0.001	96	184016	20.0	20.9	
81 1-Chlorohexane	91	11.684	11.684	0.000	96	1350872	20.0	22.0	
82 Ethylbenzene	91	11.754	11.754	0.000	98	4318403	20.0	19.6	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	86	1128155	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.768	11.768	0.000	96	2243827	20.0	19.5	
85 1,1,1,2-Tetrachloroethane	131	11.810	11.810	0.000	95	737681	20.0	21.2	
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	1701756	20.0	20.7	
88 o-Xylene	106	12.284	12.284	0.000	96	1555500	20.0	22.3	
89 Styrene	104	12.326	12.326	0.000	95	2362178	20.0	22.8	
90 Bromoform	173	12.396	12.396	0.000	97	258142	20.0	23.6	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	4361986	20.0	21.5	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	939146	20.0	20.7	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	4890506	20.0	21.2	
94 Bromobenzene	156	12.983	12.983	0.000	89	851566	20.0	20.7	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	96	392709	20.0	21.6	
96 1,3,5-Trimethylbenzene	105	13.108	13.108	0.000	95	3458399	20.0	22.1	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	3155446	20.0	20.3	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	87	129986	20.0	21.5	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	89	123446	20.0	23.0	
100 Cyclohexanone	55	13.248	13.248	0.000	92	74111	200.0	198.8	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	2788252	20.0	21.1	
102 tert-Butylbenzene	119	13.430	13.430	0.000	93	3106458	20.0	21.0	
103 1,2,4-Trimethylbenzene	105	13.486	13.486	0.000	97	3423809	20.0	21.4	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	4754921	20.0	20.5	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	3917287	20.0	21.2	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	1740580	20.0	19.9	
107 1,2,3-Trimethylbenzene	105	13.919	13.919	0.000	98	3199086	20.0	21.0	
* 108 1,4-Dichlorobenzene-d4	152	13.919	13.919	0.000	59	533491	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	93	1705248	20.0	19.5	
111 n-Butylbenzene	134	14.128	14.128	0.000	96	1028489	20.0	21.1	
110 Benzyl chloride	126	14.156	14.156	0.000	89	129712	20.0	19.7	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	1424008	20.0	20.5	
113 n-Nonyl Aldehyde	57	15.078	15.078	0.000	91	289588	20.0	21.2	
115 1,2-Dibromo-3-Chloropropan	157	15.148	15.148	0.000	84	72609	20.0	25.1	
114 1,3,5-Trichlorobenzene	180	15.161	15.162	-0.001	98	1413327	20.0	20.5	
116 Hexachlorobutadiene	225	15.748	15.748	0.000	98	781531	20.0	18.7	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	1085567	20.0	21.5	
118 Naphthalene	128	16.153	16.153	0.000	97	1316312	20.0	21.0	
120 1,2,3-Trichlorobenzene	180	16.349	16.349	0.000	96	856069	20.0	21.3	
S 119 Xylenes, Total	106				0			43.1	
S 130 Trihalomethanes, Total	1				0			87.9	

Reagents:

8260 Surr 25_00071

Amount Added: 20.00

Units: uL

8260NewHiWrk_00183

Amount Added: 4.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7563.D

Injection Date: 14-Feb-2017 14:30:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: ic

Worklist Smp#: 11

Client ID:

Purge Vol: 25.000 mL

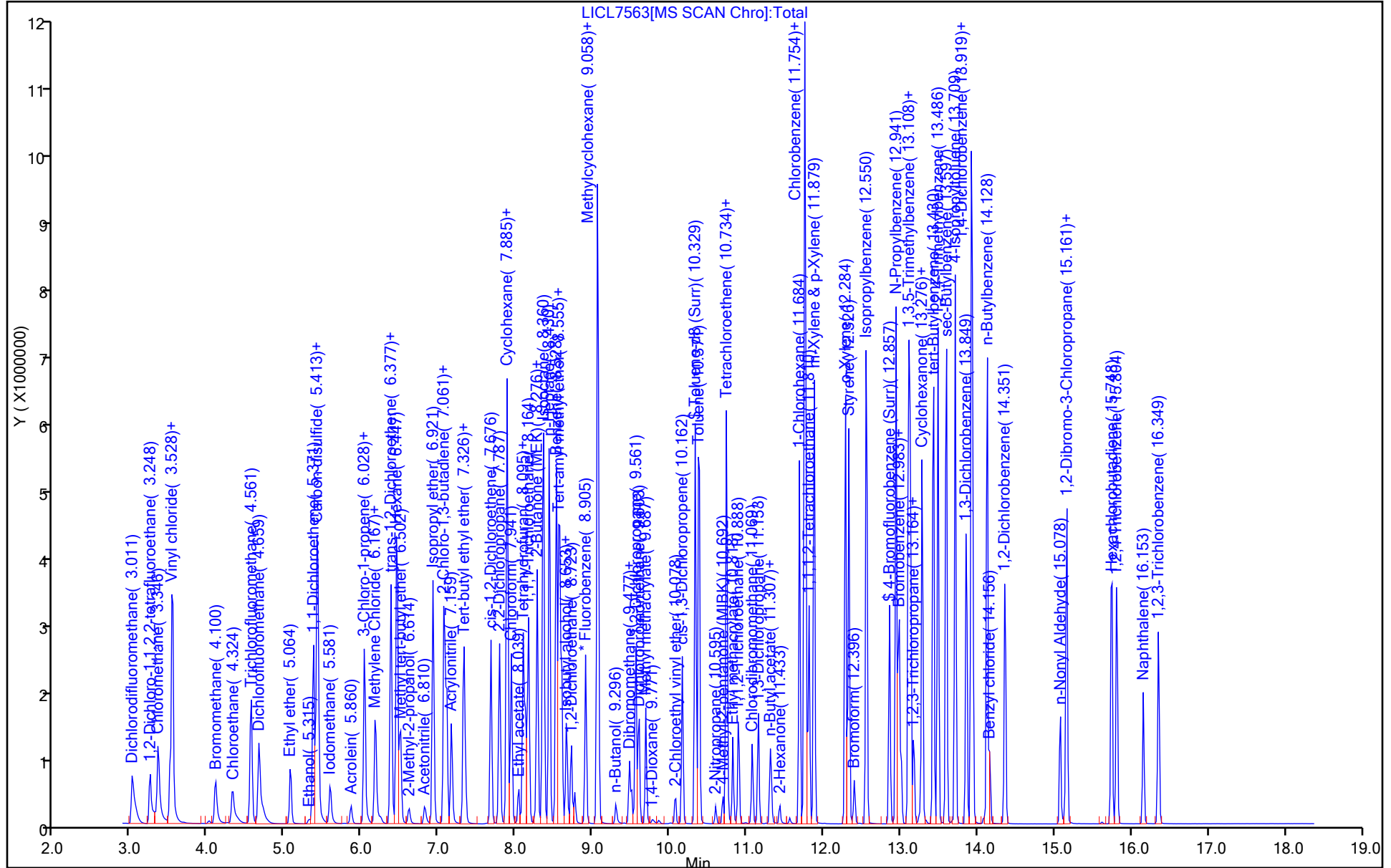
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 14-Feb-2017 14:56:30 ALS Bottle#: 8 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 40
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:40:59 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: rhoadess

Date: 15-Feb-2017 10:58:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	100	2636692	40.0	38.0	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	1368515	40.0	39.5	
3 Chloromethane	50	3.346	3.346	0.000	100	2836166	40.0	38.4	
4 Vinyl chloride	62	3.500	3.500	0.000	98	2894691	40.0	39.0	
5 Butadiene	39	3.541	3.528	0.013	89	3009031	40.0	37.8	
6 Bromomethane	94	4.100	4.100	0.000	91	1250968	40.0	37.1	
7 Chloroethane	64	4.324	4.324	0.000	100	1587780	40.0	36.5	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	3474861	40.0	38.1	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	3574242	40.0	36.7	
10 Ethyl ether	74	5.064	5.064	0.000	94	708611	40.0	43.2	
11 Ethanol	45	5.301	5.315	-0.014	100	225956	1600.0	1513.2	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	97	2119756	40.0	41.2	
13 Carbon disulfide	76	5.413	5.413	0.000	100	7274693	40.0	39.9	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	90	1929989	40.0	38.5	
16 Iodomethane	142	5.580	5.581	-0.001	99	1692176	40.0	41.4	
S 15 1,2-Dichloroethene, Total	96				0			80.7	
17 Acrolein	56	5.860	5.860	0.000	99	474485	200.0	227.4	
18 3-Chloro-1-propene	39	6.027	6.028	-0.001	92	2437693	40.0	40.6	
19 Isopropyl alcohol	45	6.069	6.069	0.000	98	302224	400.0	443.2	
20 Methylene Chloride	84	6.167	6.167	0.000	98	1612750	40.0	37.7	
21 Acetone	43	6.237	6.251	-0.014	99	160101	40.0	38.3	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	98	2156075	40.0	40.1	
23 Methyl acetate	74	6.377	6.391	-0.014	98	455488	200.0	209.6	
24 Hexane	86	6.460	6.447	0.013	90	808431	40.0	43.5	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	95	2479651	40.0	44.0	
26 2-Methyl-2-propanol	59	6.600	6.614	-0.014	89	365472	400.0	450.2	
27 Acetonitrile	41	6.810	6.810	0.000	99	664114	400.0	356.3	
28 Isopropyl ether	45	6.921	6.921	0.000	94	5490596	40.0	44.2	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	94	4101400	40.0	44.6	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	98	3757018	40.0	38.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.159	7.159	0.000	99	2237698	400.0	393.9	
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	97	3989127	40.0	47.2	
33 Vinyl acetate	43	7.340	7.340	0.000	98	1775934	40.0	44.8	
34 cis-1,2-Dichloroethene	96	7.675	7.676	-0.001	82	2068435	40.0	40.7	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	93	2860984	40.0	43.1	
37 Chlorobromomethane	128	7.885	7.885	0.000	48	615280	40.0	37.7	
36 Cyclohexane	84	7.885	7.885	0.000	91	3974985	40.0	42.6	
38 Chloroform	83	7.941	7.941	0.000	95	3286289	40.0	38.5	
39 Ethyl acetate	45	8.039	8.039	0.000	99	173553	80.0	81.0	
40 Carbon tetrachloride	117	8.094	8.095	-0.001	99	3109164	40.0	40.4	
41 Tetrahydrofuran	71	8.122	8.123	-0.001	89	126688	80.0	81.4	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.123	-0.001	95	1583491	40.0	43.6	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	3531719	40.0	40.2	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	99	264324	40.0	40.0	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	96	3146503	40.0	41.7	
44 Isooctane	57	8.360	8.360	0.000	96	10902381	40.0	41.9	
46 n-Heptane	43	8.430	8.430	0.000	95	4469957	40.0	40.8	
48 Benzene	78	8.527	8.528	-0.001	97	8047817	40.0	37.7	
49 Propionitrile	54	8.555	8.555	0.000	40	838323	400.0	387.0	
50 Methacrylonitrile	41	8.569	8.555	0.014	93	4476859	400.0	383.3	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	94	2636896	40.0	47.7	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	92	1438479	40.0	40.2	
52 Isobutyl alcohol	42	8.667	8.667	0.000	94	365507	1000.0	1234.1	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	98	1603847	40.0	37.4	
* 55 Fluorobenzene	96	8.904	8.905	-0.001	99	1962956	10.0	10.0	
58 Methylcyclohexane	55	9.058	9.058	0.000	92	3798739	40.0	39.5	
57 Trichloroethene	95	9.058	9.058	0.000	65	2236904	40.0	37.9	
59 n-Butanol	56	9.295	9.296	-0.001	89	370033	1000.0	1015.0	
61 Dibromomethane	93	9.477	9.477	0.000	93	593144	40.0	38.7	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	878884	40.0	41.3	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	95	1757801	40.0	40.1	
63 Dichlorobromomethane	83	9.603	9.603	0.000	99	1990323	40.0	41.3	
64 Methyl methacrylate	69	9.687	9.687	0.000	93	1041364	80.0	81.1	
65 1,4-Dioxane	88	9.784	9.785	0.000	96	115692	800.0	800.4	
66 2-Chloroethyl vinyl ether	63	10.078	10.078	0.000	93	329263	40.0	40.1	
67 cis-1,3-Dichloropropene	75	10.161	10.162	-0.001	95	2367621	40.0	46.1	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	93	7761722	40.0	44.9	
69 Toluene	92	10.385	10.371	0.014	99	5242977	40.0	41.3	
70 2-Nitropropane	43	10.594	10.595	-0.001	98	344381	80.0	81.0	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	96	560481	40.0	42.0	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	82	1739577	40.0	46.2	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	1903799	40.0	38.9	
74 Ethyl methacrylate	69	10.818	10.818	0.000	90	1122615	40.0	41.4	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	93	743923	40.0	39.3	
76 Chlorodibromomethane	129	11.069	11.069	0.000	90	1134461	40.0	44.3	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	92	1649148	40.0	40.3	
78 n-Butyl acetate	43	11.307	11.307	0.000	98	1085856	40.0	39.9	
79 Ethylene Dibromide	107	11.321	11.321	0.000	99	809705	40.0	42.1	
80 2-Hexanone	43	11.432	11.433	-0.001	95	405071	40.0	40.2	
81 1-Chlorohexane	91	11.684	11.684	0.000	97	3360012	40.0	48.1	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	45	1282816	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	97	9469134	40.0	37.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.768	11.768	0.000	93	4982702	40.0	38.0	
85 1,1,1,2-Tetrachloroethane	131	11.809	11.810	-0.001	95	1653307	40.0	41.9	
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	3971961	40.0	42.6	
88 o-Xylene	106	12.284	12.284	0.000	96	3621957	40.0	45.8	
89 Styrene	104	12.326	12.326	0.000	95	5449977	40.0	46.3	
90 Bromoform	173	12.396	12.396	0.000	97	581518	40.0	45.7	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	10055299	40.0	42.6	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	92	2511754	40.0	47.6	
93 N-Propylbenzene	91	12.941	12.941	0.000	97	10929700	40.0	40.8	
94 Bromobenzene	156	12.983	12.983	0.000	88	1937781	40.0	40.4	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	96	835618	40.0	39.6	
96 1,3,5-Trimethylbenzene	105	13.108	13.108	0.000	95	8044316	40.0	44.1	
97 2-Chlorotoluene	91	13.122	13.122	0.000	97	7255220	40.0	40.1	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	87	270304	40.0	38.4	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	96	263721	40.0	42.2	
100 Cyclohexanone	55	13.248	13.248	0.000	92	179553	400.0	405.2	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	6490968	40.0	42.1	
102 tert-Butylbenzene	119	13.430	13.430	0.000	93	7422275	40.0	43.2	
103 1,2,4-Trimethylbenzene	105	13.485	13.486	-0.001	97	7943513	40.0	42.6	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	10993079	40.0	40.7	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	96	9136770	40.0	42.5	
106 1,3-Dichlorobenzene	146	13.862	13.849	0.013	99	4062756	40.0	40.0	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.919	0.000	52	620389	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.918	13.919	0.000	98	7313522	40.0	41.3	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	93	3861852	40.0	37.9	
111 n-Butylbenzene	134	14.128	14.128	0.000	95	2509452	40.0	44.2	
110 Benzyl chloride	126	14.156	14.156	0.000	91	317429	40.0	40.5	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	98	3255106	40.0	40.3	
113 n-Nonyl Aldehyde	57	15.064	15.078	-0.014	91	811232	40.0	39.8	
115 1,2-Dibromo-3-Chloropropan	157	15.147	15.148	-0.001	85	160919	40.0	47.8	
114 1,3,5-Trichlorobenzene	180	15.161	15.162	-0.001	98	3297207	40.0	41.2	
116 Hexachlorobutadiene	225	15.748	15.748	0.000	98	1959840	40.0	40.4	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	95	2522059	40.0	42.9	
118 Naphthalene	128	16.153	16.153	0.000	97	2992441	40.0	40.7	
120 1,2,3-Trichlorobenzene	180	16.348	16.349	-0.001	96	1974560	40.0	42.2	
S 119 Xylenes, Total	106				0			88.3	
S 130 Trihalomethanes, Total	1				0			169.8	

Reagents:

8260_Surr_00044

Amount Added: 0.40

Units: uL

8260NewHiWrk_00183

Amount Added: 8.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D

Injection Date: 14-Feb-2017 14:56:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: ic

Worklist Smp#: 12

Client ID:

Purge Vol: 25.000 mL

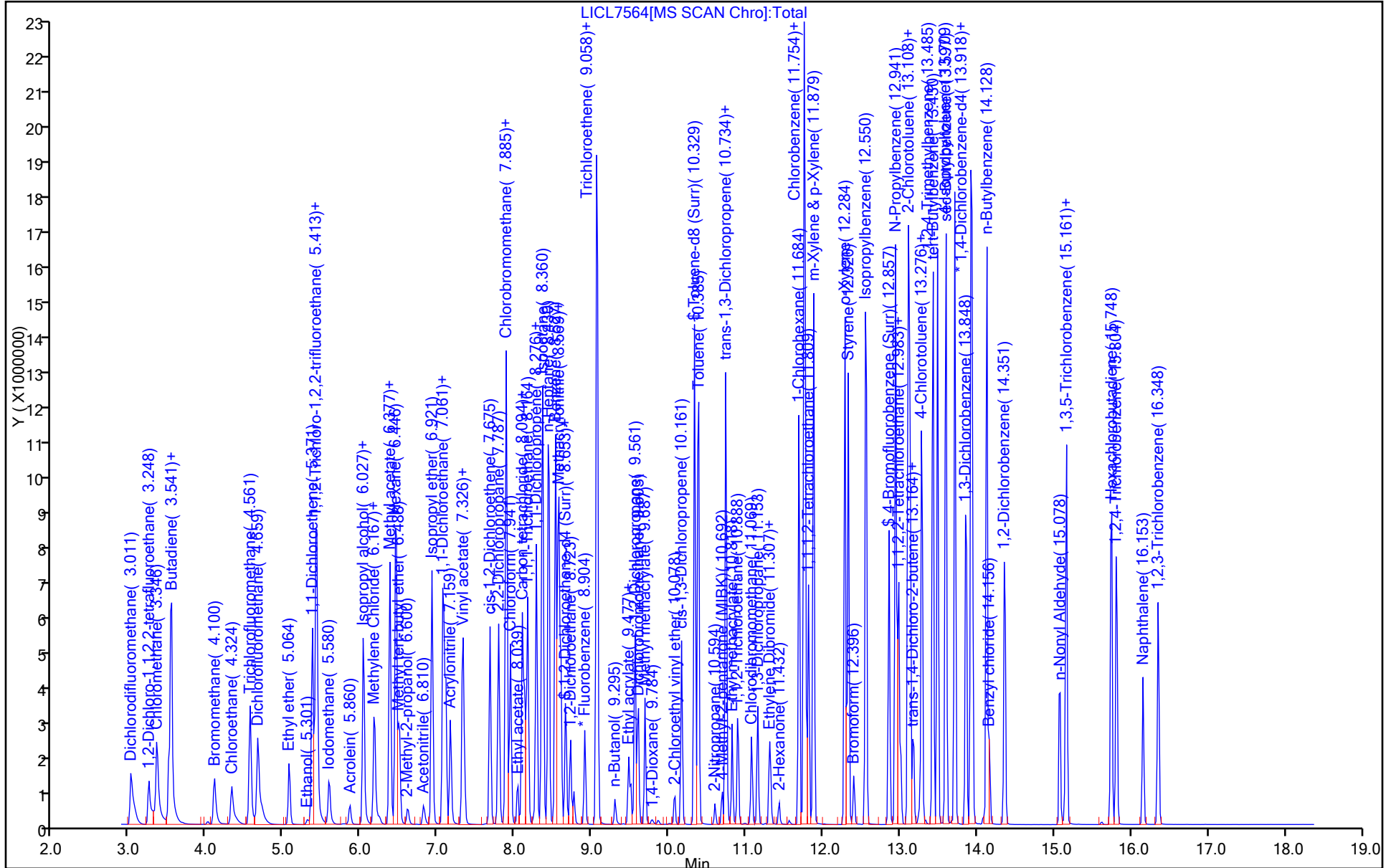
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1 Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06 Calibration End Date: 01/30/2017 12:30 Calibration ID: 12255

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-290044/5	ZICL1152.D
Level 2	IC 160-290044/6	ZICL1153.D
Level 3	IC 160-290044/7	ZICL1154.D
Level 4	IC 160-290044/8	ZICL1155.D
Level 5	ICIS 160-290044/9	ZICL1156.D
Level 6	IC 160-290044/10	ZICL1157.D
Level 7	IC 160-290044/11	ZICL1158.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.3622 0.3236	0.3099 0.3295	0.3434	0.3318	0.3224	Ave		0.3318			0.1000	5.1	20.0				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.2036 0.2049	0.1786 0.2032	0.1973	0.2182	0.1993	Ave		0.2007			0.0100	5.9	20.0				
Chloromethane	0.3266 0.2759	0.2931 0.2813	0.3086	0.2987	0.2742	Ave		0.2940			0.1000	6.5	20.0				
Vinyl chloride	0.4316 0.4374	0.3957 0.4619	0.4163	0.4335	0.4073	Ave		0.4262			0.1000	5.1	20.0				
Butadiene	0.4240 0.4444	0.4007 0.4673	0.4431	0.4361	0.4072	Ave		0.4318			0.0100	5.3	20.0				
Methyl bromide	0.4224 0.3996	0.3666 0.4073	0.3929	0.3850	0.3691	Ave		0.3918			0.1000	5.1	20.0				
Chloroethane	0.3130 0.3490	0.3093 0.3420	0.3287	0.3225	0.3319	Ave		0.3281			0.1000	4.4	20.0				
Trichlorofluoromethane	0.3813 0.4883	0.3423 0.4918	0.3876	0.4584	0.4320	Lin1	-0.107	0.4857			0.1000			0.9980		0.9900	
Dichlorofluoromethane	0.4701 0.4635	0.4149 0.4539	0.4339	0.4411	0.4353	Ave		0.4447			0.0100	4.3	20.0				
Ethyl ether	0.1252 0.1014	0.1080 0.1065	0.1132	0.0989	0.0977	Ave		0.1073			0.0100	9.0	20.0				
Ethanol	0.0007 0.0006	0.0008 0.0006	0.0007	0.0007	0.0006	Ave		0.0007		*	0.0010	10.8	20.0				
1,1-Dichloroethene	0.2714 0.2756	0.2496 0.2922	0.2616	0.2703	0.2610	Ave		0.2688			0.1000	5.0	20.0				
Carbon disulfide	0.8390 0.8598	0.7769 0.8920	0.8399	0.8495	0.8236	Ave		0.8401			0.1000	4.2	20.0				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2816 0.2855	0.2378 0.3021	0.2811	0.2788	0.2654	Ave		0.2761			0.1000	7.3	20.0				

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 St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Iodomethane	0.5160 0.4765	0.4949 0.5091	0.4882	0.4851	0.4630	Ave		0.4904			0.0100	3.7		20.0			
Acrolein	0.0192 0.0144	0.0166 0.0155	0.0156	0.0138	0.0140	Ave		0.0156			0.0010	12.2		20.0			
Allyl chloride	0.3236 0.2999	0.2858 0.3077	0.2949	0.2960	0.2909	Ave		0.2998			0.0100	4.2		20.0			
Isopropyl alcohol	0.0046 0.0041	0.0054 0.0044	0.0047	0.0038	0.0041	Ave		0.0044		*	0.0100	11.3		20.0			
Methylene Chloride	0.2618 0.2206	0.2453 0.2355	0.2504	0.2312	0.2227	Ave		0.2382			0.1000	6.3		20.0			
Acetone	0.0422 0.0192	0.0287 0.0212	0.0274	0.0245	0.0224	Lin1	0.0109	0.0204		*	0.1000				0.9960		0.9900
trans-1,2-Dichloroethene	0.3533 0.2974	0.2977 0.3180	0.2976	0.2798	0.2902	Ave		0.3048			0.1000	7.9		20.0			
Methyl acetate	0.0182 0.0139	0.0158 0.0159	0.0147	0.0135	0.0140	Ave		0.0151		*	0.1000	10.9		20.0			
Hexane	0.0940 0.0983	0.0959 0.1070	0.0965	0.1003	0.0927	Ave		0.0978			0.0100	4.9		20.0			
Methyl tert-butyl ether	0.4578 0.4142	0.4626 0.4474	0.4451	0.4139	0.4217	Ave		0.4375			0.1000	4.7		20.0			
tert-Butyl alcohol	0.0089 0.0071	0.0075 0.0079	0.0077	0.0067	0.0070	Ave		0.0076		*	0.0100	9.7		20.0			
Acetonitrile	0.0100 0.0071	0.0085 0.0074	0.0073	0.0069	0.0071	Ave		0.0078			0.0010	14.4		20.0			
Isopropyl ether	0.6731 0.6099	0.6567 0.6309	0.6463	0.6065	0.6147	Ave		0.6340			0.0100	4.0		20.0			
2-Chloro-1,3-butadiene	0.4051 0.4339	0.3516 0.4660	0.3957	0.4241	0.4085	Ave		0.4121			0.0100	8.6		20.0			
1,1-Dichloroethane	0.5124 0.4479	0.4601 0.4798	0.4587	0.4566	0.4418	Ave		0.4653			0.2000	5.1		20.0			
Acrylonitrile	0.0317 0.0276	0.0306 0.0291	0.0300	0.0271	0.0280	Ave		0.0292			0.0100	5.8		20.0			
Tert-butyl ethyl ether	0.5985 0.5413	0.5798 0.5823	0.5471	0.5309	0.5457	Ave		0.5608			0.0100	4.6		20.0			
Vinyl acetate	0.2962 0.2886	0.2957 0.3085	0.2911	0.2763	0.2899	Ave		0.2923			0.0100	3.3		20.0			
cis-1,2-Dichloroethene	0.3048 0.2864	0.3129 0.3037	0.3021	0.2916	0.2878	Ave		0.2985			0.1000	3.3		20.0			
2,2-Dichloropropane	0.3556 0.3385	0.3220 0.3306	0.3359	0.3550	0.3333	Ave		0.3387			0.0100	3.7		20.0			

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 St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Bromochloromethane	0.1115 0.1150	0.1131 0.1337	0.1127	0.1122	0.1124	Ave		0.1158			0.0100	6.9	20.0				
Cyclohexane	0.4737 0.5121	0.4371 0.5496	0.4697	0.5050	0.4840	Ave		0.4902			0.1000	7.3	20.0				
Chloroform	0.4757 0.4456	0.4900 0.4758	0.4655	0.4564	0.4513	Ave		0.4658			0.2000	3.4	20.0				
Ethyl acetate	0.0127 0.0107	0.0112 0.0113	0.0111	0.0101	0.0111	Ave		0.0111			0.0100	7.0	20.0				
Carbon tetrachloride	0.4065 0.4572	0.3940 0.4850	0.4141	0.4437	0.4260	Ave		0.4324			0.1000	7.3	20.0				
Tetrahydrofuran	0.0092 0.0101	0.0133 0.0113	0.0090	0.0095	0.0097	Ave		0.0103			0.0010	14.9	20.0				
1,1,1-Trichloroethane	0.4654 0.4738	0.4178 0.4946	0.4643	0.4659	0.4578	Ave		0.4628			0.1000	5.0	20.0				
2-Butanone	0.0341 0.0307	0.0420 0.0332	0.0364	0.0299	0.0310	Ave		0.0339		*	0.1000	12.5	20.0				
1,1-Dichloropropene	0.4065 0.3947	0.3456 0.4151	0.3897	0.4004	0.3783	Ave		0.3901			0.0100	5.9	20.0				
Isooctane	1.0314 1.0526	0.9808 1.0383	1.0463	1.1139	1.0388	Ave		1.0432			0.0100	3.7	20.0				
n-Heptane	0.4492 0.4443	0.3845 0.4615	0.4321	0.4416	0.4276	Ave		0.4344			0.0100	5.7	20.0				
Benzene	1.1123 1.0136	1.0621 0.9927	1.0876	1.0540	1.0206	Ave		1.0490			0.5000	4.1	20.0				
Propionitrile	0.0105 0.0109	0.0123 0.0122	0.0111	0.0096	0.0106	Ave		0.0110			0.0010	8.6	20.0				
Methacrylonitrile	0.0629 0.0584	0.0609 0.0630	0.0599	0.0558	0.0583	Ave		0.0599			0.0100	4.4	20.0				
Tert-amyl methyl ether	0.4463 0.4646	0.4900 0.5345	0.4697	0.4512	0.4771	Ave		0.4762			0.0100	6.2	20.0				
Isobutanol	0.0015 0.0018	0.0016 0.0022	0.0018	0.0018	0.0019	Ave		0.0018			0.0010	12.9	20.0				
1,2-Dichloroethane	0.2635 0.2291	0.2500 0.2432	0.2477	0.2293	0.2294	Ave		0.2417			0.1000	5.5	20.0				
Methylcyclohexane	0.3511 0.4108	0.3465 0.4527	0.3772	0.3964	0.3800	Ave		0.3878			0.1000	9.4	20.0				
Trichloroethene	0.2924 0.3248	0.2927 0.3764	0.2995	0.2986	0.2964	Ave		0.3115			0.2000	9.8	20.0				
n-Butanol	0.0016 0.0019	0.0017 +++++	0.0014	0.0015	0.0018	Ave		0.0016		*	0.0100	11.2	20.0				

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 St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dibromomethane	0.1089 0.0915	0.1002 0.1020	0.1012	0.0923	0.0934	Ave		0.0985		0.0100	6.5		20.0				
Ethyl acrylate	0.1010 0.1163	0.1125 0.1235	0.1137	0.1005	0.1102	Ave		0.1111		0.0100	7.4		20.0				
1,2-Dichloropropane	0.2357 0.2066	0.2292 0.2203	0.2254	0.2048	0.2058	Ave		0.2183		0.1000	5.8		20.0				
Bromodichloromethane	0.2791 0.2825	0.2642 0.3060	0.2818	0.2697	0.2710	Ave		0.2792		0.2000	4.9		20.0				
Methyl methacrylate	0.0692 0.0725	0.0693 0.0798	0.0708	0.0661	0.0703	Ave		0.0711		0.0100	6.0		20.0				
1,4-Dioxane	0.0007 0.0008	0.0008 0.0009	0.0010	0.0009	0.0008	Ave		0.0009	*	0.0010	10.4		20.0				
2-Chloroethyl vinyl ether	0.0244 0.0186	0.0201 0.0208	0.0184	0.0174	0.0169	Ave		0.0195		0.0100	13.1		20.0				
cis-1,3-Dichloropropene	0.3371 0.3206	0.3162 0.3464	0.3212	0.3122	0.3229	Ave		0.3252		0.2000	3.7		20.0				
Toluene	0.9814 0.8581	0.9439 0.7522	0.9401	0.9179	0.8789	Ave		0.8961		0.4000	8.5		20.0				
2-Nitropropane	0.0295 0.0280	0.0372 0.0281	0.0280	0.0259	0.0269	Ave		0.0291		0.0100	12.8		20.0				
4-Methyl-2-pentanone	0.1078 0.0922	0.1051 0.0833	0.0980	0.0947	0.0976	Ave		0.0970	*	0.1000	8.4		20.0				
Tetrachloroethene	0.4364 0.3836	0.3899 0.3814	0.4110	0.4111	0.3865	Ave		0.4000		0.2000	5.1		20.0				
trans-1,3-Dichloropropene	0.3423 0.3178	0.3506 0.3210	0.3419	0.3138	0.3267	Ave		0.3306		0.1000	4.3		20.0				
Ethyl methacrylate	0.1687 0.1845	0.1955 0.1749	0.1817	0.1756	0.1886	Ave		0.1814		0.0100	5.0		20.0				
1,1,2-Trichloroethane	0.1798 0.1246	0.1639 +++++	0.1582	0.1441	0.1368	Ave		0.1512		0.1000	13.2		20.0				
Chlorodibromomethane	0.2276 0.2243	0.2386 0.2078	0.2372	0.2251	0.2329	Ave		0.2276		0.1000	4.6		20.0				
1,3-Dichloropropane	0.3550 0.2695	0.3565 0.2452	0.3428	0.3008	0.2926	Ave		0.3089		0.0100	14.2		20.0				
n-Butyl acetate	0.1912 0.1702	0.1815 0.1572	0.1810	0.1687	0.1732	Ave		0.1747		0.0100	6.3		20.0				
1,2-Dibromoethane	0.1792 0.1459	0.1992 0.1353	0.1716	0.1519	0.1525	Ave		0.1622		0.1000	13.6		20.0				
2-Hexanone	+++++ 0.0612	+++++ 0.0570	0.0768	0.0642	0.0613	Ave		0.0641	*	0.1000	11.8		20.0				

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 St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Ethylbenzene	2.0351 1.6339	1.8435 ++++	1.8986	1.8948	1.8130	Ave		1.8532			0.1000	7.1	20.0				
Chlorobenzene	1.1402 0.9697	1.0871 0.8632	1.0921	1.0167	1.0226	Ave		1.0274			0.5000	9.0	20.0				
1,1,1,2-Tetrachloroethane	0.3418 0.3125	0.3478 0.2970	0.3374	0.3313	0.3236	Ave		0.3274			0.0100	5.4	20.0				
m-Xylene & p-Xylene	0.7528 0.6727	0.6719 0.6191	0.7271	0.7086	0.6984	Ave		0.6929			0.1000	6.3	20.0				
o-Xylene	0.6722 0.6052	0.6503 0.5661	0.6593	0.6448	0.6303	Ave		0.6326			0.3000	5.7	20.0				
Styrene	0.8581 0.9006	0.8754 0.7893	0.8985	0.9065	0.9278	Ave		0.8794			0.3000	5.2	20.0				
Bromoform	0.2589 0.2328	0.2358 0.2195	0.2441	0.2200	0.2317	Ave		0.2347			0.1000	5.9	20.0				
Isopropylbenzene	3.6531 2.9708	3.4461 ++++	3.6710	3.5890	3.2394	Ave		3.4282			0.1000	8.0	20.0				
N-Propylbenzene	4.1489 3.2730	3.8450 ++++	4.0384	4.0433	3.6029	Ave		3.8253			0.0100	8.7	20.0				
Bromobenzene	0.9083 0.7063	0.8762 0.6395	0.8706	0.7562	0.7231	Ave		0.7829			0.0100	13.1	20.0				
1,1,2,2-Tetrachloroethane	0.3501 0.2855	0.3618 0.2445	0.3467	0.2977	0.2949	Ave		0.3116			0.3000	13.7	20.0				
1,3,5-Trimethylbenzene	2.7196 2.4741	2.5808 1.8900	2.7834	2.7498	2.6227	Ave		2.5458			0.0100	12.1	20.0				
2-Chlorotoluene	2.5668 2.2349	2.5334 1.8292	2.6015	2.4863	2.3450	Ave		2.3710			0.0100	11.5	20.0				
1,2,3-Trichloropropane	0.1499 0.1001	0.1222 0.0842	0.1293	0.1141	0.0993	Lin1	0.0431	0.0900			0.0100			0.9900		0.9900	
trans-1,4-Dichloro-2-butene	0.1008 0.0753	0.0922 ++++	0.0783	0.0706	0.0749	Ave		0.0820			0.0100	14.4	20.0				
Cyclohexanone	0.0064 0.0048	0.0085 0.0046	0.0067	0.0051	0.0051	Lin1	0.0215	0.0047			0.0010			0.9940		0.9900	
4-Chlorotoluene	2.3144 1.8967	2.2926 1.4827	2.2561	2.1706	2.0117	Ave		2.0607			0.0100	14.4	20.0				
tert-Butylbenzene	2.8210 2.3157	2.4818 1.7821	2.6577	2.6266	2.4583	Ave		2.4490			0.0100	13.7	20.0				
1,2,4-Trimethylbenzene	2.8686 2.4112	2.6726 1.7785	2.8274	2.7634	2.5821	Ave		2.5577			0.0100	14.8	20.0				
sec-Butylbenzene	3.8427 3.1820	3.6098 ++++	3.8435	3.8643	3.5649	Ave		3.6512			0.0100	7.2	20.0				

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 St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
4-Isopropyltoluene	3.3649 2.8500	3.0300 ++++	3.2152	3.3213	3.0699	Ave		3.1419			0.0100	6.2	20.0				
1,3-Dichlorobenzene	1.7085 1.3510	1.6656 1.1807	1.6710	1.4953	1.4301	Ave		1.5003			0.6000	13.0	20.0				
1,2,3-Trimethylbenzene	2.8604 2.3653	2.6684 1.8306	2.7876	2.6578	2.5194	Ave		2.5271			0.0100	13.8	20.0				
1,4-Dichlorobenzene	1.8088 1.4670	1.6387 1.3093	1.6855	1.5508	1.5196	Ave		1.5685			0.5000	10.3	20.0				
n-Butylbenzene	0.9132 0.8430	0.7643 0.7899	0.8653	0.8807	0.8485	Ave		0.8436			0.0100	6.1	20.0				
Benzyl chloride	0.1267 0.1294	0.1206 0.1228	0.1248	0.1145	0.1270	Ave		0.1237			0.0100	4.0	20.0				
1,2-Dichlorobenzene	1.3928 1.0685	1.3717 0.9464	1.3703	1.2346	1.1514	Ave		1.2194			0.4000	14.1	20.0				
Nonanal	0.1074 0.1292	0.1293 0.1384	0.1075	0.1139	0.1208	Ave		0.1209			0.0100	9.9	20.0				
1,2-Dibromo-3-Chloropropane	0.0558 0.0502	0.0692 0.0489	0.0561	0.0524	0.0529	Ave		0.0551			0.0500	12.3	20.0				
1,3,5-Trichlorobenzene	1.1360 0.8985	1.1179 0.8235	1.0607	1.0459	0.9664	Ave		1.0070			0.0100	11.5	20.0				
Hexachlorobutadiene	0.5531 0.4573	0.5084 0.4179	0.5102	0.5419	0.4908	Ave		0.4971			0.0100	9.5	20.0				
1,2,4-Trichlorobenzene	0.7418 0.5312	0.7289 ++++	0.6675	0.6196	0.5960	Ave		0.6475			0.2000	12.5	20.0				
Naphthalene	0.8021 0.5777	0.7773 ++++	0.7292	0.6709	0.6234	Ave		0.6967			0.0100	12.7	20.0				
1,2,3-Trichlorobenzene	0.4468 0.3018	0.4259 ++++	0.3907	0.3800	0.3482	Ave		0.3822			0.0100	13.7	20.0				
Dibromofluoromethane (Surr)	0.1915 0.2291	0.2266 ++++	0.2270	0.2098	0.2276	Ave		0.2186			0.0100	6.9	20.0				
1,2-Dichloroethane-d4 (Surr)	0.2054 0.1898	0.2113 ++++	0.1983	0.1854	0.1906	Ave		0.1968			0.0100	5.1	20.0				
Toluene-d8 (Surr)	1.1559 1.1194	1.2541 1.3769	1.2890	1.1864	1.2350	Ave		1.2310			0.0100	7.1	20.0				
4-Bromofluorobenzene (Surr)	0.7186 0.6454	0.7799 ++++	0.7303	0.6828	0.6840	Ave		0.7068			0.0100	6.6	20.0				

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 St. Louis Job No.: 160-21259-1 Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06 Calibration End Date: 01/30/2017 12:30 Calibration ID: 12255

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-290044/5	ZICL1152.D
Level 2	IC 160-290044/6	ZICL1153.D
Level 3	IC 160-290044/7	ZICL1154.D
Level 4	IC 160-290044/8	ZICL1155.D
Level 5	ICIS 160-290044/9	ZICL1156.D
Level 6	IC 160-290044/10	ZICL1157.D
Level 7	IC 160-290044/11	ZICL1158.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	29086 1179069	49557 2400671	112105	218120	566215	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	FB	Ave	16348 746838	28555 1480346	64406	143454	350074	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Chloromethane	FB	Ave	26228 1005308	46862 2049049	100730	196338	481652	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Vinyl chloride	FB	Ave	34654 1593929	63273 3364737	135903	284947	715516	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Butadiene	FB	Ave	34043 1619322	64069 3404162	144632	286699	715189	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl bromide	FB	Ave	33915 1456349	58616 2967055	128262	253059	648352	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Chloroethane	FB	Ave	25131 1271905	49451 2491444	107308	211972	583002	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Trichlorofluoromethane	FB	Lin1	30618 1779274	54728 3582579	126522	301331	758874	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Dichlorofluoromethane	FB	Ave	37746 1689000	66341 3306627	141619	289965	764621	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl ether	FB	Ave	10052 369365	17270 776180	36938	64991	171554	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethanol	FB	Ave	2173 84312	4992 182474	9229	17335	41057	20.0 800	40.0 1600	80.0	160	400
1,1-Dichloroethene	FB	Ave	21796 1004150	39908 2128781	85399	177652	458436	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Carbon disulfide	FB	Ave	67374 3133237	124236 6498486	274162	558402	1446736	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	22609 1040252	38026 2200829	91773	183295	466243	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Iodomethane	FB	Ave	41435 1736561	79135 3709078	159373	318867	813337	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acrolein	FB	Ave	7726 261887	13289 563453	25500	45428	122740	2.50 100	5.00 200	10.0	20.0	50.0
Allyl chloride	FB	Ave	25982 1092840	45708 2241519	96275	194566	510886	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isopropyl alcohol	FB	Ave	3688 148788	8559 323999	15196	25084	72697	5.00 200	10.0 400	20.0	40.0	100
Methylene Chloride	FB	Ave	21023 803897	39219 1715867	81750	151972	391196	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Acetone	FB	Lin1	3387 69943	4591 154359	8945	16081	39288	0.500 20.0	1.00 40.0	2.00	4.00	10.0
trans-1,2-Dichloroethene	FB	Ave	28367 1083784	47601 2316818	97133	183922	509679	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl acetate	FB	Ave	7327 252849	12640 577860	24017	44444	122812	2.50 100	5.00 200	10.0	20.0	50.0
Hexane	FB	Ave	7552 358379	15340 779389	31492	65907	162774	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl tert-butyl ether	FB	Ave	36757 1509436	73965 3259248	145294	272063	740742	0.500 20.0	1.00 40.0	2.00	4.00	10.0
tert-Butyl alcohol	FB	Ave	7180 259938	12054 578682	25096	44216	123785	5.00 200	10.0 400	20.0	40.0	100
Acetonitrile	FB	Ave	8021 257267	13614 540255	23872	45368	124749	5.00 200	10.0 400	20.0	40.0	100
Isopropyl ether	FB	Ave	54051 2222534	105005 4596009	210955	398666	1079791	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Chloro-1,3-butadiene	FB	Ave	32526 1581313	56223 3394932	129153	278801	717620	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1-Dichloroethane	FB	Ave	41145 1632152	73570 3495032	149740	300139	775992	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Acrylonitrile	FB	Ave	25430 1004779	48946 2119552	97975	178441	491604	5.00 200	10.0 400	20.0	40.0	100
Tert-butyl ethyl ether	FB	Ave	48062 1972659	92708 4241903	178595	348971	958557	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Vinyl acetate	FB	Ave	23786 1051822	47279 2247763	95012	181601	509296	0.500 20.0	1.00 40.0	2.00	4.00	10.0
cis-1,2-Dichloroethene	FB	Ave	24474 1043691	50038 2212530	98597	191681	505533	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2,2-Dichloropropane	FB	Ave	28556 1233455	51496 2408107	109643	233364	585488	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Bromochloromethane	FB	Ave	8954 419006	18085 974312	36779	73741	197446	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Cyclohexane	FB	Ave	38038 1866144	69887 4004051	153325	331947	850131	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1 Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06 Calibration End Date: 01/30/2017 12:30 Calibration ID: 12255

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chloroform	FB	Ave	38200 1623864	78359 3466526	151949	300019	792638	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl acetate	FB	Ave	2032 77738	3579 164017	7214	13230	38994	1.00 40.0	2.00 80.0	4.00	8.00	20.0
Carbon tetrachloride	FB	Ave	32645 1666132	63004 3533471	135162	291644	748345	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Tetrahydrofuran	FB	Ave	1479 73449	4266 164139	5851	12522	34196	1.00 40.0	2.00 80.0	4.00	8.00	20.0
1,1,1-Trichloroethane	FB	Ave	37371 1726644	66812 3603533	151570	306246	804174	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Butanone	FB	Ave	2736 112033	6723 241549	11891	19658	54536	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1-Dichloropropene	FB	Ave	32639 1438351	55262 3024330	127201	263219	664554	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isooctane	FB	Ave	82824 3835626	156834 7564214	341522	732223	1824698	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Heptane	FB	Ave	36073 1618901	61486 3362327	141062	290301	751097	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Benzene	FB	Ave	89318 3693798	169835 7232136	355004	692877	1792719	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Propionitrile	FB	Ave	8405 397464	19609 889519	36088	63324	185862	5.00 200	10.0 400	20.0	40.0	100
Methacrylonitrile	FB	Ave	50543 2126734	97405 4591372	195628	366474	1023321	5.00 200	10.0 400	20.0	40.0	100
Tert-amyl methyl ether	FB	Ave	35841 1692965	78355 3893669	153308	296611	838046	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isobutanol	FB	Ave	2993 166001	6270 402298	14926	30254	82266	12.5 500	25.0 1000	50.0	100	250
1,2-Dichloroethane	FB	Ave	21158 834734	39973 1771681	80867	150746	402914	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methylcyclohexane	FB	Ave	28195 1497025	55405 3297684	123134	260600	667514	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Trichloroethene	FB	Ave	23476 1183581	46806 2741788	97753	196290	520623	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Butanol	FB	Ave	3125 172768	6900 +++++	11665	24441	78419	12.5 500	25.0 +++++	50.0	100	250
Dibromomethane	FB	Ave	8743 333380	16021 743068	33047	60655	163981	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl acrylate	FB	Ave	8108 423778	17989 899402	37099	66062	193613	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dichloropropane	FB	Ave	18925 752910	36649 1605184	73564	134629	361557	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Bromodichloromethane	FB	Ave	22411 1029598	42244 2229599	91995	177306	476034	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Methyl methacrylate	FB	Ave	11121 528212	22160 1163180	46206	86899	246935	1.00 40.0	2.00 80.0	4.00	8.00	20.0
1,4-Dioxane	FB	Ave	1189 59032	2685 132927	6607	11794	28088	10.0 400	20.0 800	40.0	80.0	200
2-Chloroethyl vinyl ether	FB	Ave	1956 67687	3211 151721	6004	11430	29723	0.500 20.0	1.00 40.0	2.00	4.00	10.0
cis-1,3-Dichloropropene	FB	Ave	27065 1168358	50567 2523215	104850	205215	567257	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Toluene	CBNZ d5	Ave	58070 2640082	109961 5459860	225580	457741	1227373	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Nitropropane	CBNZ d5	Ave	3496 172067	8660 408272	13450	25859	75244	1.00 40.0	2.00 80.0	4.00	8.00	20.0
4-Methyl-2-pentanone	CBNZ d5	Ave	6379 283751	12238 604899	23513	47241	136264	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Tetrachloroethene	CBNZ d5	Ave	25820 1180093	45420 2768333	98621	205017	539753	0.500 20.0	1.00 40.0	2.00	4.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	20257 977811	40845 2330196	82055	156490	456281	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	9985 567615	22773 1269705	43595	87547	263348	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	10641 383189	19097 +++++	37962	71880	190982	0.500 20.0	1.00 +++++	2.00	4.00	10.0
Chlorodibromomethane	CBNZ d5	Ave	13468 689917	27790 1508326	56908	112272	325243	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	21004 829210	41525 1779891	82250	150032	408594	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Butyl acetate	CBNZ d5	Ave	11312 523493	21138 1140872	43441	84120	241822	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	10606 448757	23204 982304	41168	75743	213015	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Hexanone	CBNZ d5	Ave	+++++ 188181	+++++ 413493	18419	32029	85655	+++++ 20.0	+++++ 40.0	2.00	4.00	10.0
Ethylbenzene	CBNZ d5	Ave	120421 5026580	214756 +++++	455602	944933	2531884	0.500 20.0	1.00 +++++	2.00	4.00	10.0
Chlorobenzene	CBNZ d5	Ave	67466 2983444	126636 6265719	262055	507033	1428105	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	20228 961518	40517 2155793	80964	165201	451957	0.500 20.0	1.00 40.0	2.00	4.00	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	44542 2069651	78270 4493803	174468	353380	975355	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis

Job No.: 160-21259-1

Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ

GC Column: RTX-VMS40 ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06

Calibration End Date: 01/30/2017 12:30

Calibration ID: 12255

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
o-Xylene	CBNZ d5	Ave	39773 1861804	75752 4109177	158210	321563	880231	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Styrene	CBNZ d5	Ave	50773 2770720	101981 5728866	215604	452050	1295634	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Bromoform	DCBd 4	Ave	7798 378640	13626 896930	29345	56544	173767	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Isopropylbenzene	DCBd 4	Ave	110026 4832511	199135 ++++	441314	922242	2429555	0.500 20.0	1.00 ++++	2.00	4.00	10.0
N-Propylbenzene	DCBd 4	Ave	124959 5324014	222185 ++++	485481	1038990	2702181	0.500 20.0	1.00 ++++	2.00	4.00	10.0
Bromobenzene	DCBd 4	Ave	27358 1148896	50630 2612591	104665	194327	542355	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	10546 464489	20905 998809	41681	76501	221160	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	81910 4024481	149131 7721328	334610	706604	1967051	0.500 20.0	1.00 40.0	2.00	4.00	10.0
2-Chlorotoluene	DCBd 4	Ave	77308 3635468	146395 7472751	312744	638902	1758724	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,3-Trichloropropane	DCBd 4	Lin1	4515 162764	7059 344115	15548	29332	74478	0.500 20.0	1.00 40.0	2.00	4.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	3036 122562	5328 ++++	9407	18145	56182	0.500 20.0	1.00 ++++	2.00	4.00	10.0
Cyclohexanone	DCBd 4	Lin1	1915 78433	4907 188327	8040	12994	38274	5.00 200	10.0 400	20.0	40.0	100
4-Chlorotoluene	DCBd 4	Ave	69706 3085275	132479 6057429	271220	557762	1508755	0.500 20.0	1.00 40.0	2.00	4.00	10.0
tert-Butylbenzene	DCBd 4	Ave	84966 3766803	143414 7280388	319489	674949	1843754	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	86400 3922139	154439 7265615	339894	710085	1936583	0.500 20.0	1.00 40.0	2.00	4.00	10.0
sec-Butylbenzene	DCBd 4	Ave	115738 5176079	208596 ++++	462051	992975	2673687	0.500 20.0	1.00 ++++	2.00	4.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	101348 4635916	175091 ++++	386512	853445	2302452	0.500 20.0	1.00 ++++	2.00	4.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	51459 2197585	96250 4823563	200873	384234	1072586	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	86151 3847447	154192 7478722	335110	682970	1889550	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	54478 2386299	94695 5349108	202627	398496	1139669	0.500 20.0	1.00 40.0	2.00	4.00	10.0
n-Butylbenzene	DCBd 4	Ave	27503 1371333	44168 3227113	104027	226297	636384	0.500 20.0	1.00 40.0	2.00	4.00	10.0

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

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1 Analy Batch No.: 290044

SDG No.: _____

Instrument ID: VMSZ GC Column: RTX-VMS40 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/30/2017 10:06 Calibration End Date: 01/30/2017 12:30 Calibration ID: 12255

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzyl chloride	DCBd 4	Ave	3815 210505	6968 501844	14999	29421	95233	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	41948 1738049	79265 3866297	164736	317260	863523	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Nonanal	DCBd 4	Ave	3235 210223	7471 565379	12921	29276	90579	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1682 81659	4000 199742	6745	13462	39646	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	34215 1461508	64596 3364078	127506	268768	724821	0.500 20.0	1.00 40.0	2.00	4.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	16660 743930	29378 1707089	61333	139248	368078	0.500 20.0	1.00 40.0	2.00	4.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	22341 864054	42122 ++++	80247	159222	446993	0.500 20.0	1.00 ++++	2.00	4.00	10.0
Naphthalene	DCBd 4	Ave	24157 939669	44915 ++++	87660	172386	467526	0.500 20.0	1.00 ++++	2.00	4.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	13457 490859	24613 ++++	46967	97642	261116	0.500 20.0	1.00 ++++	2.00	4.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	15375 834998	36236 ++++	74084	137931	399842	0.500 20.0	1.00 ++++	2.00	4.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	16495 691594	33795 ++++	64741	121840	334748	0.500 20.0	1.00 ++++	2.00	4.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	68395 3443902	146095 9993947	309308	591667	1724639	0.500 20.0	1.00 40.0	2.00	4.00	10.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	21643 1049898	45067 ++++	87787	175463	513020	0.500 20.0	1.00 ++++	2.00	4.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1152.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 30-Jan-2017 10:06:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-005
 Misc. Info.: VSTD0005
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12

Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:47:11 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:47:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.947	2.950	-0.003	99	29086	0.5000	0.5458	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.185	3.187	-0.002	98	16348	0.5000	0.5071	
3 Chloromethane	50	3.268	3.271	-0.003	99	26228	0.5000	0.5554	
4 Vinyl chloride	62	3.436	3.439	-0.003	98	34654	0.5000	0.5062	
5 Butadiene	39	3.450	3.452	-0.002	89	34043	0.5000	0.4909	
6 Bromomethane	94	4.008	4.011	-0.003	91	33915	0.5000	0.5389	
7 Chloroethane	64	4.246	4.234	0.012	98	25131	0.5000	0.4770	
8 Trichlorofluoromethane	101	4.469	4.472	-0.003	97	30618	0.5000	0.6120	
9 Dichlorofluoromethane	67	4.581	4.583	-0.002	97	37746	0.5000	0.5286	
10 Ethyl ether	74	4.972	4.960	0.012	90	10052	0.5000	0.5836	
11 Ethanol	45	5.209	5.198	0.011	47	2173	20.0	20.5	
12 1,1-Dichloroethene	96	5.279	5.281	-0.002	97	21796	0.5000	0.5049	
13 Carbon disulfide	76	5.321	5.323	-0.002	100	67374	0.5000	0.4994	
14 1,1,2-Trichloro-1,2,2-trif	151	5.349	5.351	-0.002	93	22609	0.5000	0.5100	
15 Iodomethane	142	5.488	5.491	-0.003	99	41435	0.5000	0.5261	
17 Acrolein	56	5.768	5.770	-0.002	94	7726	2.50	3.09	
S 16 1,2-Dichloroethene, Total	96				0			1.09	
18 3-Chloro-1-propene	39	5.949	5.952	-0.003	87	25982	0.5000	0.5396	
19 Isopropyl alcohol	45	5.963	5.966	-0.003	7	3688	5.00	5.17	
20 Methylene Chloride	84	6.089	6.091	-0.002	87	21023	0.5000	0.5495	
21 Acetone	43	6.158	6.147	0.011	83	3387	0.5000	0.5008	
22 trans-1,2-Dichloroethene	96	6.298	6.287	0.011	92	28367	0.5000	0.5794	
23 Methyl acetate	74	6.298	6.301	-0.003	83	7327	2.50	3.01	
24 Hexane	86	6.368	6.371	-0.003	93	7552	0.5000	0.4807	
25 Methyl tert-butyl ether	73	6.410	6.412	-0.002	85	36757	0.5000	0.5231	
26 2-Methyl-2-propanol	59	6.508	6.510	-0.002	97	7180	5.00	5.90	
27 Acetonitrile	41	6.731	6.734	-0.003	91	8021	5.00	6.44	
28 Isopropyl ether	45	6.843	6.845	-0.002	91	54051	0.5000	0.5308	
29 2-Chloro-1,3-butadiene	53	6.996	6.999	-0.003	92	32526	0.5000	0.4914	
30 1,1-Dichloroethane	63	7.024	7.027	-0.003	98	41145	0.5000	0.5506	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.094	7.083	0.011	96	25430	5.00	5.43	
32 Tert-butyl ethyl ether	59	7.248	7.250	-0.002	97	48062	0.5000	0.5336	
33 Vinyl acetate	43	7.275	7.278	-0.003	97	23786	0.5000	0.5066	
34 cis-1,2-Dichloroethene	96	7.611	7.613	-0.003	82	24474	0.5000	0.5106	
35 2,2-Dichloropropane	77	7.722	7.725	-0.003	89	28556	0.5000	0.5250	
37 Chlorobromomethane	128	7.820	7.823	-0.003	63	8954	0.5000	0.4815	
36 Cyclohexane	84	7.820	7.823	-0.003	87	38038	0.5000	0.4832	
38 Chloroform	83	7.876	7.878	-0.002	93	38200	0.5000	0.5107	
39 Ethyl acetate	45	7.974	7.962	0.012	97	2032	1.00	1.14	
40 Carbon tetrachloride	117	8.029	8.032	-0.003	95	32645	0.5000	0.4701	
41 Tetrahydrofuran	71	8.043	8.046	-0.003	72	1479	1.00	0.8940	
\$ 42 Dibromofluoromethane (Surr	113	8.071	8.060	0.011	94	15375	0.5000	0.4379	
43 1,1,1-Trichloroethane	97	8.099	8.102	-0.003	98	37371	0.5000	0.5028	
44 2-Butanone (MEK)	43	8.183	8.172	0.011	86	2736	0.5000	0.5023	
45 1,1-Dichloropropene	75	8.211	8.213	-0.002	96	32639	0.5000	0.5210	
46 Isooctane	57	8.295	8.297	-0.002	97	82824	0.5000	0.4944	
47 n-Heptane	43	8.378	8.367	0.011	90	36073	0.5000	0.5171	
48 Benzene	78	8.462	8.465	-0.003	96	89318	0.5000	0.5302	
50 Propionitrile	54	8.490	8.493	-0.003	46	8405	5.00	4.75	
49 Methacrylonitrile	41	8.504	8.507	-0.003	91	50543	5.00	5.26	
51 Tert-amyl methyl ether	73	8.532	8.521	0.011	98	35841	0.5000	0.4687	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.602	8.590	0.012	92	16495	0.5000	0.5219	
52 Isobutyl alcohol	42	8.602	8.590	0.012	48	2993	12.5	10.3	
54 1,2-Dichloroethane	62	8.658	8.660	-0.002	95	21158	0.5000	0.5450	
* 55 Fluorobenzene	96	8.853	8.842	0.011	99	1605977	10.0	10.0	
57 Methylcyclohexane	55	9.007	8.995	0.012	86	28195	0.5000	0.4527	
56 Trichloroethene	95	9.007	9.009	-0.002	75	23476	0.5000	0.4692	
59 n-Butanol	56	9.244	9.233	0.011	71	3125	12.5	11.8	
60 Dibromomethane	93	9.412	9.414	-0.002	83	8743	0.5000	0.5528	
61 Ethyl acrylate	55	9.453	9.442	0.011	95	8108	0.5000	0.4545	
62 1,2-Dichloropropane	63	9.495	9.498	-0.003	89	18925	0.5000	0.5399	
63 Dichlorobromomethane	83	9.537	9.540	-0.003	97	22411	0.5000	0.4998	
64 Methyl methacrylate	69	9.635	9.638	-0.003	90	11121	1.00	0.9733	
65 1,4-Dioxane	88	9.719	9.707	0.012	52	1189	10.0	8.62	
66 2-Chloroethyl vinyl ether	63	10.012	10.015	-0.003	6	1956	0.5000	0.6244	
67 cis-1,3-Dichloropropene	75	10.110	10.112	-0.002	95	27065	0.5000	0.5182	
\$ 68 Toluene-d8 (Surr)	98	10.277	10.280	-0.003	93	68395	0.5000	0.4695	
69 Toluene	92	10.333	10.322	0.011	98	58070	0.5000	0.5476	
70 2-Nitropropane	43	10.556	10.545	0.011	97	3496	1.00	1.02	
71 4-Methyl-2-pentanone (MIBK	43	10.640	10.629	0.011	94	6379	0.5000	0.5559	
72 trans-1,3-Dichloropropene	75	10.696	10.685	0.011	93	20257	0.5000	0.5177	
73 Tetrachloroethene	164	10.682	10.685	-0.003	94	25820	0.5000	0.5455	
74 Ethyl methacrylate	69	10.766	10.769	-0.002	92	9985	0.5000	0.4652	
75 1,1,2-Trichloroethane	83	10.850	10.838	0.012	88	10641	0.5000	0.5945	
76 Chlorodibromomethane	129	11.017	11.020	-0.003	88	13468	0.5000	0.5000	
77 1,3-Dichloropropane	76	11.101	11.104	-0.003	93	21004	0.5000	0.5745	
78 n-Butyl acetate	43	11.255	11.257	-0.002	94	11312	0.5000	0.5472	
79 Ethylene Dibromide	107	11.269	11.271	-0.002	99	10606	0.5000	0.5524	
80 2-Hexanone	43	11.380	11.383	-0.003	95	6455	0.5000	0.8510	
81 1-Chlorohexane	91	11.645	11.648	-0.003	91	33517	0.5000	0.5348	
82 Ethylbenzene	91	11.701	11.704	-0.003	82	120421	0.5000	0.5491	
* 83 Chlorobenzene-d5	117	11.701	11.704	-0.003	85	1183446	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.715	11.718	-0.003	93	67466	0.5000	0.5549	
85 1,1,1,2-Tetrachloroethane	131	11.757	11.760	-0.003	95	20228	0.5000	0.5221	
86 m-Xylene & p-Xylene	106	11.827	11.830	-0.003	97	44542	0.5000	0.5432	
88 o-Xylene	106	12.232	12.235	-0.002	97	39773	0.5000	0.5313	
89 Styrene	104	12.288	12.290	-0.002	94	50773	0.5000	0.4878	
90 Bromoform	173	12.358	12.360	-0.002	94	7798	0.5000	0.5516	
91 Isopropylbenzene	105	12.511	12.514	-0.003	94	110026	0.5000	0.5328	
\$ 92 4-Bromofluorobenzene (Surr	95	12.804	12.807	-0.003	92	21643	0.5000	0.5083	
93 N-Propylbenzene	91	12.902	12.905	-0.003	98	124959	0.5000	0.5423	
94 Bromobenzene	156	12.930	12.933	-0.003	89	27358	0.5000	0.5801	
95 1,1,2,2-Tetrachloroethane	83	12.958	12.961	-0.003	97	10546	0.5000	0.5618	
96 1,3,5-Trimethylbenzene	105	13.056	13.058	-0.002	95	81910	0.5000	0.5341	
97 2-Chlorotoluene	91	13.084	13.086	-0.002	97	77308	0.5000	0.5413	
99 trans-1,4-Dichloro-2-buten	53	13.125	13.128	-0.003	70	3036	0.5000	0.6145	
98 1,2,3-Trichloropropane	110	13.125	13.128	-0.003	84	4515	0.5000	0.3538	
100 Cyclohexanone	55	13.195	13.198	-0.003	53	1915	5.00	2.21	
101 4-Chlorotoluene	91	13.237	13.240	-0.003	96	69706	0.5000	0.5616	
102 tert-Butylbenzene	119	13.377	13.379	-0.002	91	84966	0.5000	0.5759	
103 1,2,4-Trimethylbenzene	105	13.447	13.449	-0.002	96	86400	0.5000	0.5608	
104 sec-Butylbenzene	105	13.544	13.547	-0.003	94	115738	0.5000	0.5262	
105 4-Isopropyltoluene	119	13.670	13.673	-0.003	96	101348	0.5000	0.5355	
106 1,3-Dichlorobenzene	146	13.810	13.812	-0.002	98	51459	0.5000	0.5694	
* 108 1,4-Dichlorobenzene-d4	152	13.879	13.882	-0.003	93	602376	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.879	13.882	-0.003	52	86151	0.5000	0.5659	
109 1,4-Dichlorobenzene	146	13.893	13.896	-0.003	96	54478	0.5000	0.5766	
110 n-Butylbenzene	134	14.089	14.077	0.012	97	27503	0.5000	0.5412	
111 Benzyl chloride	126	14.117	14.119	-0.002	87	3815	0.5000	0.5121	
112 1,2-Dichlorobenzene	146	14.312	14.315	-0.003	96	41948	0.5000	0.5711	
113 n-Nonyl Aldehyde	57	15.024	15.027	-0.003	84	3235	0.5000	0.4441	
114 1,2-Dibromo-3-Chloropropan	157	15.094	15.097	-0.003	42	1682	0.5000	0.5070	
115 1,3,5-Trichlorobenzene	180	15.122	15.111	0.011	97	34215	0.5000	0.5641	
116 Hexachlorobutadiene	225	15.694	15.697	-0.003	94	16660	0.5000	0.5564	
117 1,2,4-Trichlorobenzene	180	15.764	15.767	-0.003	93	22341	0.5000	0.5728	
118 Naphthalene	128	16.113	16.116	-0.003	95	24157	0.5000	0.5756	
120 1,2,3-Trichlorobenzene	180	16.309	16.311	-0.002	94	13457	0.5000	0.5845	
S 119 Xylenes, Total	106				0			1.07	
S 130 Trihalomethanes, Total	1				0			2.06	

Reagents:

8260 Surr 25_00070

Amount Added: 0.50

Units: uL

8260 NewWkMix_00204

Amount Added: 0.50

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1152.D

Injection Date: 30-Jan-2017 10:06:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: IC

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

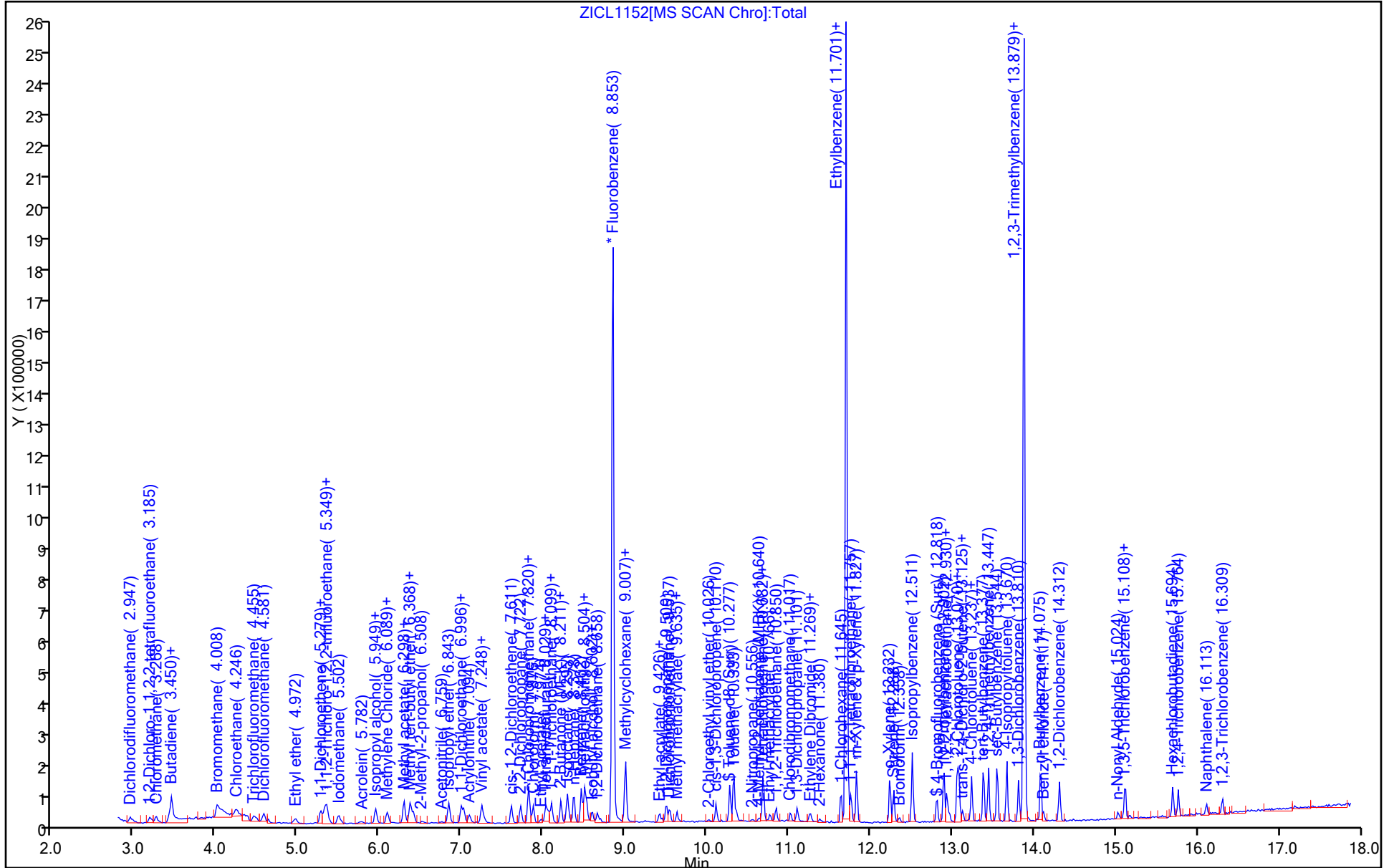
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1153.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 30-Jan-2017 10:30:30 ALS Bottle#: 3 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-006
 Misc. Info.: VSTD001
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12

Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:47:21 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:47:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.949	2.950	-0.001	99	49557	1.00	0.9340	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.187	3.187	0.000	95	28555	1.00	0.8896	
3 Chloromethane	50	3.256	3.271	-0.015	98	46862	1.00	1.00	
4 Vinyl chloride	62	3.424	3.439	-0.015	97	63273	1.00	0.9283	
5 Butadiene	39	3.452	3.452	0.000	92	64069	1.00	0.9279	
6 Bromomethane	94	4.010	4.011	-0.001	90	58616	1.00	0.9355	
7 Chloroethane	64	4.234	4.234	0.000	99	49451	1.00	0.9427	
8 Trichlorofluoromethane	101	4.471	4.472	-0.001	100	54728	1.00	0.9241	
9 Dichlorofluoromethane	67	4.583	4.583	0.000	98	66341	1.00	0.9330	
10 Ethyl ether	74	4.960	4.960	0.000	91	17270	1.00	1.01	
11 Ethanol	45	5.197	5.198	-0.001	93	4992	40.0	47.4	
12 1,1-Dichloroethene	96	5.267	5.281	-0.014	99	39908	1.00	0.9285	
13 Carbon disulfide	76	5.323	5.323	0.000	100	124236	1.00	0.9248	
14 1,1,2-Trichloro-1,2,2-trif	151	5.351	5.351	0.000	91	38026	1.00	0.8615	
15 Iodomethane	142	5.490	5.491	-0.001	97	79135	1.00	1.01	
17 Acrolein	56	5.770	5.770	0.000	98	13289	5.00	5.33	
S 16 1,2-Dichloroethene, Total	96				0			2.02	
18 3-Chloro-1-propene	39	5.951	5.952	-0.001	85	45708	1.00	0.9534	
19 Isopropyl alcohol	45	5.965	5.966	-0.001	15	8559	10.0	12.1	
20 Methylene Chloride	84	6.091	6.091	0.000	86	39219	1.00	1.03	
21 Acetone	43	6.147	6.147	0.000	95	4591	1.00	0.8743	
22 trans-1,2-Dichloroethene	96	6.286	6.287	-0.001	94	47601	1.00	0.9765	
23 Methyl acetate	74	6.300	6.301	-0.001	96	12640	5.00	5.22	
24 Hexane	86	6.370	6.371	-0.001	91	15340	1.00	0.9807	
25 Methyl tert-butyl ether	73	6.412	6.412	0.000	83	73965	1.00	1.06	
26 2-Methyl-2-propanol	59	6.510	6.510	0.000	96	12054	10.0	9.95	
27 Acetonitrile	41	6.733	6.734	-0.001	98	13614	10.0	11.0	
28 Isopropyl ether	45	6.845	6.845	0.000	92	105005	1.00	1.04	
29 2-Chloro-1,3-butadiene	53	6.998	6.999	-0.001	91	56223	1.00	0.8531	
30 1,1-Dichloroethane	63	7.026	7.027	-0.001	98	73570	1.00	0.9888	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.096	7.083	0.013	99	48946	10.0	10.5	
32 Tert-butyl ethyl ether	59	7.250	7.250	0.000	96	92708	1.00	1.03	
33 Vinyl acetate	43	7.277	7.278	-0.001	98	47279	1.00	1.01	
34 cis-1,2-Dichloroethene	96	7.613	7.613	0.000	79	50038	1.00	1.05	
35 2,2-Dichloropropane	77	7.724	7.725	-0.001	91	51496	1.00	0.9508	
36 Cyclohexane	84	7.822	7.823	-0.001	88	69887	1.00	0.8917	
37 Chlorobromomethane	128	7.822	7.823	-0.001	65	18085	1.00	0.9767	
38 Chloroform	83	7.878	7.878	0.000	94	78359	1.00	1.05	
39 Ethyl acetate	45	7.962	7.962	0.000	99	3579	2.00	2.01	
40 Carbon tetrachloride	117	8.031	8.032	-0.001	97	63004	1.00	0.9113	
41 Tetrahydrofuran	71	8.045	8.046	-0.001	54	4266	2.00	2.59	
\$ 42 Dibromofluoromethane (Surr	113	8.059	8.060	-0.001	92	36236	1.00	1.04	
43 1,1,1-Trichloroethane	97	8.101	8.102	-0.001	96	66812	1.00	0.9028	
44 2-Butanone (MEK)	43	8.185	8.172	0.013	84	6723	1.00	1.24	
45 1,1-Dichloropropene	75	8.213	8.213	0.000	95	55262	1.00	0.8860	
46 Isooctane	57	8.297	8.297	0.000	96	156834	1.00	0.9402	
47 n-Heptane	43	8.367	8.367	0.000	89	61486	1.00	0.8851	
48 Benzene	78	8.464	8.465	-0.001	96	169835	1.00	1.01	
50 Propionitrile	54	8.492	8.493	-0.001	44	19609	10.0	11.1	
49 Methacrylonitrile	41	8.506	8.507	-0.001	92	97405	10.0	10.2	
51 Tert-amyl methyl ether	73	8.534	8.521	0.013	98	78355	1.00	1.03	
52 Isobutyl alcohol	42	8.590	8.590	0.000	48	6270	25.0	21.7	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.590	8.590	0.000	92	33795	1.00	1.07	
54 1,2-Dichloroethane	62	8.660	8.660	0.000	96	39973	1.00	1.03	
* 55 Fluorobenzene	96	8.855	8.842	0.013	100	1599026	10.0	10.0	
57 Methylcyclohexane	55	8.995	8.995	0.000	90	55405	1.00	0.8934	
56 Trichloroethene	95	9.009	9.009	0.000	90	46806	1.00	0.9396	
59 n-Butanol	56	9.246	9.233	0.013	91	6900	25.0	26.2	
60 Dibromomethane	93	9.414	9.414	0.000	91	16021	1.00	1.02	
61 Ethyl acrylate	55	9.442	9.442	0.000	99	17989	1.00	1.01	
62 1,2-Dichloropropane	63	9.497	9.498	-0.001	91	36649	1.00	1.05	
63 Dichlorobromomethane	83	9.539	9.540	-0.001	98	42244	1.00	0.9462	
64 Methyl methacrylate	69	9.637	9.638	-0.001	85	22160	2.00	1.95	
65 1,4-Dioxane	88	9.721	9.707	0.014	69	2685	20.0	19.6	
66 2-Chloroethyl vinyl ether	63	10.014	10.015	-0.001	84	3211	1.00	1.03	
67 cis-1,3-Dichloropropene	75	10.112	10.112	0.000	94	50567	1.00	0.9724	
\$ 68 Toluene-d8 (Surr)	98	10.279	10.280	-0.001	92	146095	1.00	1.02	
69 Toluene	92	10.321	10.322	-0.001	99	109961	1.00	1.05	
70 2-Nitropropane	43	10.545	10.545	0.000	94	8660	2.00	2.55	
71 4-Methyl-2-pentanone (MIBK	43	10.628	10.629	-0.001	96	12238	1.00	1.08	
73 Tetrachloroethene	164	10.684	10.685	-0.001	96	45420	1.00	0.9748	
72 trans-1,3-Dichloropropene	75	10.684	10.685	-0.001	92	40845	1.00	1.06	
74 Ethyl methacrylate	69	10.768	10.769	0.000	87	22773	1.00	1.08	
75 1,1,2-Trichloroethane	83	10.852	10.838	0.014	90	19097	1.00	1.08	
76 Chlorodibromomethane	129	11.019	11.020	-0.001	88	27790	1.00	1.05	
77 1,3-Dichloropropane	76	11.103	11.104	-0.001	90	41525	1.00	1.15	
78 n-Butyl acetate	43	11.257	11.257	0.000	96	21138	1.00	1.04	
79 Ethylene Dibromide	107	11.271	11.271	0.000	96	23204	1.00	1.23	
80 2-Hexanone	43	11.382	11.383	-0.001	93	10250	1.00	1.37	
81 1-Chlorohexane	91	11.648	11.648	0.000	95	59073	1.00	0.9575	
* 83 Chlorobenzene-d5	117	11.703	11.704	-0.001	85	1164909	10.0	10.0	
82 Ethylbenzene	91	11.703	11.704	-0.001	55	214756	1.00	0.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.717	11.718	-0.001	95	126636	1.00	1.06	
85 1,1,1,2-Tetrachloroethane	131	11.759	11.760	-0.001	90	40517	1.00	1.06	
86 m-Xylene & p-Xylene	106	11.829	11.830	-0.001	98	78270	1.00	0.9696	
88 o-Xylene	106	12.234	12.235	0.000	97	75752	1.00	1.03	
89 Styrene	104	12.290	12.290	0.000	94	101981	1.00	1.00	
90 Bromoform	173	12.360	12.360	0.000	91	13626	1.00	1.00	
91 Isopropylbenzene	105	12.513	12.514	-0.001	95	199135	1.00	1.01	
\$ 92 4-Bromofluorobenzene (Surr	95	12.806	12.807	-0.001	95	45067	1.00	1.10	
93 N-Propylbenzene	91	12.904	12.905	-0.001	98	222185	1.00	1.01	
94 Bromobenzene	156	12.932	12.933	-0.001	88	50630	1.00	1.12	
95 1,1,2,2-Tetrachloroethane	83	12.960	12.961	-0.001	97	20905	1.00	1.16	
96 1,3,5-Trimethylbenzene	105	13.058	13.058	0.000	96	149131	1.00	1.01	
97 2-Chlorotoluene	91	13.086	13.086	0.000	97	146395	1.00	1.07	
98 1,2,3-Trichloropropane	110	13.128	13.128	0.000	88	7059	1.00	0.8784	
99 trans-1,4-Dichloro-2-buten	53	13.128	13.128	0.000	70	5328	1.00	1.12	
100 Cyclohexanone	55	13.197	13.198	-0.001	81	4907	10.0	13.6	
101 4-Chlorotoluene	91	13.239	13.240	-0.001	96	132479	1.00	1.11	
102 tert-Butylbenzene	119	13.379	13.379	0.000	92	143414	1.00	1.01	
103 1,2,4-Trimethylbenzene	105	13.449	13.449	0.000	97	154439	1.00	1.04	
104 sec-Butylbenzene	105	13.546	13.547	-0.001	93	208596	1.00	0.9887	
105 4-Isopropyltoluene	119	13.672	13.673	-0.001	97	175091	1.00	0.9644	
106 1,3-Dichlorobenzene	146	13.812	13.812	0.000	98	96250	1.00	1.11	
107 1,2,3-Trimethylbenzene	105	13.881	13.882	-0.001	54	154192	1.00	1.06	
* 108 1,4-Dichlorobenzene-d4	152	13.881	13.882	-0.001	93	577854	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.895	13.896	-0.001	95	94695	1.00	1.04	
110 n-Butylbenzene	134	14.077	14.077	0.000	97	44168	1.00	0.9061	
111 Benzyl chloride	126	14.119	14.119	0.000	1	6968	1.00	0.9750	
112 1,2-Dichlorobenzene	146	14.314	14.315	-0.001	98	79265	1.00	1.12	
113 n-Nonyl Aldehyde	57	15.026	15.027	-0.001	88	7471	1.00	1.07	
114 1,2-Dibromo-3-Chloropropan	157	15.096	15.097	-0.001	58	4000	1.00	1.26	
115 1,3,5-Trichlorobenzene	180	15.110	15.111	-0.001	96	64596	1.00	1.11	
116 Hexachlorobutadiene	225	15.697	15.697	-0.001	93	29378	1.00	1.02	
117 1,2,4-Trichlorobenzene	180	15.766	15.767	-0.001	92	42122	1.00	1.13	
118 Naphthalene	128	16.115	16.116	-0.001	96	44915	1.00	1.12	
120 1,2,3-Trichlorobenzene	180	16.311	16.311	0.000	92	24613	1.00	1.11	
S 119 Xylenes, Total	106				0			2.00	
S 130 Trihalomethanes, Total	1				0			4.05	

Reagents:

8260 NewWkMix_00204

Amount Added: 1.00

Units: uL

8260 Surr 25_00070

Amount Added: 1.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1153.D

Injection Date: 30-Jan-2017 10:30:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: IC

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

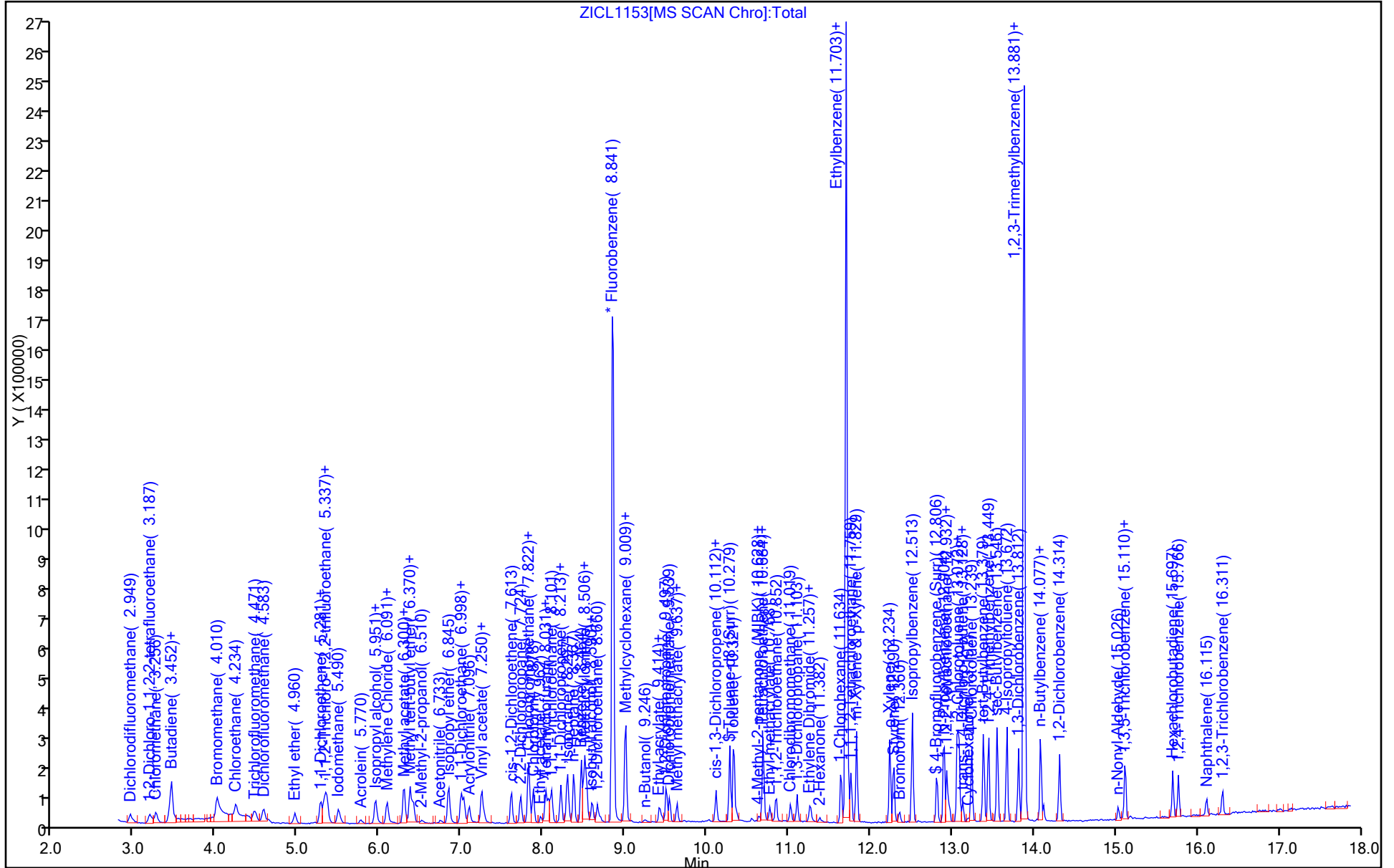
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1154.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 30-Jan-2017 10:53:30 ALS Bottle#: 4 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-007
 Misc. Info.: VSTD002
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:47:32 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:47:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.948	2.950	-0.002	99	112105	2.00	2.07	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.185	3.187	-0.002	95	64406	2.00	1.97	
3 Chloromethane	50	3.269	3.271	-0.002	100	100730	2.00	2.10	
4 Vinyl chloride	62	3.436	3.439	-0.003	99	135903	2.00	1.95	
5 Butadiene	39	3.450	3.452	-0.002	91	144632	2.00	2.05	
6 Bromomethane	94	4.009	4.011	-0.002	90	128262	2.00	2.01	
7 Chloroethane	64	4.246	4.234	0.012	99	107308	2.00	2.00	
8 Trichlorofluoromethane	101	4.469	4.472	-0.003	98	126522	2.00	1.82	
9 Dichlorofluoromethane	67	4.581	4.583	-0.002	97	141619	2.00	1.95	
10 Ethyl ether	74	4.958	4.960	-0.002	88	36938	2.00	2.11	
11 Ethanol	45	5.182	5.198	-0.016	99	9229	80.0	85.8	
12 1,1-Dichloroethene	96	5.279	5.281	-0.002	98	85399	2.00	1.95	
13 Carbon disulfide	76	5.321	5.323	-0.002	100	274162	2.00	2.00	
14 1,1,2-Trichloro-1,2,2-trif	151	5.349	5.351	-0.002	90	91773	2.00	2.04	
15 Iodomethane	142	5.489	5.491	-0.002	99	159373	2.00	1.99	
17 Acrolein	56	5.768	5.770	-0.002	99	25500	10.0	10.0	
S 16 1,2-Dichloroethene, Total	96				0			3.98	
18 3-Chloro-1-propene	39	5.949	5.952	-0.003	86	96275	2.00	1.97	
19 Isopropyl alcohol	45	5.963	5.966	-0.003	13	15196	20.0	21.0	
20 Methylene Chloride	84	6.089	6.091	-0.002	88	81750	2.00	2.10	
21 Acetone	43	6.159	6.147	0.012	92	8945	2.00	2.15	
22 trans-1,2-Dichloroethene	96	6.298	6.287	0.011	96	97133	2.00	1.95	
23 Methyl acetate	74	6.298	6.301	-0.003	98	24017	10.0	9.72	
24 Hexane	86	6.368	6.371	-0.003	92	31492	2.00	1.97	
25 Methyl tert-butyl ether	73	6.410	6.412	-0.002	82	145294	2.00	2.03	
26 2-Methyl-2-propanol	59	6.508	6.510	-0.002	97	25096	20.0	20.3	
27 Acetonitrile	41	6.731	6.734	-0.003	97	23872	20.0	18.9	
28 Isopropyl ether	45	6.843	6.845	-0.002	90	210955	2.00	2.04	
29 2-Chloro-1,3-butadiene	53	6.997	6.999	-0.002	92	129153	2.00	1.92	
30 1,1-Dichloroethane	63	7.024	7.027	-0.003	96	149740	2.00	1.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.094	7.083	0.011	96	97975	20.0	20.6	
32 Tert-butyl ethyl ether	59	7.248	7.250	-0.002	96	178595	2.00	1.95	
33 Vinyl acetate	43	7.276	7.278	-0.002	97	95012	2.00	1.99	
34 cis-1,2-Dichloroethene	96	7.611	7.613	-0.002	79	98597	2.00	2.02	
35 2,2-Dichloropropane	77	7.723	7.725	-0.002	90	109643	2.00	1.98	
37 Chlorobromomethane	128	7.820	7.823	-0.003	63	36779	2.00	1.95	
36 Cyclohexane	84	7.820	7.823	-0.003	88	153325	2.00	1.92	
38 Chloroform	83	7.876	7.878	-0.002	92	151949	2.00	2.00	
39 Ethyl acetate	45	7.960	7.962	-0.002	99	7214	4.00	3.97	
40 Carbon tetrachloride	117	8.030	8.032	-0.002	99	135162	2.00	1.92	
41 Tetrahydrofuran	71	8.044	8.046	-0.002	32	5851	4.00	3.48	
\$ 42 Dibromofluoromethane (Surr	113	8.058	8.060	-0.002	94	74084	2.00	2.08	
43 1,1,1-Trichloroethane	97	8.100	8.102	-0.002	97	151570	2.00	2.01	
44 2-Butanone (MEK)	43	8.183	8.172	0.011	84	11891	2.00	2.15	
45 1,1-Dichloropropene	75	8.211	8.213	-0.002	96	127201	2.00	2.00	
46 Isooctane	57	8.295	8.297	-0.002	96	341522	2.00	2.01	
47 n-Heptane	43	8.365	8.367	-0.002	91	141062	2.00	1.99	
48 Benzene	78	8.463	8.465	-0.002	96	355004	2.00	2.07	
50 Propionitrile	54	8.490	8.493	-0.003	42	36088	20.0	20.1	
49 Methacrylonitrile	41	8.504	8.507	-0.003	91	195628	20.0	20.0	
51 Tert-amyl methyl ether	73	8.532	8.521	0.011	97	153308	2.00	1.97	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.602	8.590	0.012	92	64741	2.00	2.02	
52 Isobutyl alcohol	42	8.588	8.590	-0.002	50	14926	50.0	50.7	
54 1,2-Dichloroethane	62	8.658	8.660	-0.002	98	80867	2.00	2.05	
* 55 Fluorobenzene	96	8.854	8.842	0.012	99	1632114	10.0	10.0	
57 Methylcyclohexane	55	9.007	8.995	0.012	85	123134	2.00	1.95	
56 Trichloroethene	95	9.007	9.009	-0.002	76	97753	2.00	1.92	
59 n-Butanol	56	9.244	9.233	0.011	87	11665	50.0	43.4	
60 Dibromomethane	93	9.426	9.414	0.012	90	33047	2.00	2.06	
61 Ethyl acrylate	55	9.454	9.442	0.012	97	37099	2.00	2.05	
62 1,2-Dichloropropane	63	9.510	9.498	0.012	92	73564	2.00	2.07	
63 Dichlorobromomethane	83	9.538	9.540	-0.002	99	91995	2.00	2.02	
64 Methyl methacrylate	69	9.635	9.638	-0.003	84	46206	4.00	3.98	
65 1,4-Dioxane	88	9.719	9.707	0.012	92	6607	40.0	47.1	
66 2-Chloroethyl vinyl ether	63	10.026	10.015	0.011	85	6004	2.00	1.89	
67 cis-1,3-Dichloropropene	75	10.110	10.112	-0.002	95	104850	2.00	1.98	
\$ 68 Toluene-d8 (Surr)	98	10.278	10.280	-0.002	93	309308	2.00	2.09	
69 Toluene	92	10.333	10.322	0.011	98	225580	2.00	2.10	
70 2-Nitropropane	43	10.543	10.545	-0.002	98	13450	4.00	3.85	
71 4-Methyl-2-pentanone (MIBK	43	10.641	10.629	0.012	95	23513	2.00	2.02	
72 trans-1,3-Dichloropropene	75	10.683	10.685	-0.003	89	82055	2.00	2.07	
73 Tetrachloroethene	164	10.683	10.685	-0.003	97	98621	2.00	2.06	
74 Ethyl methacrylate	69	10.766	10.769	-0.002	87	43595	2.00	2.00	
75 1,1,2-Trichloroethane	83	10.850	10.838	0.012	91	37962	2.00	2.09	
76 Chlorodibromomethane	129	11.018	11.020	-0.002	89	56908	2.00	2.08	
77 1,3-Dichloropropane	76	11.101	11.104	-0.003	90	82250	2.00	2.22	
78 n-Butyl acetate	43	11.255	11.257	-0.002	98	43441	2.00	2.07	
79 Ethylene Dibromide	107	11.269	11.271	-0.002	99	41168	2.00	2.12	
80 2-Hexanone	43	11.381	11.383	-0.002	97	18419	2.00	2.40	
81 1-Chlorohexane	91	11.646	11.648	-0.002	94	126179	2.00	1.99	
82 Ethylbenzene	91	11.702	11.704	-0.002	98	455602	2.00	2.05	
* 83 Chlorobenzene-d5	117	11.702	11.704	-0.002	85	1199816	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.716	11.718	-0.002	97	262055	2.00	2.13	
85 1,1,1,2-Tetrachloroethane	131	11.758	11.760	-0.002	93	80964	2.00	2.06	
86 m-Xylene & p-Xylene	106	11.827	11.830	-0.003	98	174468	2.00	2.10	
88 o-Xylene	106	12.232	12.235	-0.002	98	158210	2.00	2.08	
89 Styrene	104	12.288	12.290	-0.002	93	215604	2.00	2.04	
90 Bromoform	173	12.358	12.360	-0.002	96	29345	2.00	2.08	
91 Isopropylbenzene	105	12.512	12.514	-0.002	95	441314	2.00	2.14	
\$ 92 4-Bromofluorobenzene (Surr	95	12.805	12.807	-0.002	93	87787	2.00	2.07	
93 N-Propylbenzene	91	12.902	12.905	-0.003	97	485481	2.00	2.11	
94 Bromobenzene	156	12.930	12.933	-0.003	83	104665	2.00	2.22	
95 1,1,2,2-Tetrachloroethane	83	12.972	12.961	0.011	97	41681	2.00	2.23	
96 1,3,5-Trimethylbenzene	105	13.056	13.058	-0.002	95	334610	2.00	2.19	
97 2-Chlorotoluene	91	13.084	13.086	-0.002	97	312744	2.00	2.19	
99 trans-1,4-Dichloro-2-buten	53	13.140	13.128	0.012	77	9407	2.00	1.91	
98 1,2,3-Trichloropropane	110	13.126	13.128	-0.002	87	15548	2.00	2.40	
100 Cyclohexanone	55	13.196	13.198	-0.002	88	8040	20.0	24.0	
101 4-Chlorotoluene	91	13.238	13.240	-0.002	97	271220	2.00	2.19	
102 tert-Butylbenzene	119	13.377	13.379	-0.002	92	319489	2.00	2.17	
103 1,2,4-Trimethylbenzene	105	13.447	13.449	-0.002	97	339894	2.00	2.21	
104 sec-Butylbenzene	105	13.545	13.547	-0.002	95	462051	2.00	2.11	
105 4-Isopropyltoluene	119	13.670	13.673	-0.003	96	386512	2.00	2.05	
106 1,3-Dichlorobenzene	146	13.810	13.812	-0.002	98	200873	2.00	2.23	
* 108 1,4-Dichlorobenzene-d4	152	13.880	13.882	-0.002	94	601074	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.880	13.882	-0.002	65	335110	2.00	2.21	
109 1,4-Dichlorobenzene	146	13.894	13.896	-0.002	96	202627	2.00	2.15	
110 n-Butylbenzene	134	14.089	14.077	0.012	96	104027	2.00	2.05	
111 Benzyl chloride	126	14.117	14.119	-0.002	92	14999	2.00	2.02	
112 1,2-Dichlorobenzene	146	14.313	14.315	-0.002	98	164736	2.00	2.25	
113 n-Nonyl Aldehyde	57	15.025	15.027	-0.002	87	12921	2.00	1.78	
114 1,2-Dibromo-3-Chloropropan	157	15.108	15.097	0.011	55	6745	2.00	2.04	
115 1,3,5-Trichlorobenzene	180	15.122	15.111	0.011	97	127506	2.00	2.11	
116 Hexachlorobutadiene	225	15.695	15.697	-0.002	96	61333	2.00	2.05	
117 1,2,4-Trichlorobenzene	180	15.765	15.767	-0.002	91	80247	2.00	2.06	
118 Naphthalene	128	16.114	16.116	-0.002	96	87660	2.00	2.09	
120 1,2,3-Trichlorobenzene	180	16.309	16.311	-0.002	93	46967	2.00	2.04	
S 119 Xylenes, Total	106				0			4.18	
S 130 Trihalomethanes, Total	1				0			8.18	

Reagents:

8260 Surr 25_00070

Amount Added: 2.00

Units: uL

8260 NewWkMix_00204

Amount Added: 2.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1154.D

Injection Date: 30-Jan-2017 10:53:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: IC

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

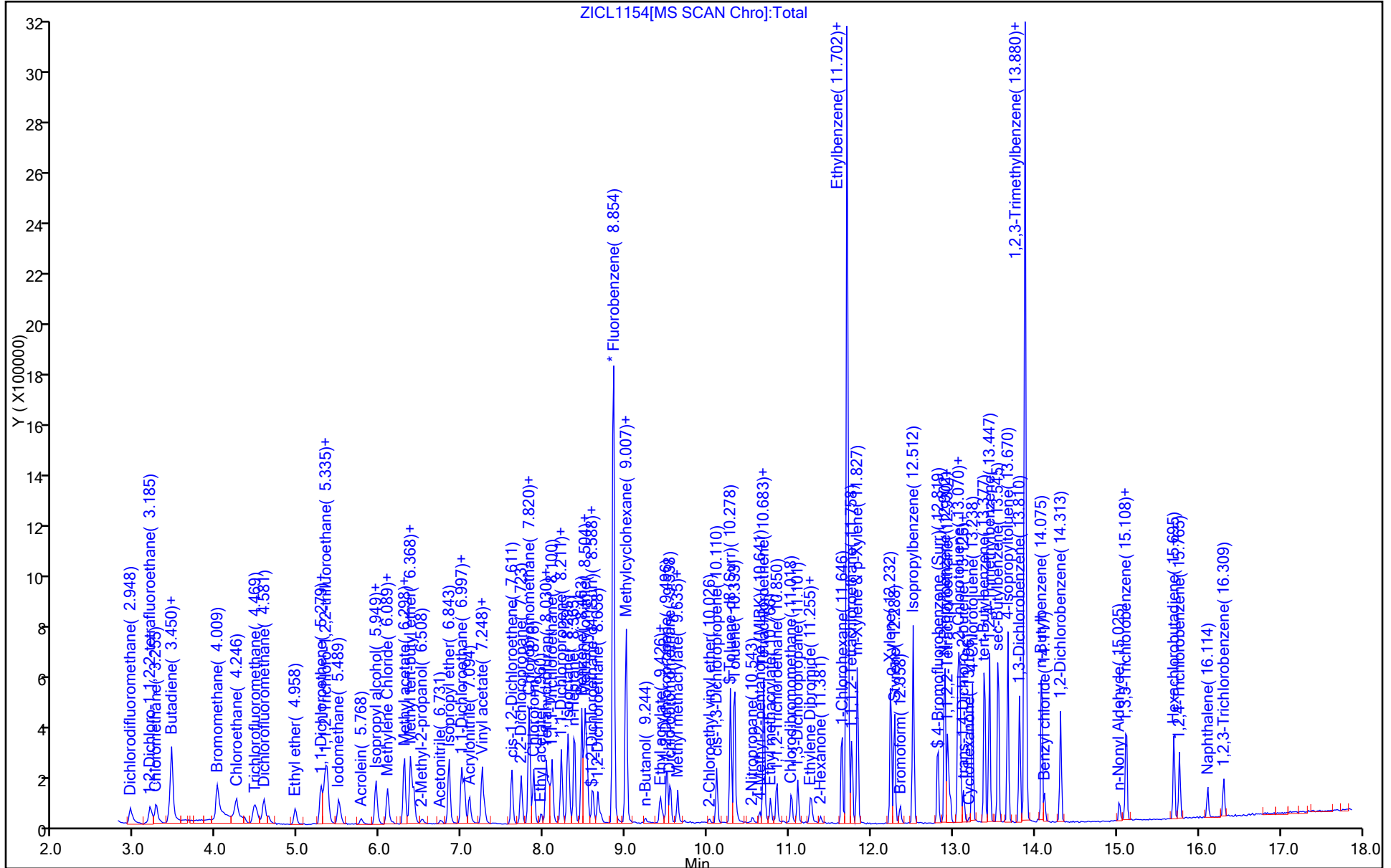
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1155.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 30-Jan-2017 11:17:30 ALS Bottle#: 5 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-008
 Misc. Info.: VSTD004
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12

Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:47:43 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:47:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.947	2.950	-0.003	99	218120	4.00	4.00	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.184	3.187	-0.003	99	143454	4.00	4.35	
3 Chloromethane	50	3.268	3.271	-0.003	100	196338	4.00	4.06	
4 Vinyl chloride	62	3.435	3.439	-0.004	99	284947	4.00	4.07	
5 Butadiene	39	3.449	3.452	-0.003	89	286699	4.00	4.04	
6 Bromomethane	94	4.008	4.011	-0.003	90	253059	4.00	3.93	
7 Chloroethane	64	4.245	4.234	0.011	99	211972	4.00	3.93	
8 Trichlorofluoromethane	101	4.469	4.472	-0.003	98	301331	4.00	3.99	
9 Dichlorofluoromethane	67	4.580	4.583	-0.003	98	289965	4.00	3.97	
10 Ethyl ether	74	4.957	4.960	-0.003	90	64991	4.00	3.69	
11 Ethanol	45	5.195	5.198	-0.003	97	17335	160.0	160.1	
12 1,1-Dichloroethene	96	5.278	5.281	-0.003	98	177652	4.00	4.02	
13 Carbon disulfide	76	5.320	5.323	-0.003	100	558402	4.00	4.04	
14 1,1,2-Trichloro-1,2,2-trif	151	5.348	5.351	-0.003	90	183295	4.00	4.04	
15 Iodomethane	142	5.488	5.491	-0.003	99	318867	4.00	3.96	
17 Acrolein	56	5.767	5.770	-0.003	96	45428	20.0	17.7	
S 16 1,2-Dichloroethene, Total	96				0			7.58	
18 3-Chloro-1-propene	39	5.949	5.952	-0.003	88	194566	4.00	3.95	
19 Isopropyl alcohol	45	5.963	5.966	-0.003	12	25084	40.0	34.4	
20 Methylene Chloride	84	6.088	6.091	-0.003	88	151972	4.00	3.88	
21 Acetone	43	6.158	6.147	0.011	99	16081	4.00	4.26	
22 trans-1,2-Dichloroethene	96	6.298	6.287	0.011	96	183922	4.00	3.67	
23 Methyl acetate	74	6.298	6.301	-0.003	97	44444	20.0	17.9	
24 Hexane	86	6.367	6.371	-0.004	92	65907	4.00	4.10	
25 Methyl tert-butyl ether	73	6.409	6.412	-0.003	82	272063	4.00	3.78	
26 2-Methyl-2-propanol	59	6.521	6.510	0.011	98	44216	40.0	35.5	
27 Acetonitrile	41	6.744	6.734	0.010	99	45368	40.0	35.6	
28 Isopropyl ether	45	6.842	6.845	-0.003	91	398666	4.00	3.83	
29 2-Chloro-1,3-butadiene	53	6.996	6.999	-0.003	92	278801	4.00	4.12	
30 1,1-Dichloroethane	63	7.024	7.027	-0.003	97	300139	4.00	3.92	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.093	7.083	0.010	99	178441	40.0	37.2	
32 Tert-butyl ethyl ether	59	7.247	7.250	-0.003	96	348971	4.00	3.79	
33 Vinyl acetate	43	7.275	7.278	-0.003	98	181601	4.00	3.78	
34 cis-1,2-Dichloroethene	96	7.610	7.613	-0.003	80	191681	4.00	3.91	
35 2,2-Dichloropropane	77	7.722	7.725	-0.003	91	233364	4.00	4.19	
36 Cyclohexane	84	7.819	7.823	-0.004	88	331947	4.00	4.12	
37 Chlorobromomethane	128	7.819	7.823	-0.004	60	73741	4.00	3.87	
38 Chloroform	83	7.875	7.878	-0.003	93	300019	4.00	3.92	
39 Ethyl acetate	45	7.959	7.962	-0.003	99	13230	8.00	7.23	
40 Carbon tetrachloride	117	8.029	8.032	-0.003	99	291644	4.00	4.10	
41 Tetrahydrofuran	71	8.043	8.046	-0.003	83	12522	8.00	7.40	
\$ 42 Dibromofluoromethane (Surr	113	8.071	8.060	0.011	94	137931	4.00	3.84	
43 1,1,1-Trichloroethane	97	8.099	8.102	-0.003	96	306246	4.00	4.03	
44 2-Butanone (MEK)	43	8.182	8.172	0.010	99	19658	4.00	3.53	
45 1,1-Dichloropropene	75	8.210	8.213	-0.003	96	263219	4.00	4.11	
46 Isooctane	57	8.294	8.297	-0.003	96	732223	4.00	4.27	
47 n-Heptane	43	8.364	8.367	-0.003	90	290301	4.00	4.07	
48 Benzene	78	8.462	8.465	-0.003	96	692877	4.00	4.02	
50 Propionitrile	54	8.490	8.493	-0.003	45	63324	40.0	35.0	
49 Methacrylonitrile	41	8.504	8.507	-0.003	92	366474	40.0	37.2	
51 Tert-amyl methyl ether	73	8.532	8.521	0.011	98	296611	4.00	3.79	
52 Isobutyl alcohol	42	8.587	8.590	-0.003	50	30254	100.0	102.0	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.601	8.590	0.011	94	121840	4.00	3.77	
54 1,2-Dichloroethane	62	8.657	8.660	-0.003	98	150746	4.00	3.79	
* 55 Fluorobenzene	96	8.853	8.842	0.011	99	1643370	10.0	10.0	
57 Methylcyclohexane	55	9.006	8.995	0.011	85	260600	4.00	4.09	
56 Trichloroethene	95	9.006	9.009	-0.003	70	196290	4.00	3.83	
59 n-Butanol	56	9.244	9.233	0.011	90	24441	100.0	90.3	
60 Dibromomethane	93	9.425	9.414	0.011	90	60655	4.00	3.75	
61 Ethyl acrylate	55	9.453	9.442	0.011	99	66062	4.00	3.62	
62 1,2-Dichloropropane	63	9.509	9.498	0.011	91	134629	4.00	3.75	
63 Dichlorobromomethane	83	9.537	9.540	-0.003	98	177306	4.00	3.86	
64 Methyl methacrylate	69	9.635	9.638	-0.003	89	86899	8.00	7.43	
65 1,4-Dioxane	88	9.718	9.707	0.011	88	11794	80.0	83.6	
66 2-Chloroethyl vinyl ether	63	10.025	10.015	0.010	90	11430	4.00	3.57	
67 cis-1,3-Dichloropropene	75	10.109	10.112	-0.003	95	205215	4.00	3.84	
\$ 68 Toluene-d8 (Surr)	98	10.277	10.280	-0.003	94	591667	4.00	3.86	
69 Toluene	92	10.333	10.322	0.011	98	457741	4.00	4.10	
70 2-Nitropropane	43	10.542	10.545	-0.003	98	25859	8.00	7.13	
71 4-Methyl-2-pentanone (MIBK	43	10.640	10.629	0.011	97	47241	4.00	3.91	
73 Tetrachloroethene	164	10.682	10.685	-0.003	97	205017	4.00	4.11	
72 trans-1,3-Dichloropropene	75	10.696	10.685	0.011	93	156490	4.00	3.80	
74 Ethyl methacrylate	69	10.765	10.769	-0.003	88	87547	4.00	3.87	
75 1,1,2-Trichloroethane	83	10.849	10.838	0.011	90	71880	4.00	3.81	
76 Chlorodibromomethane	129	11.017	11.020	-0.003	90	112272	4.00	3.96	
77 1,3-Dichloropropane	76	11.101	11.104	-0.003	91	150032	4.00	3.90	
78 n-Butyl acetate	43	11.254	11.257	-0.003	97	84120	4.00	3.86	
79 Ethylene Dibromide	107	11.268	11.271	-0.003	98	75743	4.00	3.74	
80 2-Hexanone	43	11.380	11.383	-0.003	95	32029	4.00	4.01	
81 1-Chlorohexane	91	11.645	11.648	-0.003	94	286635	4.00	4.34	
* 83 Chlorobenzene-d5	117	11.701	11.704	-0.003	87	1246735	10.0	10.0	
82 Ethylbenzene	91	11.701	11.704	-0.003	92	944933	4.00	4.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.715	11.718	-0.003	95	507033	4.00	3.96	
85 1,1,1,2-Tetrachloroethane	131	11.771	11.760	0.011	96	165201	4.00	4.05	
86 m-Xylene & p-Xylene	106	11.827	11.830	-0.003	98	353380	4.00	4.09	
88 o-Xylene	106	12.245	12.235	0.011	96	321563	4.00	4.08	
89 Styrene	104	12.287	12.290	-0.003	94	452050	4.00	4.12	
90 Bromoform	173	12.357	12.360	-0.003	97	56544	4.00	3.75	
91 Isopropylbenzene	105	12.511	12.514	-0.003	95	922242	4.00	4.19	
\$ 92 4-Bromofluorobenzene (Surr	95	12.818	12.807	0.011	94	175463	4.00	3.86	
93 N-Propylbenzene	91	12.902	12.905	-0.003	98	1038990	4.00	4.23	
94 Bromobenzene	156	12.943	12.933	0.010	88	194327	4.00	3.86	
95 1,1,2,2-Tetrachloroethane	83	12.971	12.961	0.010	97	76501	4.00	3.82	
96 1,3,5-Trimethylbenzene	105	13.055	13.058	-0.003	95	706604	4.00	4.32	
97 2-Chlorotoluene	91	13.083	13.086	-0.003	97	638902	4.00	4.19	
98 1,2,3-Trichloropropane	110	13.125	13.128	-0.003	88	29332	4.00	4.59	
99 trans-1,4-Dichloro-2-buten	53	13.139	13.128	0.011	75	18145	4.00	3.44	
100 Cyclohexanone	55	13.195	13.198	-0.003	80	12994	40.0	38.7	
101 4-Chlorotoluene	91	13.237	13.240	-0.003	97	557762	4.00	4.21	
102 tert-Butylbenzene	119	13.390	13.379	0.011	91	674949	4.00	4.29	
103 1,2,4-Trimethylbenzene	105	13.446	13.449	-0.003	97	710085	4.00	4.32	
104 sec-Butylbenzene	105	13.544	13.547	-0.003	94	992975	4.00	4.23	
105 4-Isopropyltoluene	119	13.670	13.673	-0.003	96	853445	4.00	4.23	
106 1,3-Dichlorobenzene	146	13.809	13.812	-0.003	99	384234	4.00	3.99	
107 1,2,3-Trimethylbenzene	105	13.879	13.882	-0.003	82	682970	4.00	4.21	
* 108 1,4-Dichlorobenzene-d4	152	13.879	13.882	-0.003	94	642410	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.893	13.896	-0.003	96	398496	4.00	3.95	
110 n-Butylbenzene	134	14.088	14.077	0.011	97	226297	4.00	4.18	
111 Benzyl chloride	126	14.116	14.119	-0.003	98	29421	4.00	3.70	
112 1,2-Dichlorobenzene	146	14.312	14.315	-0.003	98	317260	4.00	4.05	
113 n-Nonyl Aldehyde	57	15.024	15.027	-0.003	90	29276	4.00	3.77	
114 1,2-Dibromo-3-Chloropropan	157	15.094	15.097	-0.003	90	13462	4.00	3.80	
115 1,3,5-Trichlorobenzene	180	15.122	15.111	0.011	97	268768	4.00	4.15	
116 Hexachlorobutadiene	225	15.694	15.697	-0.003	97	139248	4.00	4.36	
117 1,2,4-Trichlorobenzene	180	15.764	15.767	-0.003	93	159222	4.00	3.83	
118 Naphthalene	128	16.113	16.116	-0.003	96	172386	4.00	3.85	
120 1,2,3-Trichlorobenzene	180	16.308	16.311	-0.003	95	97642	4.00	3.98	
S 119 Xylenes, Total	106				0			8.17	
S 130 Trihalomethanes, Total	1				0			15.5	

Reagents:

8260 Surr 25_00070

Amount Added: 4.00

Units: uL

8260 NewWkMix_00204

Amount Added: 4.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1155.D

Injection Date: 30-Jan-2017 11:17:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: IC

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

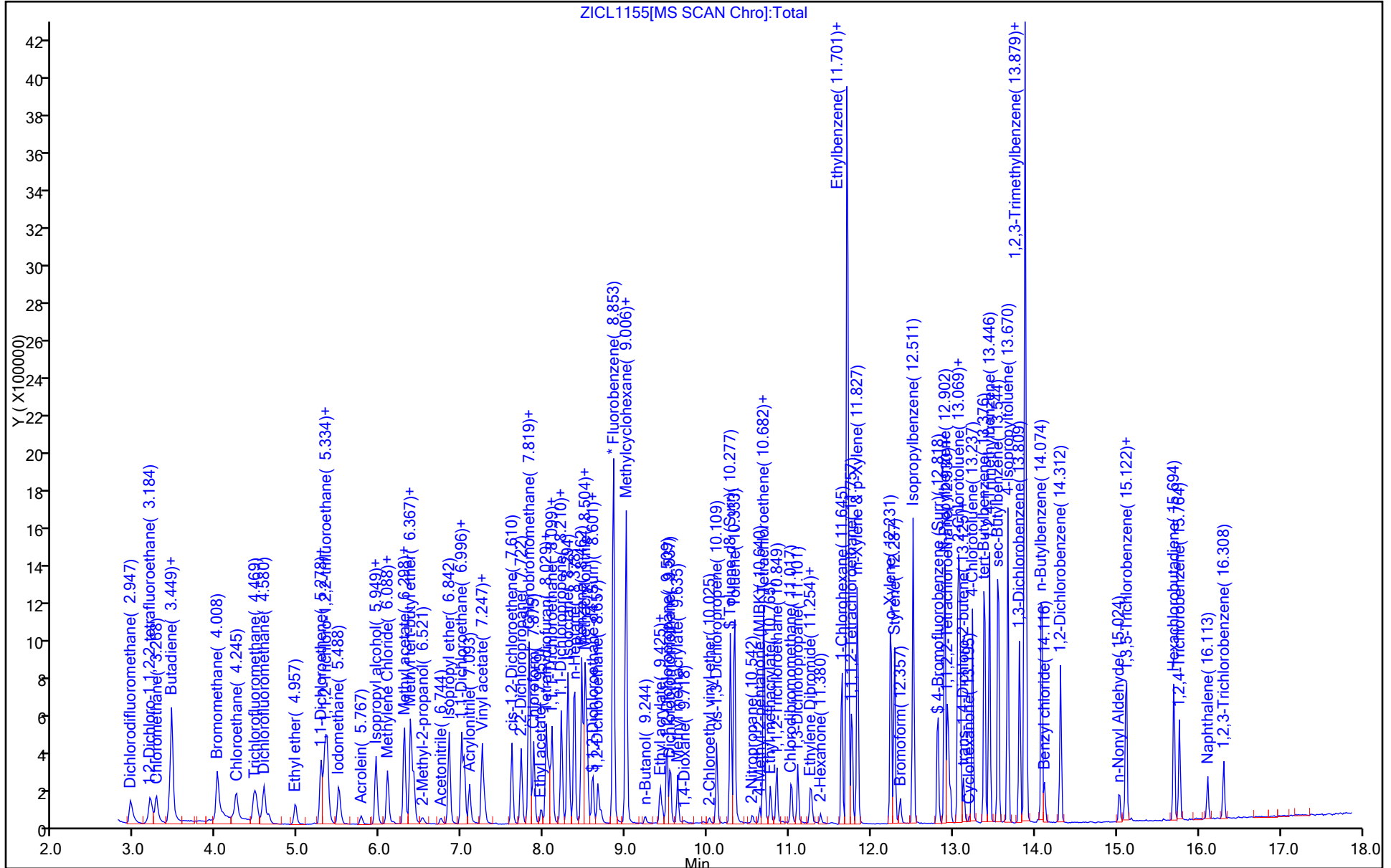
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1156.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 30-Jan-2017 11:41:30 ALS Bottle#: 6 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-009
 Misc. Info.: VSTD010
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12

Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:47:56 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:47:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.950	2.950	0.000	100	566215	10.0	9.71	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.187	3.187	0.000	95	350074	10.0	9.93	
3 Chloromethane	50	3.271	3.271	0.000	99	481652	10.0	9.33	
4 Vinyl chloride	62	3.439	3.439	0.000	99	715516	10.0	9.56	
5 Butadiene	39	3.453	3.453	0.000	89	715189	10.0	9.43	
6 Bromomethane	94	4.011	4.011	0.000	89	648352	10.0	9.42	
7 Chloroethane	64	4.235	4.235	0.000	99	583002	10.0	10.1	
8 Trichlorofluoromethane	101	4.472	4.472	0.000	100	758874	10.0	9.11	
9 Dichlorofluoromethane	67	4.584	4.584	0.000	98	764621	10.0	9.79	
10 Ethyl ether	74	4.961	4.961	0.000	92	171554	10.0	9.11	
11 Ethanol	45	5.212	5.212	0.000	99	41057	400.0	354.8	
12 1,1-Dichloroethene	96	5.282	5.282	0.000	99	458436	10.0	9.71	
13 Carbon disulfide	76	5.324	5.324	0.000	100	1446736	10.0	9.80	
14 1,1,2-Trichloro-1,2,2-trif	151	5.352	5.352	0.000	91	466243	10.0	9.62	
15 Iodomethane	142	5.491	5.491	0.000	99	813337	10.0	9.44	
17 Acrolein	56	5.770	5.770	0.000	97	122740	50.0	44.8	
18 3-Chloro-1-propene	39	5.952	5.952	0.000	87	510886	10.0	9.70	
19 Isopropyl alcohol	45	5.966	5.966	0.000	98	72697	100.0	93.2	
20 Methylene Chloride	84	6.092	6.092	0.000	89	391196	10.0	9.35	
21 Acetone	43	6.161	6.161	0.000	98	39288	10.0	10.4	
22 trans-1,2-Dichloroethene	96	6.287	6.287	0.000	97	509679	10.0	9.52	
23 Methyl acetate	74	6.301	6.301	0.000	96	122812	50.0	46.2	
24 Hexane	86	6.371	6.371	0.000	92	162774	10.0	9.47	
25 Methyl tert-butyl ether	73	6.413	6.413	0.000	82	740742	10.0	9.64	
26 2-Methyl-2-propanol	59	6.510	6.510	0.000	99	123785	100.0	93.0	
27 Acetonitrile	41	6.734	6.734	0.000	99	124749	100.0	91.6	
28 Isopropyl ether	45	6.845	6.845	0.000	91	1079791	10.0	9.70	
29 2-Chloro-1,3-butadiene	53	6.999	6.999	0.000	92	717620	10.0	9.91	
30 1,1-Dichloroethane	63	7.027	7.027	0.000	97	775992	10.0	9.49	
31 Acrylonitrile	53	7.097	7.097	0.000	99	491604	100.0	96.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59	7.250	7.250	0.000	96	958557	10.0	9.73	
33 Vinyl acetate	43	7.278	7.278	0.000	97	509296	10.0	9.92	
34 cis-1,2-Dichloroethene	96	7.613	7.613	0.000	79	505533	10.0	9.64	
35 2,2-Dichloropropane	77	7.725	7.725	0.000	90	585488	10.0	9.84	
37 Chlorobromomethane	128	7.823	7.823	0.000	62	197446	10.0	9.71	
36 Cyclohexane	84	7.823	7.823	0.000	88	850131	10.0	9.87	
38 Chloroform	83	7.879	7.879	0.000	93	792638	10.0	9.69	
39 Ethyl acetate	45	7.962	7.962	0.000	100	38994	20.0	19.9	
40 Carbon tetrachloride	117	8.032	8.032	0.000	98	748345	10.0	9.85	
41 Tetrahydrofuran	71	8.046	8.046	0.000	87	34196	20.0	18.9	
\$ 42 Dibromofluoromethane (Surr	113	8.060	8.060	0.000	94	399842	10.0	10.4	
43 1,1,1-Trichloroethane	97	8.102	8.102	0.000	97	804174	10.0	9.89	
44 2-Butanone (MEK)	43	8.172	8.172	0.000	100	54536	10.0	9.15	
45 1,1-Dichloropropene	75	8.214	8.214	0.000	96	664554	10.0	9.70	
46 Isooctane	57	8.297	8.297	0.000	97	1824698	10.0	9.96	
47 n-Heptane	43	8.367	8.367	0.000	89	751097	10.0	9.84	
48 Benzene	78	8.465	8.465	0.000	96	1792719	10.0	9.73	
50 Propionitrile	54	8.493	8.493	0.000	89	185862	100.0	96.0	
49 Methacrylonitrile	41	8.507	8.507	0.000	91	1023321	100.0	97.3	
51 Tert-amyl methyl ether	73	8.535	8.535	0.000	97	838046	10.0	10.0	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.591	8.591	0.000	93	334748	10.0	9.68	
52 Isobutyl alcohol	42	8.591	8.591	0.000	54	82266	250.0	259.5	
54 1,2-Dichloroethane	62	8.660	8.660	0.000	98	402914	10.0	9.49	
* 55 Fluorobenzene	96	8.856	8.856	0.000	99	1756518	10.0	10.0	
57 Methylcyclohexane	55	8.996	8.996	0.000	89	667514	10.0	9.80	
56 Trichloroethene	95	9.010	9.010	0.000	78	520623	10.0	9.51	
59 n-Butanol	56	9.233	9.233	0.000	88	78419	250.0	271.1	
60 Dibromomethane	93	9.414	9.414	0.000	90	163981	10.0	9.48	
61 Ethyl acrylate	55	9.442	9.442	0.000	99	193613	10.0	9.92	
62 1,2-Dichloropropane	63	9.498	9.498	0.000	92	361557	10.0	9.43	
63 Dichlorobromomethane	83	9.540	9.540	0.000	99	476034	10.0	9.71	
64 Methyl methacrylate	69	9.638	9.638	0.000	87	246935	20.0	19.8	
65 1,4-Dioxane	88	9.708	9.708	0.000	93	28088	200.0	186.2	
66 2-Chloroethyl vinyl ether	63	10.015	10.015	0.000	96	29723	10.0	8.67	
67 cis-1,3-Dichloropropene	75	10.113	10.113	0.000	96	567257	10.0	9.93	
\$ 68 Toluene-d8 (Surr)	98	10.280	10.280	0.000	93	1724639	10.0	10.0	
69 Toluene	92	10.322	10.322	0.000	98	1227373	10.0	9.81	
70 2-Nitropropane	43	10.545	10.545	0.000	98	75244	20.0	18.5	
71 4-Methyl-2-pentanone (MIBK	43	10.629	10.629	0.000	97	136264	10.0	10.1	
72 trans-1,3-Dichloropropene	75	10.685	10.685	0.000	75	456281	10.0	9.88	
73 Tetrachloroethene	164	10.685	10.685	0.000	98	539753	10.0	9.66	
74 Ethyl methacrylate	69	10.769	10.769	0.000	88	263348	10.0	10.4	
75 1,1,2-Trichloroethane	83	10.839	10.839	0.000	90	190982	10.0	9.04	
76 Chlorodibromomethane	129	11.020	11.020	0.000	89	325243	10.0	10.2	
77 1,3-Dichloropropane	76	11.104	11.104	0.000	91	408594	10.0	9.47	
78 n-Butyl acetate	43	11.257	11.257	0.000	98	241822	10.0	9.91	
79 Ethylene Dibromide	107	11.271	11.271	0.000	99	213015	10.0	9.40	
80 2-Hexanone	43	11.383	11.383	0.000	95	85655	10.0	9.57	
81 1-Chlorohexane	91	11.634	11.634	0.000	98	739236	10.0	10.0	
82 Ethylbenzene	91	11.704	11.704	0.000	97	2531884	10.0	9.78	
* 83 Chlorobenzene-d5	117	11.704	11.704	0.000	69	1396520	10.0	10.0	
84 Chlorobenzene	112	11.718	11.718	0.000	95	1428105	10.0	9.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131	11.760	11.760	0.000	96	451957	10.0	9.89	
86 m-Xylene & p-Xylene	106	11.830	11.830	0.000	99	975355	10.0	10.1	
88 o-Xylene	106	12.235	12.235	0.000	97	880231	10.0	9.96	
89 Styrene	104	12.291	12.291	0.000	94	1295634	10.0	10.5	
90 Bromoform	173	12.360	12.360	0.000	97	173767	10.0	9.87	
91 Isopropylbenzene	105	12.514	12.514	0.000	95	2429555	10.0	9.45	
\$ 92 4-Bromofluorobenzene (Surr	95	12.807	12.807	0.000	95	513020	10.0	9.68	
93 N-Propylbenzene	91	12.891	12.891	0.000	98	2702181	10.0	9.42	
94 Bromobenzene	156	12.933	12.933	0.000	88	542355	10.0	9.24	
95 1,1,2,2-Tetrachloroethane	83	12.961	12.961	0.000	97	221160	10.0	9.46	
96 1,3,5-Trimethylbenzene	105	13.058	13.058	0.000	96	1967051	10.0	10.3	
97 2-Chlorotoluene	91	13.086	13.086	0.000	98	1758724	10.0	9.89	
99 trans-1,4-Dichloro-2-buten	53	13.128	13.128	0.000	84	56182	10.0	9.13	
98 1,2,3-Trichloropropane	110	13.128	13.128	0.000	87	74478	10.0	10.6	
100 Cyclohexanone	55	13.198	13.198	0.000	85	38274	100.0	104.6	
101 4-Chlorotoluene	91	13.240	13.240	0.000	96	1508755	10.0	9.76	
102 tert-Butylbenzene	119	13.380	13.380	0.000	93	1843754	10.0	10.0	
103 1,2,4-Trimethylbenzene	105	13.449	13.449	0.000	96	1936583	10.0	10.1	
104 sec-Butylbenzene	105	13.547	13.547	0.000	95	2673687	10.0	9.76	
105 4-Isopropyltoluene	119	13.673	13.673	0.000	96	2302452	10.0	9.77	
106 1,3-Dichlorobenzene	146	13.812	13.812	0.000	98	1072586	10.0	9.53	
* 108 1,4-Dichlorobenzene-d4	152	13.882	13.882	0.000	90	750001	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.882	13.882	0.000	95	1889550	10.0	9.97	
109 1,4-Dichlorobenzene	146	13.896	13.896	0.000	96	1139669	10.0	9.69	
110 n-Butylbenzene	134	14.078	14.078	0.000	97	636384	10.0	10.1	
111 Benzyl chloride	126	14.120	14.120	0.000	70	95233	10.0	10.3	
112 1,2-Dichlorobenzene	146	14.315	14.315	0.000	99	863523	10.0	9.44	
113 n-Nonyl Aldehyde	57	15.027	15.027	0.000	89	90579	10.0	9.99	
114 1,2-Dibromo-3-Chloropropan	157	15.097	15.097	0.000	85	39646	10.0	9.60	
115 1,3,5-Trichlorobenzene	180	15.111	15.111	0.000	97	724821	10.0	9.60	
116 Hexachlorobutadiene	225	15.697	15.697	0.000	96	368078	10.0	9.87	
117 1,2,4-Trichlorobenzene	180	15.767	15.767	0.000	93	446993	10.0	9.20	
118 Naphthalene	128	16.116	16.116	0.000	96	467526	10.0	8.95	
120 1,2,3-Trichlorobenzene	180	16.312	16.312	0.000	95	261116	10.0	9.11	

Reagents:

8260 Surr 25_00070

Amount Added: 10.00

Units: uL

8260 NewWkMix_00204

Amount Added: 10.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1156.D

Injection Date: 30-Jan-2017 11:41:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: ICIS

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

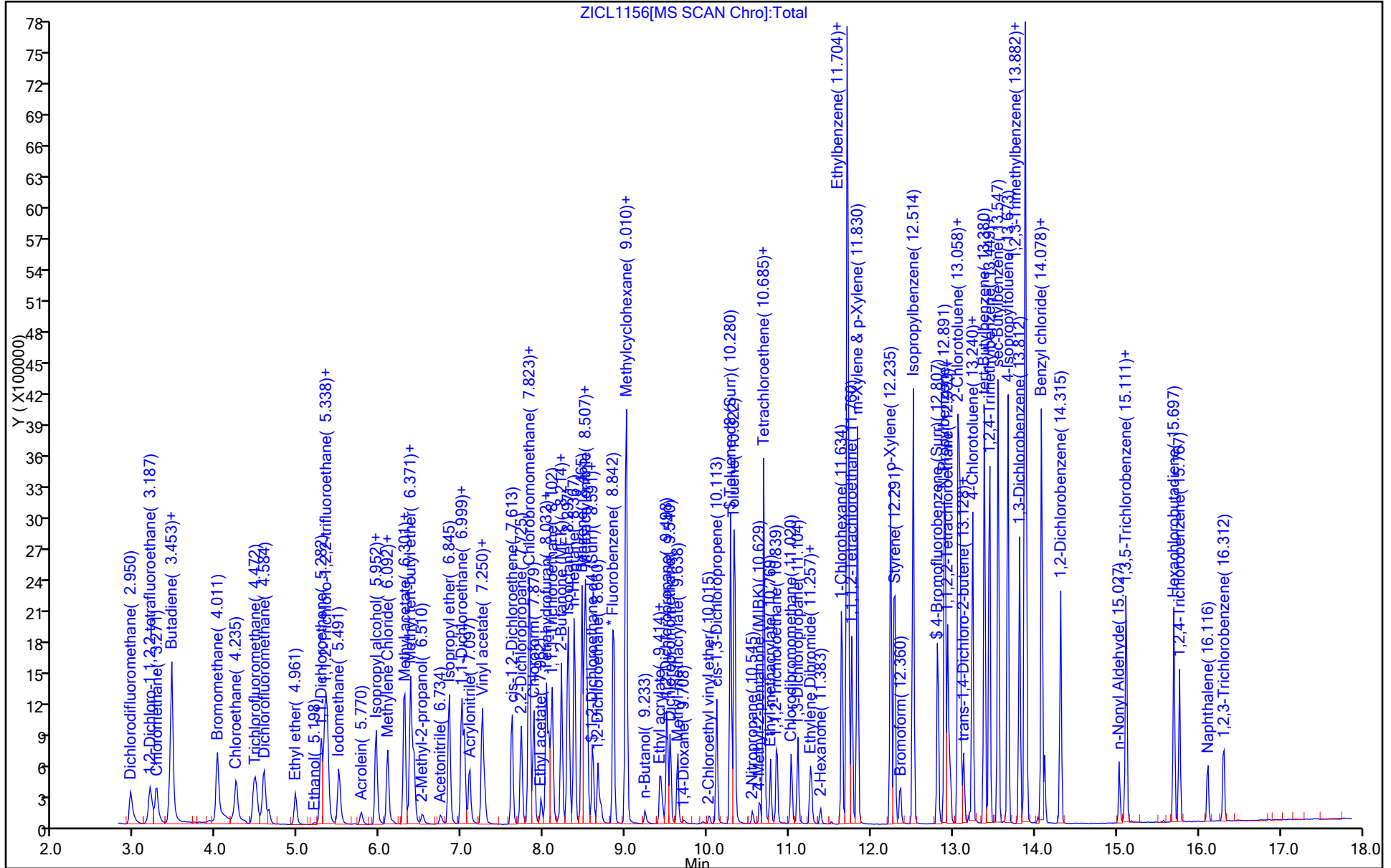
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1157.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 30-Jan-2017 12:06:30 ALS Bottle#: 7 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-010
 Misc. Info.: VSTD020
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:48:07 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:48:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.950	2.950	0.000	100	1179069	20.0	19.5	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.187	3.187	0.000	96	746838	20.0	20.4	
3 Chloromethane	50	3.271	3.271	0.000	100	1005308	20.0	18.8	
4 Vinyl chloride	62	3.439	3.439	0.000	98	1593929	20.0	20.5	
5 Butadiene	39	3.452	3.452	0.000	89	1619322	20.0	20.6	
6 Bromomethane	94	4.011	4.011	0.000	90	1456349	20.0	20.4	
7 Chloroethane	64	4.234	4.234	0.000	99	1271905	20.0	21.3	
8 Trichlorofluoromethane	101	4.472	4.472	0.000	100	1779274	20.0	20.3	
9 Dichlorofluoromethane	67	4.583	4.583	0.000	98	1689000	20.0	20.8	
10 Ethyl ether	74	4.960	4.960	0.000	89	369365	20.0	18.9	
11 Ethanol	45	5.198	5.198	0.000	99	84312	800.0	702.3	
12 1,1-Dichloroethene	96	5.281	5.281	0.000	98	1004150	20.0	20.5	
13 Carbon disulfide	76	5.323	5.323	0.000	100	3133237	20.0	20.5	
14 1,1,2-Trichloro-1,2,2-trif	151	5.351	5.351	0.000	91	1040252	20.0	20.7	
15 Iodomethane	142	5.491	5.491	0.000	99	1736561	20.0	19.4	
17 Acrolein	56	5.770	5.770	0.000	98	261887	100.0	92.2	
S 16 1,2-Dichloroethene, Total	96				0			38.7	
18 3-Chloro-1-propene	39	5.952	5.952	0.000	87	1092840	20.0	20.0	
19 Isopropyl alcohol	45	5.966	5.966	0.000	98	148788	200.0	183.9	
20 Methylene Chloride	84	6.091	6.091	0.000	89	803897	20.0	18.5	
21 Acetone	43	6.147	6.147	0.000	98	69943	20.0	18.3	
22 trans-1,2-Dichloroethene	96	6.287	6.287	0.000	98	1083784	20.0	19.5	
23 Methyl acetate	74	6.301	6.301	0.000	97	252849	100.0	91.6	
24 Hexane	86	6.371	6.371	0.000	92	358379	20.0	20.1	
25 Methyl tert-butyl ether	73	6.412	6.412	0.000	82	1509436	20.0	18.9	
26 2-Methyl-2-propanol	59	6.510	6.510	0.000	99	259938	200.0	188.4	
27 Acetonitrile	41	6.734	6.734	0.000	100	257267	200.0	182.0	
28 Isopropyl ether	45	6.845	6.845	0.000	91	2222534	20.0	19.2	
29 2-Chloro-1,3-butadiene	53	6.999	6.999	0.000	92	1581313	20.0	21.1	
30 1,1-Dichloroethane	63	7.027	7.027	0.000	97	1632152	20.0	19.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.083	7.083	0.000	99	1004779	200.0	189.1	
32 Tert-butyl ethyl ether	59	7.250	7.250	0.000	96	1972659	20.0	19.3	
33 Vinyl acetate	43	7.278	7.278	0.000	97	1051822	20.0	19.7	
34 cis-1,2-Dichloroethene	96	7.613	7.613	0.000	79	1043691	20.0	19.2	
35 2,2-Dichloropropane	77	7.725	7.725	0.000	89	1233455	20.0	20.0	
36 Cyclohexane	84	7.823	7.823	0.000	87	1866144	20.0	20.9	
37 Chlorobromomethane	128	7.823	7.823	0.000	61	419006	20.0	19.9	
38 Chloroform	83	7.878	7.878	0.000	95	1623864	20.0	19.1	
39 Ethyl acetate	45	7.962	7.962	0.000	99	77738	40.0	38.3	
40 Carbon tetrachloride	117	8.032	8.032	0.000	99	1666132	20.0	21.1	
41 Tetrahydrofuran	71	8.046	8.046	0.000	83	73449	40.0	39.1	
\$ 42 Dibromofluoromethane (Surr	113	8.060	8.060	0.000	94	834998	20.0	21.0	
43 1,1,1-Trichloroethane	97	8.102	8.102	0.000	97	1726644	20.0	20.5	
44 2-Butanone (MEK)	43	8.172	8.172	0.000	98	112033	20.0	18.1	
45 1,1-Dichloropropene	75	8.213	8.213	0.000	95	1438351	20.0	20.2	
46 Isooctane	57	8.297	8.297	0.000	96	3835626	20.0	20.2	
47 n-Heptane	43	8.367	8.367	0.000	88	1618901	20.0	20.5	
48 Benzene	78	8.465	8.465	0.000	97	3693798	20.0	19.3	
50 Propionitrile	54	8.493	8.493	0.000	90	397464	200.0	198.0	
49 Methacrylonitrile	41	8.507	8.507	0.000	90	2126734	200.0	194.9	
51 Tert-amyl methyl ether	73	8.521	8.521	0.000	97	1692965	20.0	19.5	
52 Isobutyl alcohol	42	8.590	8.590	0.000	56	166001	500.0	504.8	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.590	8.590	0.000	91	691594	20.0	19.3	
54 1,2-Dichloroethane	62	8.660	8.660	0.000	98	834734	20.0	19.0	
* 55 Fluorobenzene	96	8.842	8.842	0.000	99	1822038	10.0	10.0	
57 Methylcyclohexane	55	8.995	8.995	0.000	89	1497025	20.0	21.2	
56 Trichloroethene	95	9.009	9.009	0.000	80	1183581	20.0	20.9	
59 n-Butanol	56	9.233	9.233	0.000	88	172768	500.0	575.7	
60 Dibromomethane	93	9.414	9.414	0.000	89	333380	20.0	18.6	
61 Ethyl acrylate	55	9.442	9.442	0.000	99	423778	20.0	20.9	
62 1,2-Dichloropropane	63	9.498	9.498	0.000	92	752910	20.0	18.9	
63 Dichlorobromomethane	83	9.540	9.540	0.000	99	1029598	20.0	20.2	
64 Methyl methacrylate	69	9.638	9.638	0.000	87	528212	40.0	40.7	
65 1,4-Dioxane	88	9.707	9.707	0.000	91	59032	400.0	377.3	
66 2-Chloroethyl vinyl ether	63	10.015	10.015	0.000	94	67687	20.0	19.0	
67 cis-1,3-Dichloropropene	75	10.112	10.112	0.000	95	1168358	20.0	19.7	
\$ 68 Toluene-d8 (Surr)	98	10.280	10.280	0.000	93	3443902	20.0	18.2	
69 Toluene	92	10.322	10.322	0.000	99	2640082	20.0	19.2	
70 2-Nitropropane	43	10.545	10.545	0.000	99	172067	40.0	38.4	
71 4-Methyl-2-pentanone (MIBK	43	10.629	10.629	0.000	98	283751	20.0	19.0	
73 Tetrachloroethene	164	10.685	10.685	0.000	98	1180093	20.0	19.2	
72 trans-1,3-Dichloropropene	75	10.685	10.685	0.000	75	977811	20.0	19.2	
74 Ethyl methacrylate	69	10.769	10.769	0.000	87	567615	20.0	20.3	
75 1,1,2-Trichloroethane	83	10.838	10.838	0.000	92	383189	20.0	16.5	
76 Chlorodibromomethane	129	11.020	11.020	0.000	91	689917	20.0	19.7	
77 1,3-Dichloropropane	76	11.104	11.104	0.000	90	829210	20.0	17.5	
78 n-Butyl acetate	43	11.257	11.257	0.000	98	523493	20.0	19.5	
79 Ethylene Dibromide	107	11.271	11.271	0.000	98	448757	20.0	18.0	
80 2-Hexanone	43	11.383	11.383	0.000	96	188181	20.0	19.1	
81 1-Chlorohexane	91	11.648	11.648	0.000	94	1611065	20.0	19.8	
* 83 Chlorobenzene-d5	117	11.704	11.704	0.000	85	1538262	10.0	10.0	
82 Ethylbenzene	91	11.704	11.704	0.000	96	5026580	20.0	17.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.718	11.718	0.000	94	2983444	20.0	18.9	
85 1,1,1,2-Tetrachloroethane	131	11.760	11.760	0.000	95	961518	20.0	19.1	
86 m-Xylene & p-Xylene	106	11.830	11.830	0.000	99	2069651	20.0	19.4	
88 o-Xylene	106	12.235	12.235	0.000	96	1861804	20.0	19.1	
89 Styrene	104	12.290	12.290	0.000	94	2770720	20.0	20.5	
90 Bromoform	173	12.360	12.360	0.000	98	378640	20.0	19.8	
91 Isopropylbenzene	105	12.514	12.514	0.000	96	4832511	20.0	17.3	
\$ 92 4-Bromofluorobenzene (Surr	95	12.807	12.807	0.000	96	1049898	20.0	18.3	
93 N-Propylbenzene	91	12.905	12.905	0.000	96	5324014	20.0	17.1	
94 Bromobenzene	156	12.933	12.933	0.000	90	1148896	20.0	18.0	
95 1,1,2,2-Tetrachloroethane	83	12.961	12.961	0.000	97	464489	20.0	18.3	
96 1,3,5-Trimethylbenzene	105	13.058	13.058	0.000	97	4024481	20.0	19.4	
97 2-Chlorotoluene	91	13.086	13.086	0.000	98	3635468	20.0	18.9	
98 1,2,3-Trichloropropane	110	13.128	13.128	0.000	87	162764	20.0	21.8	
99 trans-1,4-Dichloro-2-buten	53	13.128	13.128	0.000	82	122562	20.0	18.4	
100 Cyclohexanone	55	13.198	13.198	0.000	86	78433	200.0	201.8	
101 4-Chlorotoluene	91	13.240	13.240	0.000	96	3085275	20.0	18.4	
102 tert-Butylbenzene	119	13.379	13.379	0.000	92	3766803	20.0	18.9	
103 1,2,4-Trimethylbenzene	105	13.449	13.449	0.000	96	3922139	20.0	18.9	
104 sec-Butylbenzene	105	13.547	13.547	0.000	95	5176079	20.0	17.4	
105 4-Isopropyltoluene	119	13.673	13.673	0.000	94	4635916	20.0	18.1	
106 1,3-Dichlorobenzene	146	13.812	13.812	0.000	98	2197585	20.0	18.0	
107 1,2,3-Trimethylbenzene	105	13.882	13.882	0.000	97	3847447	20.0	18.7	
* 108 1,4-Dichlorobenzene-d4	152	13.882	13.882	0.000	67	813327	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.896	13.896	0.000	94	2386299	20.0	18.7	
110 n-Butylbenzene	134	14.077	14.077	0.000	95	1371333	20.0	20.0	
111 Benzyl chloride	126	14.119	14.119	0.000	77	210505	20.0	20.9	
112 1,2-Dichlorobenzene	146	14.315	14.315	0.000	99	1738049	20.0	17.5	
113 n-Nonyl Aldehyde	57	15.027	15.027	0.000	90	210223	20.0	21.4	
114 1,2-Dibromo-3-Chloropropan	157	15.097	15.097	0.000	85	81659	20.0	18.2	
115 1,3,5-Trichlorobenzene	180	15.111	15.111	0.000	97	1461508	20.0	17.8	
116 Hexachlorobutadiene	225	15.697	15.697	0.000	98	743930	20.0	18.4	
117 1,2,4-Trichlorobenzene	180	15.767	15.767	0.000	94	864054	20.0	16.4	
118 Naphthalene	128	16.116	16.116	0.000	96	939669	20.0	16.6	
120 1,2,3-Trichlorobenzene	180	16.311	16.311	0.000	94	490859	20.0	15.8	
S 119 Xylenes, Total	106				0			38.5	
S 130 Trihalomethanes, Total	1				0			78.9	

Reagents:

8260 Surr 25_00070

Amount Added: 20.00

Units: uL

8260NewHiWrk_00181

Amount Added: 4.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1157.D

Injection Date: 30-Jan-2017 12:06:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: ic

Worklist Smp#: 10

Client ID:

Purge Vol: 25.000 mL

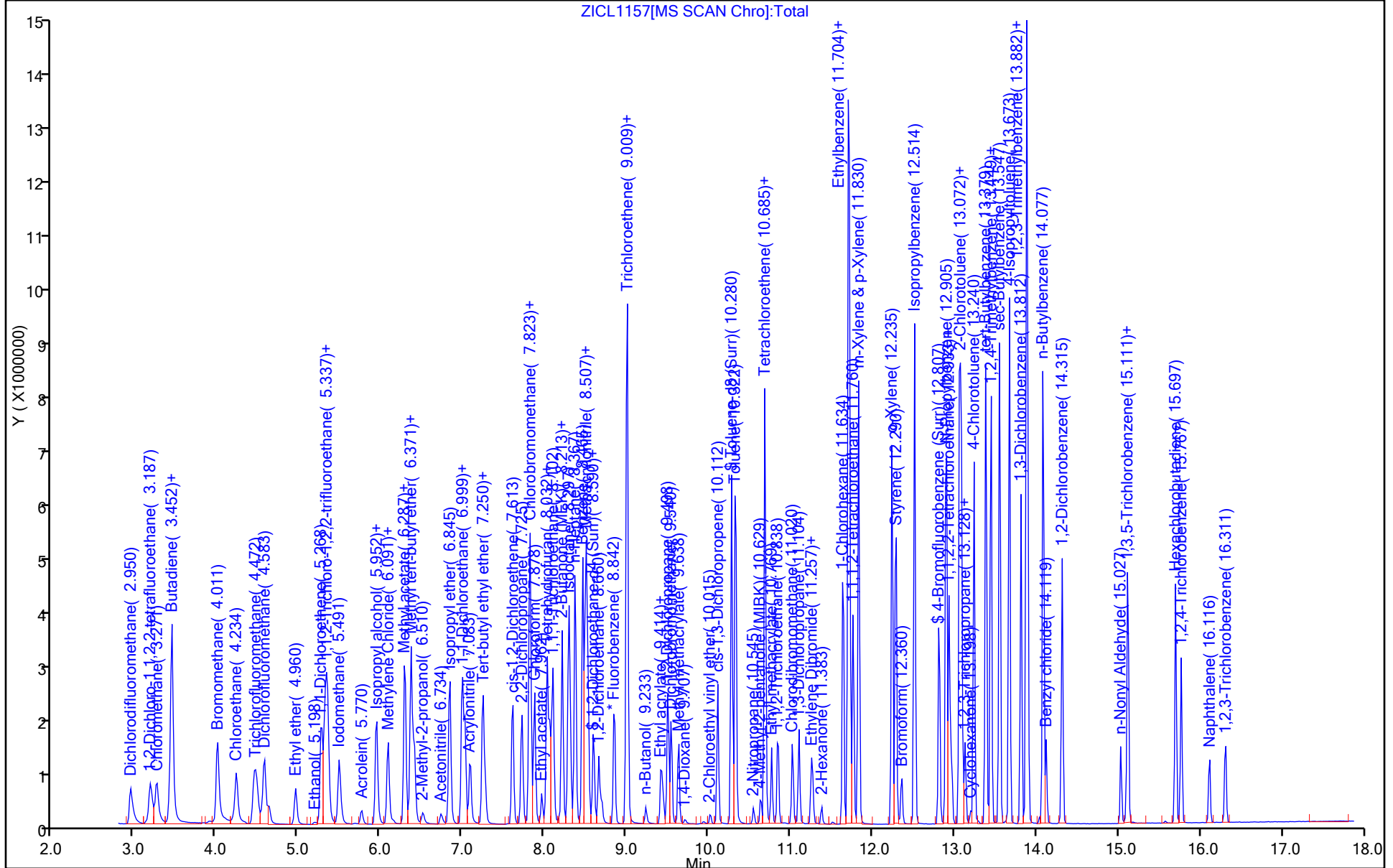
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 30-Jan-2017 12:30:30 ALS Bottle#: 8 Worklist Smp#: 11
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-011
 Misc. Info.: VSTD040
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12

Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:48:17 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:48:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.947	2.950	-0.003	100	2400671	40.0	39.7	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.185	3.187	-0.002	95	1480346	40.0	40.5	
3 Chloromethane	50	3.268	3.271	-0.003	99	2049049	40.0	38.3	
4 Vinyl chloride	62	3.436	3.439	-0.003	98	3364737	40.0	43.3	
5 Butadiene	39	3.450	3.452	-0.002	88	3404162	40.0	43.3	
6 Bromomethane	94	4.008	4.011	-0.003	90	2967055	40.0	41.6	
7 Chloroethane	64	4.232	4.234	-0.002	99	2491444	40.0	41.7	
8 Trichlorofluoromethane	101	4.469	4.472	-0.003	100	3582579	40.0	40.7	
9 Dichlorofluoromethane	67	4.581	4.583	-0.002	98	3306627	40.0	40.8	
10 Ethyl ether	74	4.958	4.960	-0.002	90	776180	40.0	39.7	
11 Ethanol	45	5.195	5.198	-0.003	100	182474	1600.0	1520.6	
12 1,1-Dichloroethene	96	5.279	5.281	-0.002	97	2128781	40.0	43.5	
13 Carbon disulfide	76	5.321	5.323	-0.002	100	6498486	40.0	42.5	
14 1,1,2-Trichloro-1,2,2-trif	151	5.349	5.351	-0.002	90	2200829	40.0	43.8	
15 Iodomethane	142	5.488	5.491	-0.003	100	3709078	40.0	41.5	
17 Acrolein	56	5.768	5.770	-0.002	99	563453	200.0	198.4	
S 16 1,2-Dichloroethene, Total	96				0			82.4	
18 3-Chloro-1-propene	39	5.949	5.952	-0.003	86	2241519	40.0	41.0	
19 Isopropyl alcohol	45	5.963	5.966	-0.003	98	323999	400.0	400.6	
20 Methylene Chloride	84	6.089	6.091	-0.002	87	1715867	40.0	39.5	
21 Acetone	43	6.145	6.147	-0.002	99	154359	40.0	41.0	
22 trans-1,2-Dichloroethene	96	6.298	6.287	0.011	95	2316818	40.0	41.7	
23 Methyl acetate	74	6.298	6.301	-0.003	96	577860	200.0	209.5	
24 Hexane	86	6.368	6.371	-0.003	92	779389	40.0	43.7	
25 Methyl tert-butyl ether	73	6.410	6.412	-0.002	82	3259248	40.0	40.9	
26 2-Methyl-2-propanol	59	6.508	6.510	-0.002	99	578682	400.0	419.5	
27 Acetonitrile	41	6.731	6.734	-0.003	99	540255	400.0	382.4	
28 Isopropyl ether	45	6.843	6.845	-0.002	89	4596009	40.0	39.8	
29 2-Chloro-1,3-butadiene	53	6.996	6.999	-0.003	92	3394932	40.0	45.2	
30 1,1-Dichloroethane	63	7.024	7.027	-0.003	97	3495032	40.0	41.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	7.094	7.083	0.011	98	2119552	400.0	399.2	
32 Tert-butyl ethyl ether	59	7.248	7.250	-0.002	94	4241903	40.0	41.5	
33 Vinyl acetate	43	7.275	7.278	-0.003	97	2247763	40.0	42.2	
34 cis-1,2-Dichloroethene	96	7.611	7.613	-0.002	78	2212530	40.0	40.7	
35 2,2-Dichloropropane	77	7.722	7.725	-0.003	89	2408107	40.0	39.0	
37 Chlorobromomethane	128	7.820	7.823	-0.003	64	974312	40.0	46.2	
36 Cyclohexane	84	7.820	7.823	-0.003	86	4004051	40.0	44.9	
38 Chloroform	83	7.876	7.878	-0.002	94	3466526	40.0	40.9	
39 Ethyl acetate	45	7.960	7.962	-0.002	99	164017	80.0	80.8	
40 Carbon tetrachloride	117	8.029	8.032	-0.003	99	3533471	40.0	44.9	
41 Tetrahydrofuran	71	8.043	8.046	-0.003	84	164139	80.0	87.5	
\$ 42 Dibromofluoromethane (Surr	113	8.071	8.060	0.011	95	3416698	40.0	85.8	
43 1,1,1-Trichloroethane	97	8.099	8.102	-0.003	97	3603533	40.0	42.8	
44 2-Butanone (MEK)	43	8.183	8.172	0.011	99	241549	40.0	39.1	
45 1,1-Dichloropropene	75	8.211	8.213	-0.002	94	3024330	40.0	42.6	
46 Isooctane	57	8.295	8.297	-0.002	96	7564214	40.0	39.8	
47 n-Heptane	43	8.378	8.367	0.011	85	3362327	40.0	42.5	
48 Benzene	78	8.462	8.465	-0.003	99	7232136	40.0	37.9	
50 Propionitrile	54	8.490	8.493	-0.003	46	889519	400.0	443.3	
49 Methacrylonitrile	41	8.504	8.507	-0.003	90	4591372	400.0	421.0	
51 Tert-amyl methyl ether	73	8.532	8.521	0.011	96	3893669	40.0	44.9	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.602	8.590	0.012	92	2906529	40.0	81.1	
52 Isobutyl alcohol	42	8.588	8.590	-0.002	44	402298	1000.0	1223.9	
54 1,2-Dichloroethane	62	8.658	8.660	-0.002	98	1771681	40.0	40.2	
* 55 Fluorobenzene	96	8.853	8.842	0.011	99	1821271	10.0	10.0	
57 Methylcyclohexane	55	9.007	8.995	0.012	85	3297684	40.0	46.7	
56 Trichloroethene	95	9.007	9.009	-0.002	80	2741788	40.0	48.3	
59 n-Butanol	56	9.230	9.233	-0.003	87	401609	1000.0	1338.9	
60 Dibromomethane	93	9.426	9.414	0.012	89	743068	40.0	41.4	
61 Ethyl acrylate	55	9.440	9.442	-0.002	99	899402	40.0	44.5	
62 1,2-Dichloropropane	63	9.509	9.498	0.011	92	1605184	40.0	40.4	
63 Dichlorobromomethane	83	9.537	9.540	-0.003	99	2229599	40.0	43.8	
64 Methyl methacrylate	69	9.635	9.638	-0.003	85	1163180	80.0	89.8	
65 1,4-Dioxane	88	9.719	9.707	0.012	89	132927	800.0	850.0	
66 2-Chloroethyl vinyl ether	63	10.026	10.015	0.011	93	151721	40.0	42.7	
67 cis-1,3-Dichloropropene	75	10.110	10.112	-0.002	95	2523215	40.0	42.6	
\$ 68 Toluene-d8 (Surr)	98	10.277	10.280	-0.003	91	9993947	40.0	44.7	
69 Toluene	92	10.333	10.322	0.011	93	5459860	40.0	33.6	
70 2-Nitropropane	43	10.543	10.545	-0.002	100	408272	80.0	77.3	
71 4-Methyl-2-pentanone (MIBK	43	10.640	10.629	0.011	95	604899	40.0	34.4	
72 trans-1,3-Dichloropropene	75	10.682	10.685	-0.003	88	2330196	40.0	38.8	
73 Tetrachloroethene	164	10.682	10.685	-0.003	98	2768333	40.0	38.1	
74 Ethyl methacrylate	69	10.766	10.769	-0.002	88	1269705	40.0	38.6	
75 1,1,2-Trichloroethane	83	10.850	10.838	0.012	92	847529	40.0	30.9	
76 Chlorodibromomethane	129	11.017	11.020	-0.003	90	1508326	40.0	36.5	
77 1,3-Dichloropropane	76	11.101	11.104	-0.003	90	1779891	40.0	31.8	
78 n-Butyl acetate	43	11.255	11.257	-0.002	98	1140872	40.0	36.0	
79 Ethylene Dibromide	107	11.269	11.271	-0.002	98	982304	40.0	33.4	
80 2-Hexanone	43	11.380	11.383	-0.003	95	413493	40.0	35.6	
81 1-Chlorohexane	91	11.646	11.648	-0.002	93	3483848	40.0	36.3	
82 Ethylbenzene	91	11.715	11.704	0.011	93	8893048	40.0	26.4	
* 83 Chlorobenzene-d5	117	11.701	11.704	-0.003	85	1814596	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112	11.715	11.718	-0.003	83	6265719	40.0	33.6	
85 1,1,1,2-Tetrachloroethane	131	11.771	11.760	0.011	95	2155793	40.0	36.3	
86 m-Xylene & p-Xylene	106	11.827	11.830	-0.003	93	4493803	40.0	35.7	
88 o-Xylene	106	12.246	12.235	0.012	93	4109177	40.0	35.8	
89 Styrene	104	12.288	12.290	-0.002	92	5728866	40.0	35.9	
90 Bromoform	173	12.358	12.360	-0.002	98	896930	40.0	37.4	
91 Isopropylbenzene	105	12.511	12.514	-0.003	92	8487959	40.0	24.2	
\$ 92 4-Bromofluorobenzene (Surr	95	12.818	12.807	0.011	94	4573420	40.0	63.4	
93 N-Propylbenzene	91	12.902	12.905	-0.003	89	8977832	40.0	23.0	
94 Bromobenzene	156	12.944	12.933	0.011	89	2612591	40.0	32.7	
95 1,1,2,2-Tetrachloroethane	83	12.972	12.961	0.011	96	998809	40.0	31.4	
96 1,3,5-Trimethylbenzene	105	13.070	13.058	0.012	95	7721328	40.0	29.7	
97 2-Chlorotoluene	91	13.084	13.086	-0.002	93	7472751	40.0	30.9	
99 trans-1,4-Dichloro-2-buten	53	13.139	13.128	0.011	84	272491	40.0	32.5	
98 1,2,3-Trichloropropane	110	13.125	13.128	-0.003	87	344115	40.0	37.0	
100 Cyclohexanone	55	13.195	13.198	-0.003	82	188327	400.0	390.0	
101 4-Chlorotoluene	91	13.237	13.240	-0.003	93	6057429	40.0	28.8	
102 tert-Butylbenzene	119	13.391	13.379	0.012	90	7280388	40.0	29.1	
103 1,2,4-Trimethylbenzene	105	13.447	13.449	-0.002	90	7265615	40.0	27.8	
104 sec-Butylbenzene	105	13.558	13.547	0.011	93	8899816	40.0	23.9	
105 4-Isopropyltoluene	119	13.670	13.673	-0.003	85	8176847	40.0	25.5	
106 1,3-Dichlorobenzene	146	13.810	13.812	-0.002	96	4823563	40.0	31.5	
* 108 1,4-Dichlorobenzene-d4	152	13.879	13.882	-0.003	59	1021333	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.879	13.882	-0.003	90	7478722	40.0	29.0	
109 1,4-Dichlorobenzene	146	13.893	13.896	-0.003	91	5349108	40.0	33.4	
110 n-Butylbenzene	134	14.089	14.077	0.012	88	3227113	40.0	37.5	
111 Benzyl chloride	126	14.117	14.119	-0.002	96	501844	40.0	39.7	
112 1,2-Dichlorobenzene	146	14.312	14.315	-0.003	96	3866297	40.0	31.0	
113 n-Nonyl Aldehyde	57	15.024	15.027	-0.003	91	565379	40.0	45.8	
114 1,2-Dibromo-3-Chloropropan	157	15.108	15.097	0.011	94	199742	40.0	35.5	
115 1,3,5-Trichlorobenzene	180	15.122	15.111	0.011	97	3364078	40.0	32.7	
116 Hexachlorobutadiene	225	15.694	15.697	-0.003	98	1707089	40.0	33.6	
117 1,2,4-Trichlorobenzene	180	15.764	15.767	-0.003	94	1962059	40.0	29.7	
118 Naphthalene	128	16.113	16.116	-0.003	96	2001672	40.0	28.1	
120 1,2,3-Trichlorobenzene	180	16.309	16.311	-0.002	95	1077290	40.0	27.6	
S 119 Xylenes, Total	106				0			71.5	
S 130 Trihalomethanes, Total	1				0			158.6	

Reagents:

8260NewHiWrk_00181

Amount Added: 8.00

Units: uL

8260_Surr_00043

Amount Added: 0.40

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D

Injection Date: 30-Jan-2017 12:30:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: ic

Worklist Smp#: 11

Client ID:

Purge Vol: 25.000 mL

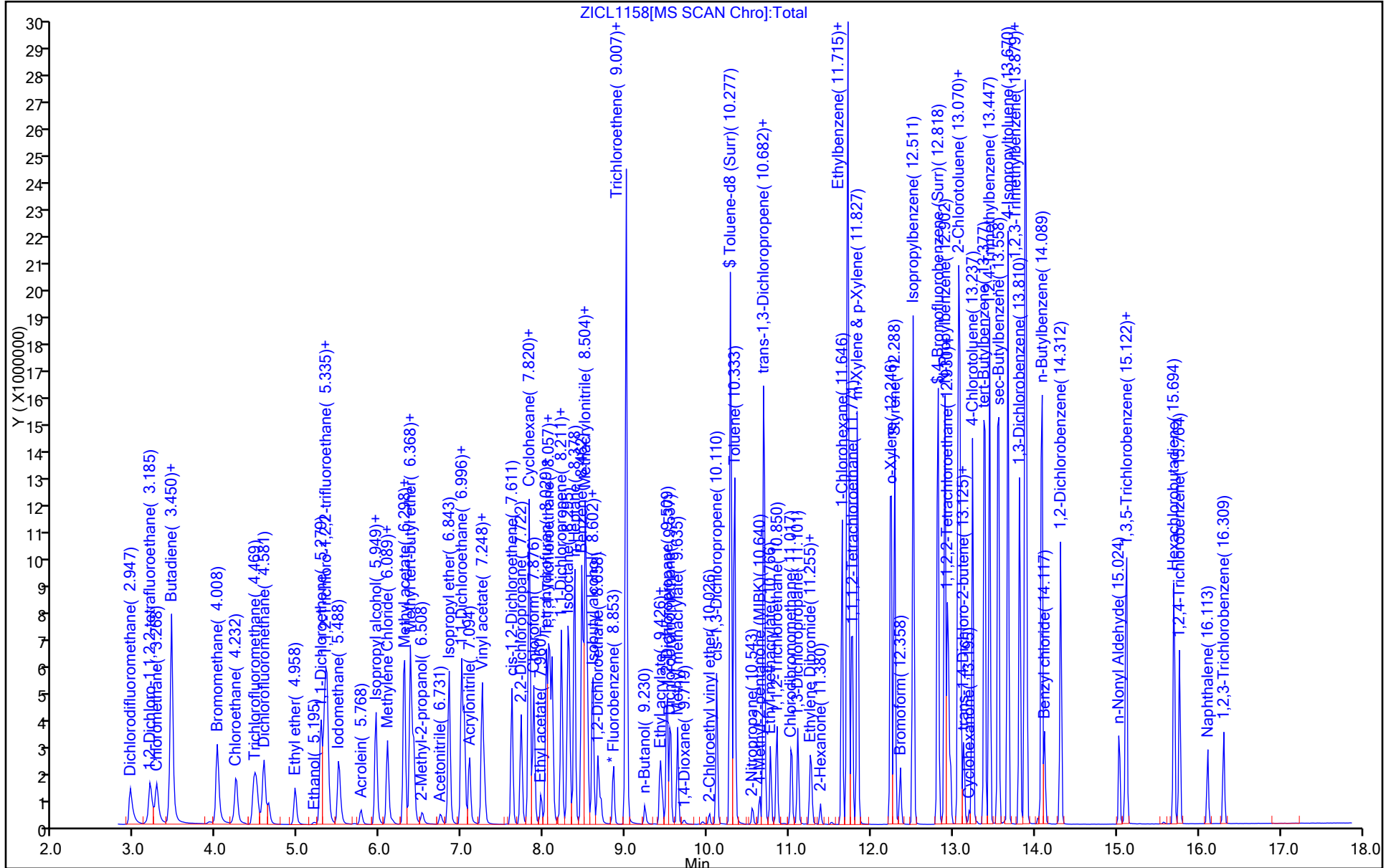
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: ICV 160-292232/14 Calibration Date: 02/14/2017 15:47
 Instrument ID: VMSL Calib Start Date: 02/14/2017 12:23
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 02/14/2017 14:56
 Lab File ID: LICV7566.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3532	0.4116	0.1000	11.7	10.0	16.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	0.1763	0.2046	0.0100	11.6	10.0	16.0	30.0
Chloromethane	Ave	0.3766	0.4244	0.1000	11.3	10.0	12.7	30.0
Vinyl chloride	Ave	0.3778	0.4098	0.1000	10.8	10.0	8.5	30.0
Butadiene	Ave	0.4055	0.3718	0.0100	9.17	10.0	-8.3	30.0
Methyl bromide	Ave	0.1716	0.1810	0.1000	10.5	10.0	5.5	30.0
Chloroethane	Ave	0.2214	0.2268	0.1000	10.2	10.0	2.4	30.0
Trichlorofluoromethane	Ave	0.4647	0.4739	0.1000	10.2	10.0	2.0	30.0
Dichlorofluoromethane	Ave	0.4956	0.5140	0.0100	10.4	10.0	3.7	30.0
Ethyl ether	Ave	0.0836	0.0916	0.0100	11.0	10.0	9.5	30.0
Ethanol	Ave	0.0008	0.0008*	0.0010	394	400	-1.4	30.0
1,1-Dichloroethene	Ave	0.2624	0.2760	0.1000	10.5	10.0	5.2	30.0
Carbon disulfide	Ave	0.9280	0.9575	0.1000	10.3	10.0	3.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2552	0.2571	0.1000	10.1	10.0	0.7	30.0
Iodomethane	Lin1		0.1869	0.0100	9.26	10.0	-7.4	30.0
Acrolein	Ave	0.0106	0.0103	0.0010	48.2	50.0	-3.6	30.0
Allyl chloride	Ave	0.3056	0.3274	0.0100	10.7	10.0	7.1	30.0
Isopropyl alcohol	Ave	0.0035	0.0037*	0.0100	106	100	6.4	30.0
Methylene Chloride	Ave	0.2179	0.2152	0.1000	9.88	10.0	-1.2	30.0
Acetone	Lin1		0.0249*	0.1000	10.5	10.0	5.4	30.0
trans-1,2-Dichloroethene	Ave	0.2739	0.2945	0.1000	10.8	10.0	7.5	30.0
Methyl acetate	Ave	0.0111	0.0117*	0.1000	52.8	50.0	5.5	30.0
Hexane	Ave	0.0946	0.1100	0.0100	11.6	10.0	16.2	30.0
Methyl tert-butyl ether	Ave	0.2870	0.3049	0.1000	10.6	10.0	6.2	30.0
tert-Butyl alcohol	Ave	0.0041	0.0043*	0.0100	104	100	3.8	30.0
Acetonitrile	Ave	0.0095	0.0087	0.0010	91.5	100	-8.5	30.0
Isopropyl ether	Ave	0.6323	0.7409	0.0100	11.7	10.0	17.2	30.0
2-Chloro-1,3-butadiene	Ave	0.4688	0.5404	0.0100	11.5	10.0	15.3	30.0
1,1-Dichloroethane	Ave	0.4983	0.5108	0.2000	10.2	10.0	2.5	30.0
Acrylonitrile	Ave	0.0289	0.0296	0.0100	102	100	2.1	30.0
Tert-butyl ethyl ether	Ave	0.4307	0.4820	0.0100	11.2	10.0	11.9	30.0
Vinyl acetate	Ave	0.2020	0.1982	0.0100	9.81	10.0	-1.9	30.0
cis-1,2-Dichloroethene	Ave	0.2592	0.2714	0.1000	10.5	10.0	4.7	30.0
2,2-Dichloropropane	Ave	0.3381	0.3500	0.0100	10.4	10.0	3.5	30.0
Bromochloromethane	Ave	0.0831	0.0820	0.0100	9.87	10.0	-1.3	30.0
Cyclohexane	Ave	0.4759	0.5398	0.1000	11.3	10.0	13.4	30.0
Chloroform	Ave	0.4344	0.4430	0.2000	10.2	10.0	2.0	30.0
Ethyl acetate	Lin1		0.0106	0.0100	20.0	20.0	-0.2	30.0
Carbon tetrachloride	Ave	0.3916	0.4127	0.1000	10.5	10.0	5.4	30.0
Tetrahydrofuran	Lin1		0.0073	0.0010	18.9	20.0	-5.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: ICV 160-292232/14 Calibration Date: 02/14/2017 15:47
 Instrument ID: VMSL Calib Start Date: 02/14/2017 12:23
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 02/14/2017 14:56
 Lab File ID: LICV7566.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,1-Trichloroethane	Ave	0.4471	0.4756	0.1000	10.6	10.0	6.4	30.0
2-Butanone	Lin1		0.0376*	0.1000	10.3	10.0	2.7	30.0
1,1-Dichloropropene	Ave	0.3847	0.4392	0.0100	11.4	10.0	14.1	30.0
Isooctane	Ave	1.327	1.491	0.0100	11.2	10.0	12.4	30.0
n-Heptane	Ave	0.5576	0.6143	0.0100	11.0	10.0	10.2	30.0
Benzene	Ave	1.086	1.118	0.5000	10.3	10.0	2.9	30.0
Methacrylonitrile	Ave	0.0595	0.0606	0.0100	102	100	1.8	30.0
Propionitrile	Ave	0.0110	0.0113	0.0010	102	100	2.2	30.0
Tert-amyl methyl ether	Ave	0.2817	0.3039	0.0100	10.8	10.0	7.9	30.0
Isobutanol	Ave	0.0015	0.0015	0.0010	255	250	1.8	30.0
1,2-Dichloroethane	Ave	0.2186	0.2141	0.1000	9.79	10.0	-2.1	30.0
Methylcyclohexane	Ave	0.4901	0.5212	0.1000	10.6	10.0	6.3	30.0
Trichloroethene	Ave	0.3004	0.3102	0.2000	10.3	10.0	3.3	30.0
n-Butanol	Lin		0.0015*	0.0100	223	250	-10.7	30.0
Dibromomethane	Ave	0.0781	0.0767	0.0100	9.82	10.0	-1.8	30.0
Ethyl acrylate	Lin1		0.0983	0.0100	9.38	10.0	-6.2	30.0
1,2-Dichloropropane	Ave	0.2232	0.2370	0.1000	10.6	10.0	6.2	30.0
Bromodichloromethane	Ave	0.2453	0.2590	0.2000	10.6	10.0	5.6	30.0
Methyl methacrylate	Lin1		0.0605	0.0100	19.1	20.0	-4.7	30.0
1,4-Dioxane	Lin1		0.0007*	0.0010	204	200	2.1	30.0
2-Chloroethyl vinyl ether	Lin1		0.0408	0.0100	10.0	10.0	0.1	30.0
cis-1,3-Dichloropropene	Ave	0.2615	0.2988	0.2000	11.4	10.0	14.3	30.0
Toluene	Ave	0.9907	1.100	0.4000	11.1	10.0	11.0	30.0
2-Nitropropane	Lin		0.0251	0.0100	16.8	20.0	-15.9	30.0
4-Methyl-2-pentanone	Lin1		0.0914*	0.1000	9.11	10.0	-8.9	30.0
Tetrachloroethene	Ave	0.3815	0.3970	0.2000	10.4	10.0	4.1	30.0
trans-1,3-Dichloropropene	Ave	0.2937	0.3313	0.1000	11.3	10.0	12.8	30.0
Ethyl methacrylate	Lin1		0.1992	0.0100	9.82	10.0	-1.8	30.0
1,1,2-Trichloroethane	Ave	0.1477	0.1548	0.1000	10.5	10.0	4.8	30.0
Chlorodibromomethane	Ave	0.1996	0.2129	0.1000	10.7	10.0	6.7	30.0
1,3-Dichloropropane	Ave	0.3191	0.3285	0.0100	10.3	10.0	2.9	30.0
n-Butyl acetate	Qua		0.1678	0.0100	9.61	10.0	-3.9	30.0
1,2-Dibromoethane	Ave	0.1501	0.1591	0.1000	10.6	10.0	6.0	30.0
2-Hexanone	Lin1		0.0759*	0.1000	9.91	10.0	-0.9	30.0
Ethylbenzene	Ave	1.953	2.060	0.1000	10.5	10.0	5.5	30.0
Chlorobenzene	Ave	1.021	1.036	0.5000	10.1	10.0	1.5	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3079	0.3337	0.0100	10.8	10.0	8.4	30.0
m-Xylene & p-Xylene	Ave	0.7273	0.8133	0.1000	11.2	10.0	11.8	30.0
o-Xylene	Ave	0.6171	0.7229	0.3000	11.7	10.0	17.1	30.0
Styrene	Ave	0.9169	1.082	0.3000	11.8	10.0	18.0	30.0
Bromoform	Ave	0.2052	0.2165	0.1000	10.6	10.0	5.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: ICV 160-292232/14 Calibration Date: 02/14/2017 15:47
 Instrument ID: VMSL Calib Start Date: 02/14/2017 12:23
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 02/14/2017 14:56
 Lab File ID: LICV7566.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropylbenzene	Ave	3.807	4.402	0.1000	11.6	10.0	15.6	30.0
N-Propylbenzene	Ave	4.323	4.950	0.0100	11.5	10.0	14.5	30.0
Bromobenzene	Ave	0.7723	0.8222	0.0100	10.6	10.0	6.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.3405	0.3414	0.3000	10.0	10.0	0.3	30.0
1,3,5-Trimethylbenzene	Ave	2.938	3.446	0.0100	11.7	10.0	17.3	30.0
2-Chlorotoluene	Ave	2.914	3.157	0.0100	10.8	10.0	8.3	30.0
1,2,3-Trichloropropane	Ave	0.1134	0.1180	0.0100	10.4	10.0	4.0	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1007	0.1092	0.0100	10.8	10.0	8.4	30.0
Cyclohexanone	Lin		0.0056	0.0010	85.2	100	-14.8	30.0
4-Chlorotoluene	Ave	2.483	2.804	0.0100	11.3	10.0	12.9	30.0
tert-Butylbenzene	Ave	2.767	3.157	0.0100	11.4	10.0	14.1	30.0
1,2,4-Trimethylbenzene	Ave	3.006	3.409	0.0100	11.3	10.0	13.4	30.0
sec-Butylbenzene	Ave	4.350	4.768	0.0100	11.0	10.0	9.6	30.0
4-Isopropyltoluene	Ave	3.465	3.818	0.0100	11.0	10.0	10.2	30.0
1,3-Dichlorobenzene	Ave	1.639	1.708	0.6000	10.4	10.0	4.2	30.0
1,2,3-Trimethylbenzene	Ave	2.855	3.156	0.0100	11.1	10.0	10.5	30.0
1,4-Dichlorobenzene	Ave	1.642	1.684	0.5000	10.3	10.0	2.6	30.0
n-Butylbenzene	Ave	0.9148	0.9800	0.0100	10.7	10.0	7.1	30.0
Benzyl chloride	Lin		0.1034	0.0100	8.96	10.0	-10.4	30.0
1,2-Dichlorobenzene	Ave	1.302	1.387	0.4000	10.6	10.0	6.5	30.0
Nonanal	Qua		0.1584	0.0100	8.34	10.0	-16.6	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0543	0.0604	0.0500	11.1	10.0	11.2	30.0
1,3,5-Trichlorobenzene	Ave	1.290	1.387	0.0100	10.8	10.0	7.5	30.0
Hexachlorobutadiene	Ave	0.7815	0.7473	0.0100	9.56	10.0	-4.4	30.0
1,2,4-Trichlorobenzene	Ave	0.9466	1.026	0.2000	10.8	10.0	8.4	30.0
Naphthalene	Lin1		1.169	0.0100	10.1	10.0	1.2	30.0
1,2,3-Trichlorobenzene	Ave	0.7544	0.8343	0.0100	11.1	10.0	10.6	30.0
Dibromofluoromethane (Surr)	Ave	0.1850	0.1856	0.0100	10.0	10.0	0.3	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1824	0.1739	0.0100	9.53	10.0	-4.7	30.0
Toluene-d8 (Surr)	Ave	1.347	1.440	0.0100	10.7	10.0	6.9	30.0
4-Bromofluorobenzene (Surr)	Ave	0.8510	0.9180	0.0100	10.8	10.0	7.9	30.0

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICV7566.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 14-Feb-2017 15:47:30 ALS Bottle#: 10 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Operator ID: SMCR Instrument ID: VMSL
 Sublist:

Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 16-Feb-2017 12:23:06 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: rhoadess Date: 15-Feb-2017 10:59:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	750829	10.0	11.7	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	373175	10.0	11.6	M
3 Chloromethane	50	3.346	3.346	0.000	99	774108	10.0	11.3	
4 Vinyl chloride	62	3.500	3.500	0.000	98	747478	10.0	10.8	
5 Butadiene	39	3.528	3.528	0.000	91	678250	10.0	9.17	
6 Bromomethane	94	4.100	4.100	0.000	91	330154	10.0	10.5	
7 Chloroethane	64	4.324	4.324	0.000	100	413603	10.0	10.2	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	864467	10.0	10.2	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	99	937585	10.0	10.4	
10 Ethyl ether	74	5.064	5.064	0.000	94	167056	10.0	11.0	
11 Ethanol	45	5.315	5.315	0.000	99	54725	400.0	394.4	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	97	503470	10.0	10.5	
13 Carbon disulfide	76	5.413	5.413	0.000	100	1746549	10.0	10.3	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	91	468924	10.0	10.1	
16 Iodomethane	142	5.581	5.581	0.000	99	340986	10.0	9.26	
17 Acrolein	56	5.860	5.860	0.000	99	93488	50.0	48.2	
18 3-Chloro-1-propene	39	6.028	6.028	0.000	91	597175	10.0	10.7	
19 Isopropyl alcohol	45	6.069	6.069	0.000	97	67446	100.0	106.4	
20 Methylene Chloride	84	6.167	6.167	0.000	98	392554	10.0	9.88	
21 Acetone	43	6.251	6.251	0.000	99	45377	10.0	10.5	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	98	537259	10.0	10.8	
23 Methyl acetate	74	6.391	6.391	0.000	98	106547	50.0	52.8	
24 Hexane	86	6.460	6.447	0.013	90	200667	10.0	11.6	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	95	556125	10.0	10.6	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	87	78340	100.0	103.8	
27 Acetonitrile	41	6.810	6.810	0.000	99	158502	100.0	91.5	
28 Isopropyl ether	45	6.921	6.921	0.000	94	1351500	10.0	11.7	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	94	985751	10.0	11.5	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	931664	10.0	10.2	
31 Acrylonitrile	53	7.159	7.159	0.000	99	539125	100.0	102.1	
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	96	879108	10.0	11.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Vinyl acetate	43	7.340	7.340	0.000	98	361466	10.0	9.81	
34 cis-1,2-Dichloroethene	96	7.676	7.676	0.000	83	495118	10.0	10.5	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	93	638434	10.0	10.4	
37 Chlorobromomethane	128	7.885	7.885	0.000	49	149608	10.0	9.87	
36 Cyclohexane	84	7.885	7.885	0.000	91	984697	10.0	11.3	
38 Chloroform	83	7.941	7.941	0.000	95	808021	10.0	10.2	
39 Ethyl acetate	45	8.039	8.039	0.000	99	38734	20.0	20.0	
40 Carbon tetrachloride	117	8.095	8.095	-0.001	99	752861	10.0	10.5	
41 Tetrahydrofuran	71	8.122	8.123	-0.001	44	26611	20.0	18.9	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.123	-0.001	95	338474	10.0	10.0	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	867493	10.0	10.6	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	99	68595	10.0	10.3	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	801040	10.0	11.4	
44 Isooctane	57	8.360	8.360	0.000	96	2720551	10.0	11.2	
46 n-Heptane	43	8.430	8.430	0.000	95	1120579	10.0	11.0	
48 Benzene	78	8.527	8.528	-0.001	97	2039699	10.0	10.3	
49 Propionitrile	54	8.555	8.555	0.000	39	205808	100.0	102.2	
50 Methacrylonitrile	41	8.555	8.555	0.000	94	1104564	100.0	101.8	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	91	554230	10.0	10.8	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	91	317134	10.0	9.53	
52 Isobutyl alcohol	42	8.667	8.667	0.000	92	70068	250.0	254.6	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	98	390514	10.0	9.79	
* 55 Fluorobenzene	96	8.905	8.905	0.000	99	1824048	10.0	10.0	
58 Methylcyclohexane	55	9.058	9.058	0.000	93	950657	10.0	10.6	
57 Trichloroethene	95	9.058	9.058	0.000	64	565850	10.0	10.3	
59 n-Butanol	56	9.296	9.296	0.000	92	67962	250.0	223.3	
61 Dibromomethane	93	9.477	9.477	0.000	93	139895	10.0	9.82	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	179304	10.0	9.38	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	94	432297	10.0	10.6	
63 Dichlorobromomethane	83	9.603	9.603	0.000	100	472335	10.0	10.6	
64 Methyl methacrylate	69	9.687	9.687	0.000	94	220512	20.0	19.1	
65 1,4-Dioxane	88	9.784	9.785	0.000	96	26589	200.0	204.2	
66 2-Chloroethyl vinyl ether	63	10.078	10.078	0.000	93	74349	10.0	10.0	
67 cis-1,3-Dichloropropene	75	10.162	10.162	0.000	94	545105	10.0	11.4	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	93	1704613	10.0	10.7	
69 Toluene	92	10.371	10.371	0.000	99	1301324	10.0	11.1	
70 2-Nitropropane	43	10.594	10.595	-0.001	98	59349	20.0	16.8	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	97	108214	10.0	9.11	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	79	392074	10.0	11.3	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	469860	10.0	10.4	
74 Ethyl methacrylate	69	10.818	10.818	0.000	91	235712	10.0	9.82	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	93	183150	10.0	10.5	
76 Chlorodibromomethane	129	11.069	11.069	0.000	90	251993	10.0	10.7	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	93	388766	10.0	10.3	
78 n-Butyl acetate	43	11.307	11.307	0.000	97	198609	10.0	9.61	
79 Ethylene Dibromide	107	11.321	11.321	0.000	99	188335	10.0	10.6	
80 2-Hexanone	43	11.432	11.433	-0.001	96	89760	10.0	9.91	
81 1-Chlorohexane	91	11.684	11.684	0.000	97	763642	10.0	11.8	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	95	1183461	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	98	2438328	10.0	10.5	
84 Chlorobenzene	112	11.768	11.768	0.000	94	1226427	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	11.810	11.810	0.000	95	394896	10.0	10.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	962523	10.0	11.2	
88 o-Xylene	106	12.284	12.284	0.000	96	855462	10.0	11.7	
89 Styrene	104	12.326	12.326	0.000	95	1280226	10.0	11.8	
90 Bromoform	173	12.396	12.396	0.000	97	121685	10.0	10.6	
91 Isopropylbenzene	105	12.550	12.550	0.000	96	2474431	10.0	11.6	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	516004	10.0	10.8	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	2782495	10.0	11.5	
94 Bromobenzene	156	12.983	12.983	0.000	89	462165	10.0	10.6	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	96	191921	10.0	10.0	
96 1,3,5-Trimethylbenzene	105	13.108	13.108	0.000	95	1936880	10.0	11.7	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	1774697	10.0	10.8	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	88	66329	10.0	10.4	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	87	61363	10.0	10.8	
100 Cyclohexanone	55	13.248	13.248	0.000	92	31481	100.0	85.2	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	1576192	10.0	11.3	
102 tert-Butylbenzene	119	13.430	13.430	0.000	93	1774649	10.0	11.4	
103 1,2,4-Trimethylbenzene	105	13.485	13.486	-0.001	97	1916126	10.0	11.3	
104 sec-Butylbenzene	105	13.597	13.597	0.000	94	2680242	10.0	11.0	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	2145914	10.0	11.0	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	960098	10.0	10.4	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.919	0.000	71	562114	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.918	13.919	0.000	97	1773996	10.0	11.1	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	93	946578	10.0	10.3	
111 n-Butylbenzene	134	14.128	14.128	0.000	96	550867	10.0	10.7	
110 Benzyl chloride	126	14.156	14.156	0.000	97	58142	10.0	8.96	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	779406	10.0	10.6	
113 n-Nonyl Aldehyde	57	15.078	15.078	0.000	90	89039	10.0	8.34	
115 1,2-Dibromo-3-Chloropropan	157	15.147	15.148	-0.001	82	33921	10.0	11.1	
114 1,3,5-Trichlorobenzene	180	15.161	15.162	-0.001	98	779569	10.0	10.8	
116 Hexachlorobutadiene	225	15.748	15.748	0.000	98	420064	10.0	9.56	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	576964	10.0	10.8	
118 Naphthalene	128	16.153	16.153	0.000	97	657362	10.0	10.1	
120 1,2,3-Trichlorobenzene	180	16.349	16.349	0.000	96	468965	10.0	11.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 Surr 25_00071

Amount Added: 10.00

Units: uL

8260NewICVMix_00196

Amount Added: 10.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICV7566.D

Injection Date: 14-Feb-2017 15:47:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: icv

Worklist Smp#: 14

Client ID:

Purge Vol: 25.000 mL

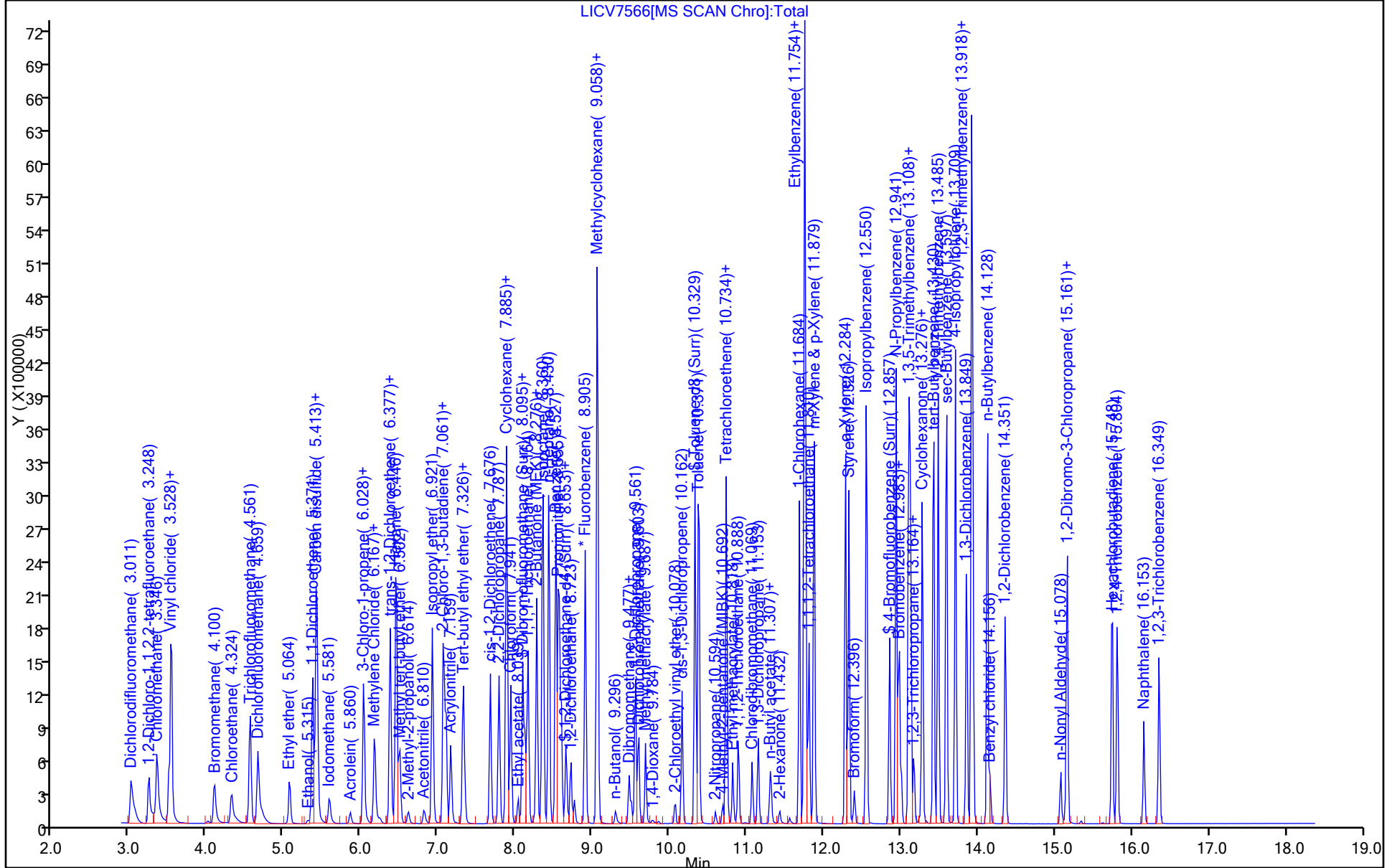
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis

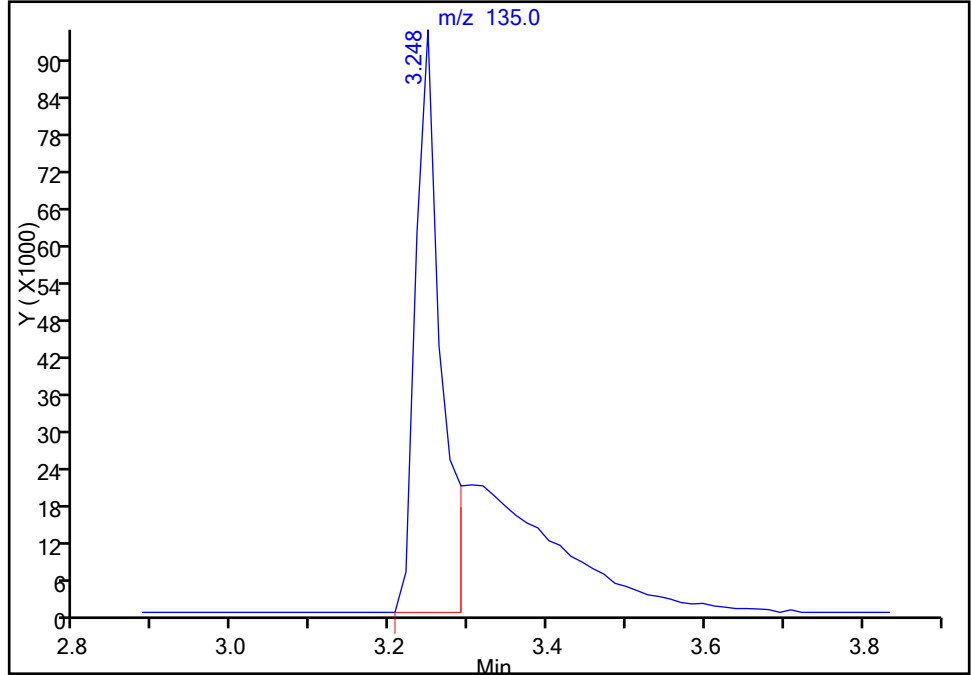
Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICV7566.D
Injection Date: 14-Feb-2017 15:47:30 Instrument ID: VMSL
Lims ID: icv
Client ID:
Operator ID: SMCR ALS Bottle#: 10 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

2 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Signal: 1

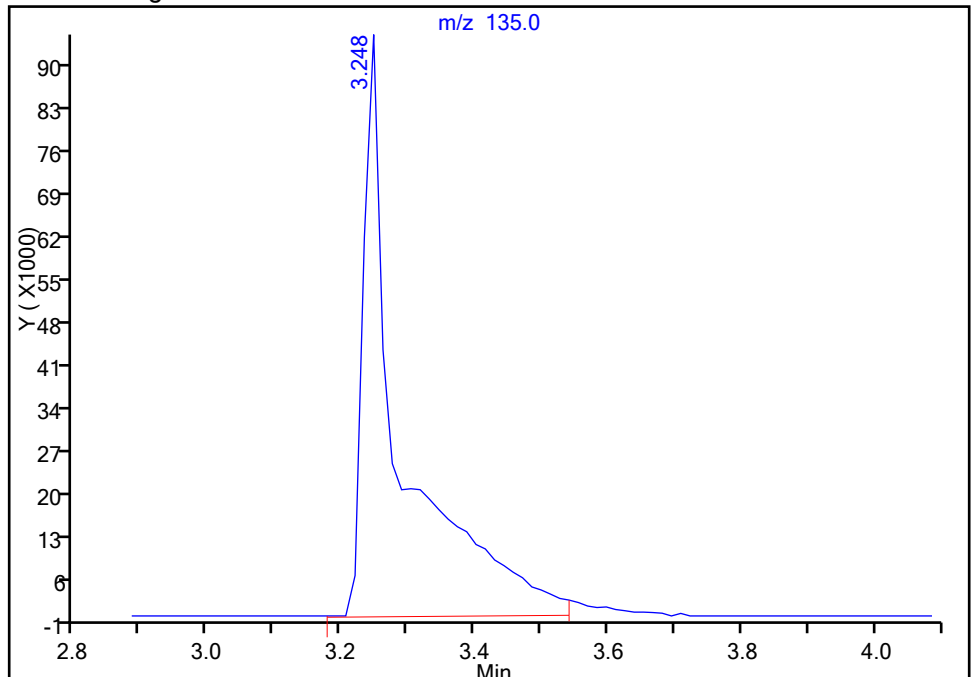
RT: 3.25
Area: 210657
Amount: 6.550657
Amount Units: ug/l

Processing Integration Results



RT: 3.25
Area: 373175
Amount: 11.604369
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 15-Feb-2017 10:59:54
Audit Action: Manually Integrated

Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: CCVIS 160-296328/2 Calibration Date: 03/07/2017 09:01
 Instrument ID: VMSL Calib Start Date: 02/14/2017 12:23
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 02/14/2017 14:56
 Lab File ID: LCCV7799.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3532	0.3737	0.1000	10.6	10.0	5.8	20.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	0.1763	0.1892	0.0100	10.7	10.0	7.3	20.0
Chloromethane	Ave	0.3766	0.4150	0.1000	11.0	10.0	10.2	20.0
Vinyl chloride	Ave	0.3778	0.4221	0.1000	11.2	10.0	11.7	20.0
Butadiene	Ave	0.4055	0.4823	0.0100	11.9	10.0	18.9	20.0
Methyl bromide	Ave	0.1716	0.2015	0.1000	11.7	10.0	17.4	20.0
Chloroethane	Ave	0.2214	0.2512	0.1000	11.3	10.0	13.5	20.0
Trichlorofluoromethane	Ave	0.4647	0.4992	0.1000	10.7	10.0	7.4	20.0
Dichlorofluoromethane	Ave	0.4956	0.5597	0.0100	11.3	10.0	12.9	20.0
Ethyl ether	Ave	0.0836	0.0874	0.0100	10.5	10.0	4.5	20.0
Ethanol	Ave	0.0008	0.0008*	0.0010	408	400	2.1	20.0
1,1-Dichloroethene	Ave	0.2624	0.2846	0.1000	10.8	10.0	8.5	20.0
Carbon disulfide	Ave	0.9280	1.052	0.1000	11.3	10.0	13.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2552	0.2674	0.1000	10.5	10.0	4.8	20.0
Iodomethane	Lin1		0.2034	0.0100	10.0	10.0	0.4	20.0
Acrolein	Ave	0.0106	0.0131	0.0010	61.5	50.0	23.1*	20.0
Allyl chloride	Ave	0.3056	0.3694	0.0100	12.1	10.0	20.9*	20.0
Isopropyl alcohol	Ave	0.0035	0.0038*	0.0100	109	100	8.5	20.0
Methylene Chloride	Ave	0.2179	0.2261	0.1000	10.4	10.0	3.8	20.0
Acetone	Lin1		0.0244*	0.1000	10.3	10.0	2.8	20.0
Methyl acetate	Ave	0.0111	0.0118*	0.1000	53.3	50.0	6.7	20.0
trans-1,2-Dichloroethene	Ave	0.2739	0.2972	0.1000	10.8	10.0	8.5	20.0
Hexane	Ave	0.0946	0.1121	0.0100	11.8	10.0	18.4	20.0
Methyl tert-butyl ether	Ave	0.2870	0.2995	0.1000	10.4	10.0	4.3	20.0
tert-Butyl alcohol	Ave	0.0041	0.0044*	0.0100	106	100	5.6	20.0
Acetonitrile	Ave	0.0095	0.0098	0.0010	104	100	3.7	20.0
Isopropyl ether	Ave	0.6323	0.7166	0.0100	11.3	10.0	13.3	20.0
2-Chloro-1,3-butadiene	Ave	0.4688	0.5660	0.0100	12.1	10.0	20.7*	20.0
1,1-Dichloroethane	Ave	0.4983	0.5553	0.2000	11.1	10.0	11.4	20.0
Acrylonitrile	Ave	0.0289	0.0311	0.0100	108	100	7.5	20.0
Tert-butyl ethyl ether	Ave	0.4307	0.4827	0.0100	11.2	10.0	12.1	20.0
Vinyl acetate	Ave	0.2020	0.2870	0.0100	14.2	10.0	42.1*	20.0
cis-1,2-Dichloroethene	Ave	0.2592	0.2736	0.1000	10.6	10.0	5.6	20.0
2,2-Dichloropropane	Ave	0.3381	0.4260	0.0100	12.6	10.0	26.0*	20.0
Bromochloromethane	Ave	0.0831	0.0841	0.0100	10.1	10.0	1.2	20.0
Cyclohexane	Ave	0.4759	0.5548	0.1000	11.7	10.0	16.6	20.0
Chloroform	Ave	0.4344	0.4645	0.2000	10.7	10.0	6.9	20.0
Ethyl acetate	Lin1		0.0099*	0.0100	18.7	20.0	-6.3	20.0
Carbon tetrachloride	Ave	0.3916	0.4316	0.1000	11.0	10.0	10.2	20.0
Tetrahydrofuran	Lin1		0.0066	0.0010	17.2	20.0	-14.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: CCVIS 160-296328/2 Calibration Date: 03/07/2017 09:01
 Instrument ID: VMSL Calib Start Date: 02/14/2017 12:23
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 02/14/2017 14:56
 Lab File ID: LCCV7799.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,1-Trichloroethane	Ave	0.4471	0.4955	0.1000	11.1	10.0	10.8	20.0
2-Butanone	Lin1		0.0343*	0.1000	9.25	10.0	-7.5	20.0
1,1-Dichloropropene	Ave	0.3847	0.4411	0.0100	11.5	10.0	14.6	20.0
Isooctane	Ave	1.327	1.607	0.0100	12.1	10.0	21.1*	20.0
n-Heptane	Ave	0.5576	0.7091	0.0100	12.7	10.0	27.2*	20.0
Benzene	Ave	1.086	1.164	0.5000	10.7	10.0	7.2	20.0
Propionitrile	Ave	0.0110	0.0117	0.0010	106	100	5.6	20.0
Methacrylonitrile	Ave	0.0595	0.0667	0.0100	112	100	12.1	20.0
Tert-amyl methyl ether	Ave	0.2817	0.3119	0.0100	11.1	10.0	10.7	20.0
Isobutanol	Ave	0.0015	0.0017	0.0010	283	250	13.3	20.0
1,2-Dichloroethane	Ave	0.2186	0.2287	0.1000	10.5	10.0	4.6	20.0
Methylcyclohexane	Ave	0.4901	0.5747	0.1000	11.7	10.0	17.3	20.0
Trichloroethene	Ave	0.3004	0.3173	0.2000	10.6	10.0	5.6	20.0
n-Butanol	Lin		0.0015*	0.0100	221	250	-11.6	20.0
Dibromomethane	Ave	0.0781	0.0781	0.0100	10.0	10.0	0.0	20.0
Ethyl acrylate	Lin1		0.0882	0.0100	8.46	10.0	-15.4	20.0
1,2-Dichloropropane	Ave	0.2232	0.2455	0.1000	11.0	10.0	10.0	20.0
Bromodichloromethane	Ave	0.2453	0.2630	0.2000	10.7	10.0	7.2	20.0
Methyl methacrylate	Lin1		0.0554	0.0100	17.5	20.0	-12.4	20.0
1,4-Dioxane	Lin1		0.0006*	0.0010	178	200	-11.2	20.0
2-Chloroethyl vinyl ether	Lin1		0.0328	0.0100	8.12	10.0	-18.8	20.0
cis-1,3-Dichloropropene	Ave	0.2615	0.3027	0.2000	11.6	10.0	15.7	20.0
Toluene	Ave	0.9907	1.106	0.4000	11.2	10.0	11.6	20.0
2-Nitropropane	Lin		0.0280	0.0100	18.5	20.0	-7.3	20.0
4-Methyl-2-pentanone	Lin1		0.0834*	0.1000	8.33	10.0	-16.7	20.0
Tetrachloroethene	Ave	0.3815	0.4107	0.2000	10.8	10.0	7.6	20.0
trans-1,3-Dichloropropene	Ave	0.2937	0.3367	0.1000	11.5	10.0	14.6	20.0
Ethyl methacrylate	Lin1		0.1649	0.0100	8.22	10.0	-17.8	20.0
1,1,2-Trichloroethane	Ave	0.1477	0.1490	0.1000	10.1	10.0	0.9	20.0
Chlorodibromomethane	Ave	0.1996	0.2034	0.1000	10.2	10.0	1.9	20.0
1,3-Dichloropropane	Ave	0.3191	0.3189	0.0100	9.99	10.0	-0.0	20.0
n-Butyl acetate	Qua		0.1468	0.0100	8.55	10.0	-14.5	20.0
1,2-Dibromoethane	Ave	0.1501	0.1509	0.1000	10.1	10.0	0.6	20.0
2-Hexanone	Lin1		0.0651*	0.1000	8.56	10.0	-14.4	20.0
Ethylbenzene	Ave	1.953	2.152	0.1000	11.0	10.0	10.2	20.0
Chlorobenzene	Ave	1.021	1.053	0.5000	10.3	10.0	3.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3079	0.3217	0.0100	10.4	10.0	4.5	20.0
m-Xylene & p-Xylene	Ave	0.7273	0.8284	0.1000	11.4	10.0	13.9	20.0
o-Xylene	Ave	0.6171	0.7053	0.3000	11.4	10.0	14.3	20.0
Styrene	Ave	0.9169	1.059	0.3000	11.5	10.0	15.5	20.0
Bromoform	Ave	0.2052	0.2046	0.1000	9.97	10.0	-0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: CCVIS 160-296328/2 Calibration Date: 03/07/2017 09:01
 Instrument ID: VMSL Calib Start Date: 02/14/2017 12:23
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 02/14/2017 14:56
 Lab File ID: LCCV7799.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropylbenzene	Ave	3.807	4.492	0.1000	11.8	10.0	18.0	20.0
N-Propylbenzene	Ave	4.323	5.314	0.0100	12.3	10.0	22.9*	20.0
Bromobenzene	Ave	0.7723	0.8005	0.0100	10.4	10.0	3.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.3405	0.3496	0.3000	10.3	10.0	2.7	20.0
1,3,5-Trimethylbenzene	Ave	2.938	3.578	0.0100	12.2	10.0	21.8*	20.0
2-Chlorotoluene	Ave	2.914	3.268	0.0100	11.2	10.0	12.1	20.0
1,2,3-Trichloropropane	Ave	0.1134	0.1098	0.0100	9.68	10.0	-3.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1007	0.1099	0.0100	10.9	10.0	9.1	20.0
Cyclohexanone	Lin		0.0053	0.0010	80.8	100	-19.2	20.0
4-Chlorotoluene	Ave	2.483	2.846	0.0100	11.5	10.0	14.6	20.0
tert-Butylbenzene	Ave	2.767	3.268	0.0100	11.8	10.0	18.1	20.0
1,2,4-Trimethylbenzene	Ave	3.006	3.510	0.0100	11.7	10.0	16.8	20.0
sec-Butylbenzene	Ave	4.350	5.227	0.0100	12.0	10.0	20.2*	20.0
4-Isopropyltoluene	Ave	3.465	4.236	0.0100	12.2	10.0	22.2*	20.0
1,3-Dichlorobenzene	Ave	1.639	1.707	0.6000	10.4	10.0	4.1	20.0
1,2,3-Trimethylbenzene	Ave	2.855	3.129	0.0100	11.0	10.0	9.6	20.0
1,4-Dichlorobenzene	Ave	1.642	1.706	0.5000	10.4	10.0	3.9	20.0
n-Butylbenzene	Ave	0.9148	1.123	0.0100	12.3	10.0	22.7*	20.0
Benzyl chloride	Lin		0.1287	0.0100	10.9	10.0	9.1	20.0
1,2-Dichlorobenzene	Ave	1.302	1.342	0.4000	10.3	10.0	3.0	20.0
Nonanal	Qua		0.2018	0.0100	10.0	10.0	0.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0543	0.0556	0.0500	10.2	10.0	2.4	20.0
1,3,5-Trichlorobenzene	Ave	1.290	1.424	0.0100	11.0	10.0	10.4	20.0
Hexachlorobutadiene	Ave	0.7815	0.8707	0.0100	11.1	10.0	11.4	20.0
1,2,4-Trichlorobenzene	Ave	0.9466	0.9824	0.2000	10.4	10.0	3.8	20.0
Naphthalene	Lin1		0.9120	0.0100	7.97	10.0	-20.3*	20.0
1,2,3-Trichlorobenzene	Ave	0.7544	0.7478	0.0100	9.91	10.0	-0.9	20.0
Dibromofluoromethane (Surr)	Ave	0.1850	0.1964	0.0100	10.6	10.0	6.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1824	0.1862	0.0100	10.2	10.0	2.1	20.0
Toluene-d8 (Surr)	Ave	1.347	1.467	0.0100	10.9	10.0	8.9	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8510	0.8942	0.0100	10.5	10.0	5.1	20.0

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LCCV7799.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 07-Mar-2017 09:01:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Operator ID: SMCR Instrument ID: VMSL
 Sublist: chrom-25mL-8260-MSL*sub17
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:30 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 07-Mar-2017 09:40:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	658785	10.0	10.6	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	333644	10.0	10.7	M
3 Chloromethane	50	3.346	3.346	0.000	99	731723	10.0	11.0	
4 Vinyl chloride	62	3.500	3.500	0.000	98	744163	10.0	11.2	
5 Butadiene	39	3.527	3.527	0.000	93	850269	10.0	11.9	
6 Bromomethane	94	4.100	4.100	0.000	91	355225	10.0	11.7	
7 Chloroethane	64	4.310	4.310	0.000	100	442942	10.0	11.3	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	880169	10.0	10.7	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	986738	10.0	11.3	
10 Ethyl ether	74	5.064	5.064	0.000	95	154107	10.0	10.5	
11 Ethanol	45	5.301	5.301	0.000	100	54761	400.0	408.3	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	96	501779	10.0	10.8	
13 Carbon disulfide	76	5.413	5.413	0.000	100	1854139	10.0	11.3	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	91	471476	10.0	10.5	
16 Iodomethane	142	5.581	5.581	0.000	99	358677	10.0	10.0	
17 Acrolein	56	5.860	5.860	0.000	99	115336	50.0	61.5	
18 3-Chloro-1-propene	39	6.027	6.027	0.000	90	651209	10.0	12.1	
19 Isopropyl alcohol	45	6.069	6.069	0.000	97	66451	100.0	108.5	
20 Methylene Chloride	84	6.167	6.167	0.000	99	398643	10.0	10.4	
21 Acetone	43	6.237	6.237	0.000	99	42931	10.0	10.3	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	97	523927	10.0	10.8	
23 Methyl acetate	74	6.377	6.377	0.000	99	104074	50.0	53.3	
24 Hexane	86	6.446	6.446	0.000	92	197628	10.0	11.8	
25 Methyl tert-butyl ether	73	6.488	6.488	0.000	79	528012	10.0	10.4	
26 2-Methyl-2-propanol	59	6.600	6.600	0.000	88	76977	100.0	105.6	
27 Acetonitrile	41	6.810	6.810	0.000	99	173574	100.0	103.7	
28 Isopropyl ether	45	6.921	6.921	0.000	94	1263490	10.0	11.3	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	95	997960	10.0	12.1	
30 1,1-Dichloroethane	63	7.089	7.089	0.000	97	979112	10.0	11.1	
31 Acrylonitrile	53	7.159	7.159	0.000	99	548589	100.0	107.5	
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	97	850978	10.0	11.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Vinyl acetate	43	7.340	7.340	0.000	98	506015	10.0	14.2	
34 cis-1,2-Dichloroethene	96	7.675	7.675	0.000	83	482411	10.0	10.6	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	92	751123	10.0	12.6	
36 Cyclohexane	84	7.885	7.885	0.000	92	978206	10.0	11.7	
37 Chlorobromomethane	128	7.885	7.885	0.000	48	148296	10.0	10.1	
38 Chloroform	83	7.941	7.941	0.000	94	818910	10.0	10.7	
39 Ethyl acetate	45	8.025	8.025	0.000	99	35045	20.0	18.7	
40 Carbon tetrachloride	117	8.094	8.094	0.000	99	760953	10.0	11.0	
41 Tetrahydrofuran	71	8.122	8.122	0.000	43	23252	20.0	17.2	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.122	0.000	95	346247	10.0	10.6	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	873590	10.0	11.1	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	98	60426	10.0	9.25	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	777651	10.0	11.5	
44 Isooctane	57	8.360	8.360	0.000	96	2832943	10.0	12.1	
46 n-Heptane	43	8.430	8.430	0.000	94	1250173	10.0	12.7	
48 Benzene	78	8.527	8.527	0.000	97	2052696	10.0	10.7	
49 Propionitrile	54	8.541	8.541	0.000	89	205554	100.0	105.6	
50 Methacrylonitrile	41	8.555	8.555	0.000	94	1175401	100.0	112.1	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	90	549871	10.0	11.1	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	92	328293	10.0	10.2	
52 Isobutyl alcohol	42	8.653	8.653	0.000	88	75329	250.0	283.2	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	97	403250	10.0	10.5	
* 55 Fluorobenzene	96	8.904	8.904	0.000	98	1763080	10.0	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	61	559448	10.0	10.6	
58 Methylcyclohexane	55	9.058	9.058	0.000	94	1013215	10.0	11.7	
59 n-Butanol	56	9.296	9.296	0.000	93	64897	250.0	221.0	
61 Dibromomethane	93	9.477	9.477	0.000	94	137761	10.0	10.0	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	155520	10.0	8.46	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	93	432772	10.0	11.0	
63 Dichlorobromomethane	83	9.589	9.589	0.000	98	463726	10.0	10.7	
64 Methyl methacrylate	69	9.687	9.687	0.000	94	195242	20.0	17.5	
65 1,4-Dioxane	88	9.770	9.770	0.000	98	22221	200.0	177.7	
66 2-Chloroethyl vinyl ether	63	10.064	10.064	0.000	93	57775	10.0	8.12	
67 cis-1,3-Dichloropropene	75	10.161	10.161	0.000	93	533591	10.0	11.6	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	1742785	10.0	10.9	
69 Toluene	92	10.371	10.371	0.000	98	1313897	10.0	11.2	
70 2-Nitropropane	43	10.594	10.594	0.000	97	66545	20.0	18.5	
71 4-Methyl-2-pentanone (MIBK	43	10.678	10.678	0.000	98	99022	10.0	8.33	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	487905	10.0	10.8	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	78	400033	10.0	11.5	
74 Ethyl methacrylate	69	10.818	10.818	0.000	91	195906	10.0	8.22	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	93	176976	10.0	10.1	
76 Chlorodibromomethane	129	11.069	11.069	0.000	91	241683	10.0	10.2	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	95	378836	10.0	10.0	
78 n-Butyl acetate	43	11.293	11.293	0.000	96	174384	10.0	8.55	
79 Ethylene Dibromide	107	11.321	11.321	0.000	99	179312	10.0	10.1	
80 2-Hexanone	43	11.418	11.418	0.000	97	77344	10.0	8.56	
81 1-Chlorohexane	91	11.684	11.684	0.000	93	792922	10.0	12.3	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	95	1188097	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	98	2556870	10.0	11.0	
84 Chlorobenzene	112	11.768	11.768	0.000	98	1251610	10.0	10.3	
85 1,1,1,2-Tetrachloroethane	131	11.809	11.809	0.000	95	382175	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	984181	10.0	11.4	
88 o-Xylene	106	12.284	12.284	0.000	96	837982	10.0	11.4	
89 Styrene	104	12.326	12.326	0.000	95	1258185	10.0	11.5	
90 Bromoform	173	12.396	12.396	0.000	97	117544	10.0	9.97	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	2580478	10.0	11.8	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	94	513691	10.0	10.5	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	3052678	10.0	12.3	
94 Bromobenzene	156	12.983	12.983	0.000	92	459840	10.0	10.4	
95 1,1,2,2-Tetrachloroethane	83	13.011	13.011	0.000	96	200850	10.0	10.3	
96 1,3,5-Trimethylbenzene	105	13.094	13.094	0.000	95	2055315	10.0	12.2	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	1877234	10.0	11.2	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	88	63091	10.0	9.68	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	79	63106	10.0	10.9	
100 Cyclohexanone	55	13.248	13.248	0.000	94	30342	100.0	80.8	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	1634809	10.0	11.5	
102 tert-Butylbenzene	119	13.430	13.430	0.000	94	1877103	10.0	11.8	
103 1,2,4-Trimethylbenzene	105	13.485	13.485	0.000	97	2016432	10.0	11.7	
104 sec-Butylbenzene	105	13.583	13.583	0.000	96	3002816	10.0	12.0	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	2433228	10.0	12.2	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	980524	10.0	10.4	
107 1,2,3-Trimethylbenzene	105	13.918	13.918	0.000	97	1797433	10.0	11.0	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.918	0.000	71	574471	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	93	980130	10.0	10.4	
111 n-Butylbenzene	134	14.128	14.128	0.000	97	644887	10.0	12.3	
110 Benzyl chloride	126	14.156	14.156	0.000	92	73936	10.0	10.9	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	770659	10.0	10.3	
113 n-Nonyl Aldehyde	57	15.064	15.064	0.000	87	115904	10.0	10.0	
115 1,2-Dibromo-3-Chloropropan	157	15.147	15.147	0.000	81	31914	10.0	10.2	
114 1,3,5-Trichlorobenzene	180	15.161	15.161	0.000	98	817989	10.0	11.0	
116 Hexachlorobutadiene	225	15.734	15.734	0.000	98	500169	10.0	11.1	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	564364	10.0	10.4	
118 Naphthalene	128	16.153	16.153	0.000	97	523924	10.0	7.97	
120 1,2,3-Trichlorobenzene	180	16.348	16.348	0.000	96	429615	10.0	9.91	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 NewWkMix_00209

Amount Added: 10.00

Units: uL

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

8260 Surr 25_00072

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LCCV7799.D

Injection Date: 07-Mar-2017 09:01:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 25.000 mL

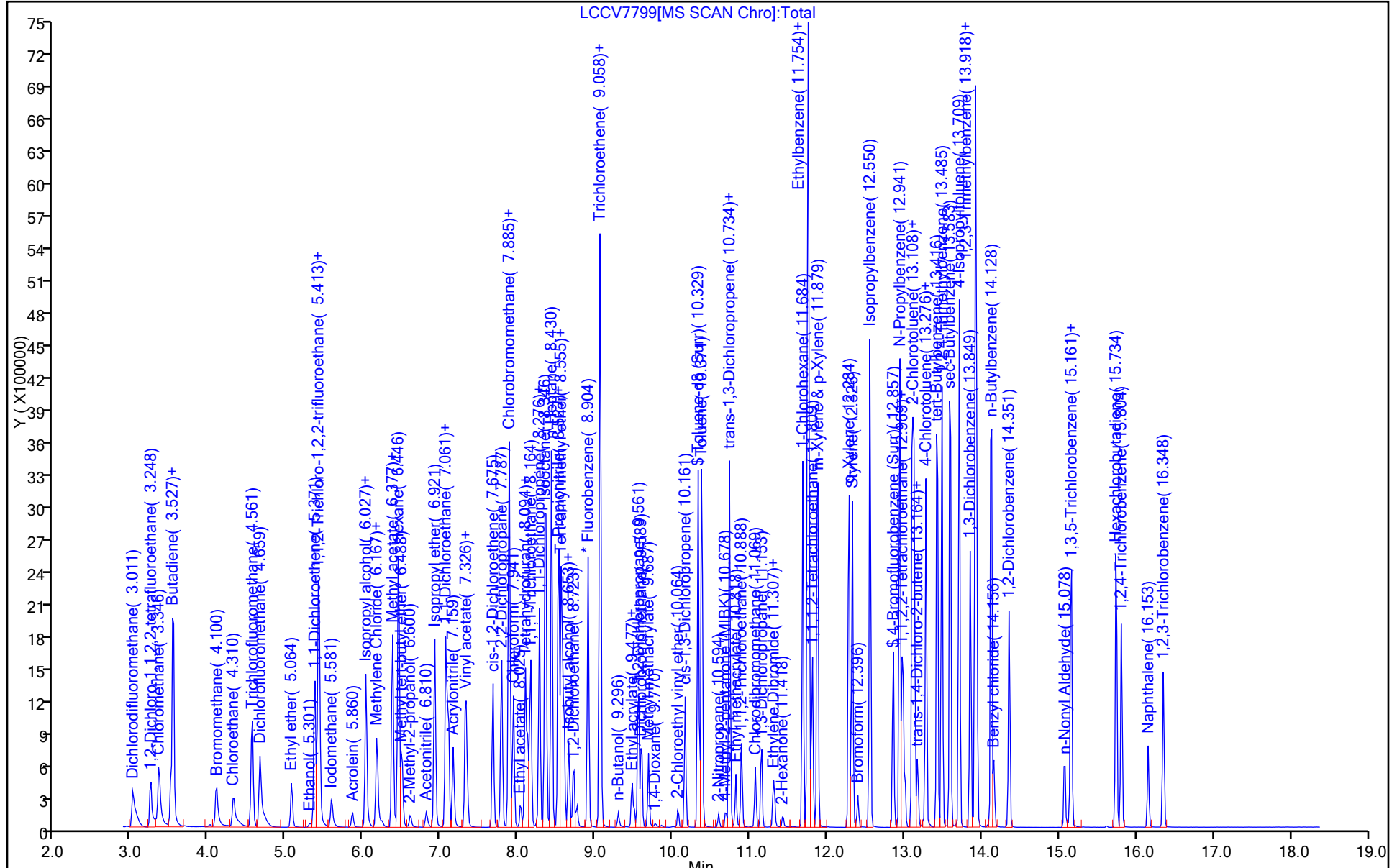
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis

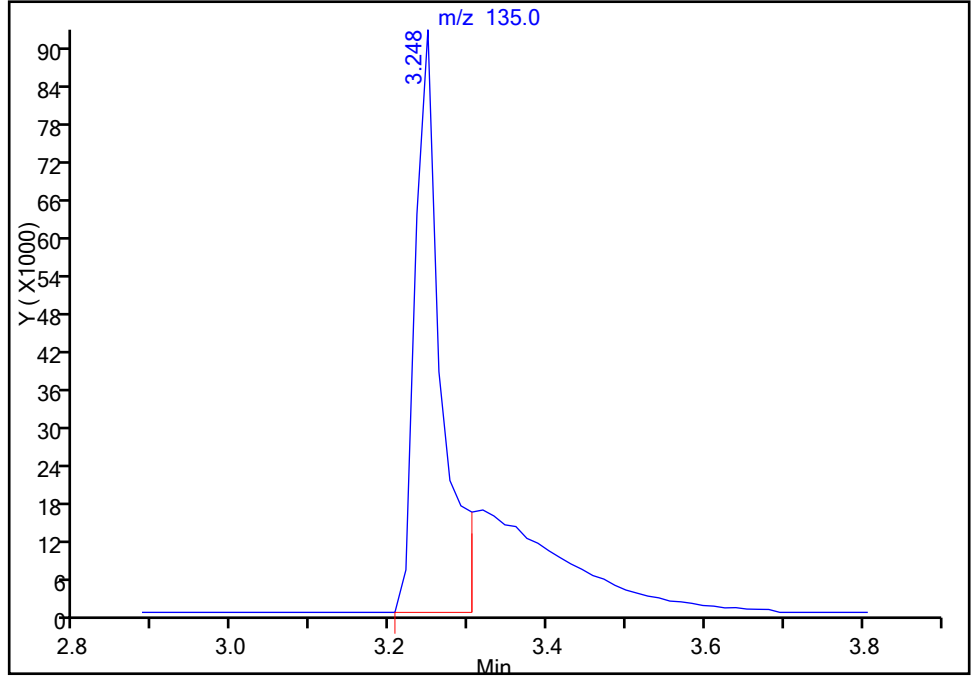
Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LCCV7799.D
Injection Date: 07-Mar-2017 09:01:30 Instrument ID: VMSL
Lims ID: CCVIS
Client ID:
Operator ID: SMCR ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 25mL-8260-MSL Limit Group: MSV-8260
Column: RTX-VMS (40m) (0.18 mm) Detector MS SCAN

2 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Signal: 1

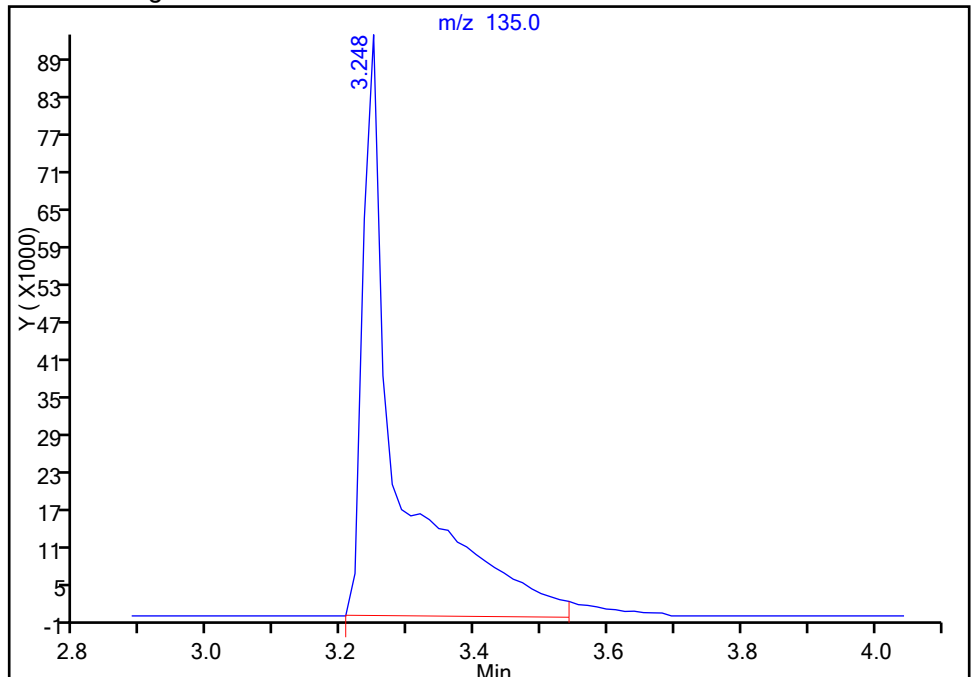
RT: 3.25
Area: 213552
Amount: 6.870318
Amount Units: ug/l

Processing Integration Results



RT: 3.25
Area: 333644
Amount: 10.733875
Amount Units: ug/l

Manual Integration Results



Reviewer: rhoadess, 07-Mar-2017 09:40:10
Audit Action: Manually Integrated

Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: ICV 160-290044/13 Calibration Date: 01/30/2017 13:18
 Instrument ID: VMSZ Calib Start Date: 01/30/2017 10:06
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 01/30/2017 12:30
 Lab File ID: ZICV1160.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3318	0.4020	0.1000	12.1	10.0	21.1	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	0.2007	0.2485	0.0100	12.4	10.0	23.8	30.0
Chloromethane	Ave	0.2940	0.3248	0.1000	11.0	10.0	10.5	30.0
Vinyl chloride	Ave	0.4262	0.4698	0.1000	11.0	10.0	10.2	30.0
Butadiene	Ave	0.4318	0.4212	0.0100	9.75	10.0	-2.5	30.0
Methyl bromide	Ave	0.3918	0.4043	0.1000	10.3	10.0	3.2	30.0
Chloroethane	Ave	0.3281	0.3665	0.1000	11.2	10.0	11.7	30.0
Trichlorofluoromethane	Lin1		0.5550	0.1000	11.6	10.0	16.5	30.0
Dichlorofluoromethane	Ave	0.4447	0.4963	0.0100	11.2	10.0	11.6	30.0
Ethyl ether	Ave	0.1073	0.0960	0.0100	8.95	10.0	-10.5	30.0
Ethanol	Ave	0.0007	0.0006*	0.0010	348	400	-13.1	30.0
1,1-Dichloroethene	Ave	0.2688	0.2819	0.1000	10.5	10.0	4.9	30.0
Carbon disulfide	Ave	0.8401	0.8646	0.1000	10.3	10.0	2.9	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2761	0.2906	0.1000	10.5	10.0	5.3	30.0
Iodomethane	Ave	0.4904	0.4875	0.0100	9.94	10.0	-0.6	30.0
Acrolein	Ave	0.0156	0.0125	0.0010	40.1	50.0	-19.8	30.0
Allyl chloride	Ave	0.2998	0.3096	0.0100	10.3	10.0	3.2	30.0
Isopropyl alcohol	Ave	0.0044	0.0037*	0.0100	83.7	100	-16.3	30.0
Methylene Chloride	Ave	0.2382	0.2251	0.1000	9.45	10.0	-5.5	30.0
Acetone	Lin1		0.0217*	0.1000	10.1	10.0	1.1	30.0
trans-1,2-Dichloroethene	Ave	0.3048	0.3160	0.1000	10.4	10.0	3.6	30.0
Methyl acetate	Ave	0.0151	0.0132*	0.1000	43.6	50.0	-12.8	30.0
Hexane	Ave	0.0978	0.1018	0.0100	10.4	10.0	4.1	30.0
Methyl tert-butyl ether	Ave	0.4375	0.4111	0.1000	9.40	10.0	-6.0	30.0
tert-Butyl alcohol	Ave	0.0076	0.0064*	0.0100	84.8	100	-15.2	30.0
Acetonitrile	Ave	0.0078	0.0067	0.0010	86.0	100	-14.0	30.0
Isopropyl ether	Ave	0.6340	0.6243	0.0100	9.85	10.0	-1.5	30.0
2-Chloro-1,3-butadiene	Ave	0.4121	0.4396	0.0100	10.7	10.0	6.7	30.0
1,1-Dichloroethane	Ave	0.4653	0.4625	0.2000	9.94	10.0	-0.6	30.0
Acrylonitrile	Ave	0.0292	0.0270	0.0100	92.5	100	-7.5	30.0
Tert-butyl ethyl ether	Ave	0.5608	0.5351	0.0100	9.54	10.0	-4.6	30.0
Vinyl acetate	Ave	0.2923	0.2737	0.0100	9.36	10.0	-6.4	30.0
cis-1,2-Dichloroethene	Ave	0.2985	0.2924	0.1000	9.80	10.0	-2.0	30.0
2,2-Dichloropropane	Ave	0.3387	0.3798	0.0100	11.2	10.0	12.1	30.0
Bromochloromethane	Ave	0.1158	0.1133	0.0100	9.78	10.0	-2.2	30.0
Cyclohexane	Ave	0.4902	0.5384	0.1000	11.0	10.0	9.8	30.0
Chloroform	Ave	0.4658	0.4645	0.2000	9.97	10.0	-0.3	30.0
Ethyl acetate	Ave	0.0111	0.0096*	0.0100	17.2	20.0	-14.2	30.0
Carbon tetrachloride	Ave	0.4324	0.4867	0.1000	11.3	10.0	12.6	30.0
Tetrahydrofuran	Ave	0.0103	0.0091	0.0010	17.7	20.0	-11.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: ICV 160-290044/13 Calibration Date: 01/30/2017 13:18
 Instrument ID: VMSZ Calib Start Date: 01/30/2017 10:06
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 01/30/2017 12:30
 Lab File ID: ZICV1160.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,1-Trichloroethane	Ave	0.4628	0.5107	0.1000	11.0	10.0	10.4	30.0
2-Butanone	Ave	0.0339	0.0290*	0.1000	8.55	10.0	-14.5	30.0
1,1-Dichloropropene	Ave	0.3901	0.4420	0.0100	11.3	10.0	13.3	30.0
Isooctane	Ave	1.043	1.122	0.0100	10.8	10.0	7.5	30.0
n-Heptane	Ave	0.4344	0.4663	0.0100	10.7	10.0	7.3	30.0
Benzene	Ave	1.049	1.093	0.5000	10.4	10.0	4.2	30.0
Propionitrile	Ave	0.0110	0.0104	0.0010	94.0	100	-6.0	30.0
Methacrylonitrile	Ave	0.0599	0.0552	0.0100	92.1	100	-7.9	30.0
Tert-amyl methyl ether	Ave	0.4762	0.4670	0.0100	9.81	10.0	-1.9	30.0
Isobutanol	Ave	0.0018	0.0017	0.0010	241	250	-3.7	30.0
1,2-Dichloroethane	Ave	0.2417	0.2252	0.1000	9.32	10.0	-6.8	30.0
Methylcyclohexane	Ave	0.3878	0.4309	0.1000	11.1	10.0	11.1	30.0
Trichloroethene	Ave	0.3115	0.3242	0.2000	10.4	10.0	4.1	30.0
n-Butanol	Ave	0.0016	0.0017*	0.0100	252	250	0.7	30.0
Dibromomethane	Ave	0.0985	0.0910	0.0100	9.24	10.0	-7.6	30.0
Ethyl acrylate	Ave	0.1111	0.1068	0.0100	9.62	10.0	-3.8	30.0
1,2-Dichloropropane	Ave	0.2183	0.2138	0.1000	9.80	10.0	-2.0	30.0
Bromodichloromethane	Ave	0.2792	0.2912	0.2000	10.4	10.0	4.3	30.0
Methyl methacrylate	Ave	0.0711	0.0665	0.0100	18.7	20.0	-6.5	30.0
1,4-Dioxane	Ave	0.0009	0.0007*	0.0010	171	200	-14.6	30.0
2-Chloroethyl vinyl ether	Ave	0.0195	0.0169	0.0100	8.67	10.0	-13.3	30.0
cis-1,3-Dichloropropene	Ave	0.3252	0.3242	0.2000	9.97	10.0	-0.3	30.0
Toluene	Ave	0.8961	0.9714	0.4000	10.8	10.0	8.4	30.0
2-Nitropropane	Ave	0.0291	0.0262	0.0100	18.0	20.0	-9.8	30.0
4-Methyl-2-pentanone	Ave	0.0970	0.0971*	0.1000	10.0	10.0	0.2	30.0
Tetrachloroethene	Ave	0.4000	0.4375	0.2000	10.9	10.0	9.4	30.0
trans-1,3-Dichloropropene	Ave	0.3306	0.3324	0.1000	10.1	10.0	0.5	30.0
Ethyl methacrylate	Ave	0.1814	0.1888	0.0100	10.4	10.0	4.1	30.0
1,1,2-Trichloroethane	Ave	0.1512	0.1388	0.1000	9.18	10.0	-8.2	30.0
Chlorodibromomethane	Ave	0.2276	0.2334	0.1000	10.3	10.0	2.6	30.0
1,3-Dichloropropane	Ave	0.3089	0.2950	0.0100	9.55	10.0	-4.5	30.0
n-Butyl acetate	Ave	0.1747	0.1737	0.0100	9.94	10.0	-0.6	30.0
1,2-Dibromoethane	Ave	0.1622	0.1566	0.1000	9.66	10.0	-3.4	30.0
2-Hexanone	Ave	0.0641	0.0664*	0.1000	10.4	10.0	3.5	30.0
Ethylbenzene	Ave	1.853	1.929	0.1000	10.4	10.0	4.1	30.0
Chlorobenzene	Ave	1.027	1.079	0.5000	10.5	10.0	5.0	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3274	0.3446	0.0100	10.5	10.0	5.3	30.0
m-Xylene & p-Xylene	Ave	0.6929	0.7695	0.1000	11.1	10.0	11.1	30.0
o-Xylene	Ave	0.6326	0.6814	0.3000	10.8	10.0	7.7	30.0
Styrene	Ave	0.8794	0.9947	0.3000	11.3	10.0	13.1	30.0
Bromoform	Ave	0.2347	0.2391	0.1000	10.2	10.0	1.9	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: ICV 160-290044/13 Calibration Date: 01/30/2017 13:18
 Instrument ID: VMSZ Calib Start Date: 01/30/2017 10:06
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 01/30/2017 12:30
 Lab File ID: ZICV1160.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropylbenzene	Ave	3.428	3.688	0.1000	10.8	10.0	7.6	30.0
N-Propylbenzene	Ave	3.825	4.070	0.0100	10.6	10.0	6.4	30.0
Bromobenzene	Ave	0.7829	0.7766	0.0100	9.92	10.0	-0.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.3116	0.2987*	0.3000	9.59	10.0	-4.1	30.0
1,3,5-Trimethylbenzene	Ave	2.546	2.899	0.0100	11.4	10.0	13.9	30.0
2-Chlorotoluene	Ave	2.371	2.575	0.0100	10.9	10.0	8.6	30.0
1,2,3-Trichloropropane	Lin1		0.1012	0.0100	10.8	10.0	7.7	30.0
trans-1,4-Dichloro-2-butene	Ave	0.0820	0.0745	0.0100	9.09	10.0	-9.1	30.0
Cyclohexanone	Lin1		0.0046	0.0010	94.0	100	-6.0	30.0
4-Chlorotoluene	Ave	2.061	2.222	0.0100	10.8	10.0	7.9	30.0
tert-Butylbenzene	Ave	2.449	2.773	0.0100	11.3	10.0	13.2	30.0
1,2,4-Trimethylbenzene	Ave	2.558	2.820	0.0100	11.0	10.0	10.3	30.0
sec-Butylbenzene	Ave	3.651	3.997	0.0100	10.9	10.0	9.5	30.0
4-Isopropyltoluene	Ave	3.142	3.457	0.0100	11.0	10.0	10.0	30.0
1,3-Dichlorobenzene	Ave	1.500	1.543	0.6000	10.3	10.0	2.8	30.0
1,2,3-Trimethylbenzene	Ave	2.527	2.711	0.0100	10.7	10.0	7.3	30.0
1,4-Dichlorobenzene	Ave	1.569	1.631	0.5000	10.4	10.0	4.0	30.0
n-Butylbenzene	Ave	0.8436	0.9583	0.0100	11.4	10.0	13.6	30.0
Benzyl chloride	Ave	0.1237	0.1342	0.0100	10.9	10.0	8.5	30.0
1,2-Dichlorobenzene	Ave	1.219	1.230	0.4000	10.1	10.0	0.9	30.0
Nonanal	Ave	0.1209	0.1440	0.0100	11.9	10.0	19.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0551	0.0532	0.0500	9.65	10.0	-3.5	30.0
1,3,5-Trichlorobenzene	Ave	1.007	1.078	0.0100	10.7	10.0	7.1	30.0
Hexachlorobutadiene	Ave	0.4971	0.5955	0.0100	12.0	10.0	19.8	30.0
1,2,4-Trichlorobenzene	Ave	0.6475	0.6506	0.2000	10.0	10.0	0.5	30.0
Naphthalene	Ave	0.6967	0.6579	0.0100	9.44	10.0	-5.6	30.0
1,2,3-Trichlorobenzene	Ave	0.3822	0.3719	0.0100	9.73	10.0	-2.7	30.0
Dibromofluoromethane (Surr)	Ave	0.2186	0.2251	0.0100	10.3	10.0	3.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1968	0.1856	0.0100	9.43	10.0	-5.7	30.0
Toluene-d8 (Surr)	Ave	1.231	1.307	0.0100	10.6	10.0	6.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.7068	0.7375	0.0100	10.4	10.0	4.3	30.0

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICV1160.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 30-Jan-2017 13:18:30 ALS Bottle#: 10 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009642-013
 Misc. Info.: icv
 Operator ID: EF Instrument ID: VMSZ
 Sublist:

Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 31-Jan-2017 09:48:17 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D

Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: fishere

Date: 31-Jan-2017 09:48:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.950	2.950	0.000	100	722576	10.0	12.1	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.187	3.187	0.000	95	446755	10.0	12.4	
3 Chloromethane	50	3.271	3.271	0.000	99	583818	10.0	11.0	
4 Vinyl chloride	62	3.439	3.439	0.000	99	844472	10.0	11.0	
5 Butadiene	39	3.453	3.452	0.001	90	757170	10.0	9.75	
6 Bromomethane	94	4.011	4.011	0.000	89	726802	10.0	10.3	
7 Chloroethane	64	4.234	4.234	0.000	99	658744	10.0	11.2	
8 Trichlorofluoromethane	101	4.458	4.472	-0.014	100	997656	10.0	11.6	
9 Dichlorofluoromethane	67	4.584	4.583	0.001	98	892081	10.0	11.2	
10 Ethyl ether	74	4.960	4.960	0.000	90	172553	10.0	8.95	
11 Ethanol	45	5.198	5.198	0.000	98	41157	400.0	347.5	
12 1,1-Dichloroethene	96	5.282	5.281	0.001	97	506811	10.0	10.5	
13 Carbon disulfide	76	5.324	5.323	0.001	100	1554096	10.0	10.3	
14 1,1,2-Trichloro-1,2,2-trif	151	5.351	5.351	0.000	89	522419	10.0	10.5	
15 Iodomethane	142	5.491	5.491	0.000	99	876246	10.0	9.94	
17 Acrolein	56	5.770	5.770	0.000	98	112405	50.0	40.1	
18 3-Chloro-1-propene	39	5.952	5.952	0.000	87	556459	10.0	10.3	
19 Isopropyl alcohol	45	5.966	5.966	0.000	98	66807	100.0	83.7	
20 Methylene Chloride	84	6.091	6.091	0.000	88	404700	10.0	9.45	
21 Acetone	43	6.161	6.147	0.014	97	39054	10.0	10.1	
22 trans-1,2-Dichloroethene	96	6.287	6.287	0.000	98	567971	10.0	10.4	
23 Methyl acetate	74	6.301	6.301	0.000	96	118757	50.0	43.6	
24 Hexane	86	6.371	6.371	0.000	92	183000	10.0	10.4	
25 Methyl tert-butyl ether	73	6.413	6.412	0.001	82	739039	10.0	9.40	
26 2-Methyl-2-propanol	59	6.510	6.510	0.000	98	115400	100.0	84.8	
27 Acetonitrile	41	6.734	6.734	0.000	97	119922	100.0	86.0	
28 Isopropyl ether	45	6.845	6.845	0.000	91	1122142	10.0	9.85	
29 2-Chloro-1,3-butadiene	53	6.999	6.999	0.000	92	790187	10.0	10.7	
30 1,1-Dichloroethane	63	7.027	7.027	0.000	97	831423	10.0	9.94	
31 Acrylonitrile	53	7.097	7.083	0.014	99	484742	100.0	92.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59	7.250	7.250	0.000	96	961796	10.0	9.54	
33 Vinyl acetate	43	7.278	7.278	0.000	97	492022	10.0	9.36	
34 cis-1,2-Dichloroethene	96	7.613	7.613	0.000	80	525638	10.0	9.80	
35 2,2-Dichloropropane	77	7.725	7.725	0.000	89	682672	10.0	11.2	
36 Cyclohexane	84	7.823	7.823	0.000	87	967751	10.0	11.0	
37 Chlorobromomethane	128	7.823	7.823	0.000	57	203630	10.0	9.78	
38 Chloroform	83	7.879	7.878	0.001	94	834876	10.0	9.97	
39 Ethyl acetate	45	7.962	7.962	0.000	99	34359	20.0	17.2	
40 Carbon tetrachloride	117	8.032	8.032	0.000	98	874818	10.0	11.3	
41 Tetrahydrofuran	71	8.046	8.046	0.000	87	32753	20.0	17.7	
\$ 42 Dibromofluoromethane (Surr	113	8.060	8.060	0.000	94	404702	10.0	10.3	
43 1,1,1-Trichloroethane	97	8.102	8.102	0.000	97	918081	10.0	11.0	
44 2-Butanone (MEK)	43	8.172	8.172	0.000	100	52123	10.0	8.55	
45 1,1-Dichloropropene	75	8.214	8.213	0.001	96	794465	10.0	11.3	
46 Isooctane	57	8.297	8.297	0.000	96	2015999	10.0	10.8	
47 n-Heptane	43	8.367	8.367	0.000	87	838146	10.0	10.7	
48 Benzene	78	8.465	8.465	0.000	96	1965039	10.0	10.4	
50 Propionitrile	54	8.493	8.493	0.000	90	186157	100.0	94.0	
49 Methacrylonitrile	41	8.507	8.507	0.000	90	991513	100.0	92.1	
51 Tert-amyl methyl ether	73	8.535	8.521	0.014	97	839505	10.0	9.81	
52 Isobutyl alcohol	42	8.591	8.590	0.001	54	78144	250.0	240.9	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.591	8.590	0.001	93	333579	10.0	9.43	
54 1,2-Dichloroethane	62	8.660	8.660	0.000	98	404877	10.0	9.32	
* 55 Fluorobenzene	96	8.856	8.842	0.014	99	1797562	10.0	10.0	
57 Methylcyclohexane	55	8.995	8.995	0.000	88	774500	10.0	11.1	
56 Trichloroethene	95	9.009	9.009	0.000	77	582685	10.0	10.4	
59 n-Butanol	56	9.233	9.233	0.000	86	74557	250.0	251.8	
60 Dibromomethane	93	9.414	9.414	0.000	91	163625	10.0	9.24	
61 Ethyl acrylate	55	9.442	9.442	0.000	98	192012	10.0	9.62	
62 1,2-Dichloropropane	63	9.498	9.498	0.000	92	384327	10.0	9.80	
63 Dichlorobromomethane	83	9.540	9.540	0.000	99	523501	10.0	10.4	
64 Methyl methacrylate	69	9.638	9.638	0.000	86	239040	20.0	18.7	
65 1,4-Dioxane	88	9.708	9.707	0.001	94	26379	200.0	170.9	
66 2-Chloroethyl vinyl ether	63	10.015	10.015	0.000	94	30397	10.0	8.67	
67 cis-1,3-Dichloropropene	75	10.112	10.112	0.000	95	582780	10.0	9.97	
\$ 68 Toluene-d8 (Surr)	98	10.280	10.280	0.000	93	1811513	10.0	10.6	
69 Toluene	92	10.322	10.322	0.000	99	1346697	10.0	10.8	
70 2-Nitropropane	43	10.545	10.545	0.000	99	72763	20.0	18.0	
71 4-Methyl-2-pentanone (MIBK	43	10.629	10.629	0.000	97	134635	10.0	10.0	
73 Tetrachloroethene	164	10.685	10.685	0.000	98	606490	10.0	10.9	
72 trans-1,3-Dichloropropene	75	10.685	10.685	0.000	71	460823	10.0	10.1	
74 Ethyl methacrylate	69	10.769	10.769	0.001	87	261776	10.0	10.4	
75 1,1,2-Trichloroethane	83	10.838	10.838	0.000	94	192394	10.0	9.18	
76 Chlorodibromomethane	129	11.020	11.020	0.000	90	323614	10.0	10.3	
77 1,3-Dichloropropane	76	11.104	11.104	0.000	90	408947	10.0	9.55	
78 n-Butyl acetate	43	11.257	11.257	0.000	98	240790	10.0	9.94	
79 Ethylene Dibromide	107	11.271	11.271	0.000	98	217141	10.0	9.66	
80 2-Hexanone	43	11.383	11.383	0.000	95	91982	10.0	10.4	
81 1-Chlorohexane	91	11.634	11.648	-0.014	98	846855	10.0	11.5	
* 83 Chlorobenzene-d5	117	11.704	11.704	0.000	67	1386308	10.0	10.0	
82 Ethylbenzene	91	11.704	11.704	0.000	97	2673892	10.0	10.4	
84 Chlorobenzene	112	11.718	11.718	0.000	94	1495624	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131	11.760	11.760	0.000	96	477771	10.0	10.5	
86 m-Xylene & p-Xylene	106	11.830	11.830	0.000	99	1066786	10.0	11.1	
88 o-Xylene	106	12.235	12.235	0.001	96	944591	10.0	10.8	
89 Styrene	104	12.290	12.290	0.000	94	1378927	10.0	11.3	
90 Bromoform	173	12.360	12.360	0.000	98	175246	10.0	10.2	
91 Isopropylbenzene	105	12.514	12.514	0.000	95	2703171	10.0	10.8	
\$ 92 4-Bromofluorobenzene (Surr	95	12.807	12.807	0.000	96	540587	10.0	10.4	
93 N-Propylbenzene	91	12.891	12.905	-0.014	98	2983632	10.0	10.6	
94 Bromobenzene	156	12.933	12.933	0.000	88	569230	10.0	9.92	
95 1,1,2,2-Tetrachloroethane	83	12.961	12.961	0.000	97	218975	10.0	9.59	
96 1,3,5-Trimethylbenzene	105	13.058	13.058	0.000	96	2124836	10.0	11.4	
97 2-Chlorotoluene	91	13.086	13.086	0.000	98	1887347	10.0	10.9	
98 1,2,3-Trichloropropane	110	13.128	13.128	0.000	87	74212	10.0	10.8	
99 trans-1,4-Dichloro-2-buten	53	13.128	13.128	0.000	78	54632	10.0	9.09	
100 Cyclohexanone	55	13.198	13.198	0.000	82	33768	100.0	94.0	
101 4-Chlorotoluene	91	13.240	13.240	0.000	96	1629085	10.0	10.8	
102 tert-Butylbenzene	119	13.379	13.379	0.000	93	2032777	10.0	11.3	
103 1,2,4-Trimethylbenzene	105	13.449	13.449	0.000	96	2067082	10.0	11.0	
104 sec-Butylbenzene	105	13.547	13.547	0.000	95	2930143	10.0	10.9	
105 4-Isopropyltoluene	119	13.673	13.673	0.000	96	2533864	10.0	11.0	
106 1,3-Dichlorobenzene	146	13.812	13.812	0.000	99	1130789	10.0	10.3	
107 1,2,3-Trimethylbenzene	105	13.882	13.882	0.000	95	1987147	10.0	10.7	
* 108 1,4-Dichlorobenzene-d4	152	13.882	13.882	0.000	90	733009	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.896	13.896	0.000	95	1195319	10.0	10.4	
110 n-Butylbenzene	134	14.078	14.077	0.001	97	702403	10.0	11.4	
111 Benzyl chloride	126	14.119	14.119	0.000	63	98397	10.0	10.9	
112 1,2-Dichlorobenzene	146	14.315	14.315	0.000	99	901768	10.0	10.1	
113 n-Nonyl Aldehyde	57	15.027	15.027	0.000	89	105528	10.0	11.9	
114 1,2-Dibromo-3-Chloropropan	157	15.097	15.097	0.000	82	38973	10.0	9.65	
115 1,3,5-Trichlorobenzene	180	15.111	15.111	0.000	97	790524	10.0	10.7	
116 Hexachlorobutadiene	225	15.697	15.697	0.000	97	436509	10.0	12.0	
117 1,2,4-Trichlorobenzene	180	15.767	15.767	0.000	94	476874	10.0	10.0	
118 Naphthalene	128	16.116	16.116	0.000	96	482237	10.0	9.44	
120 1,2,3-Trichlorobenzene	180	16.311	16.311	0.000	94	272607	10.0	9.73	

Reagents:

8260NewICVMix_00194

Amount Added: 10.00

Units: uL

8260 Surr 25_00070

Amount Added: 10.00

Units: uL

I.S. Working_00143

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICV1160.D

Injection Date: 30-Jan-2017 13:18:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: ICV

Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL

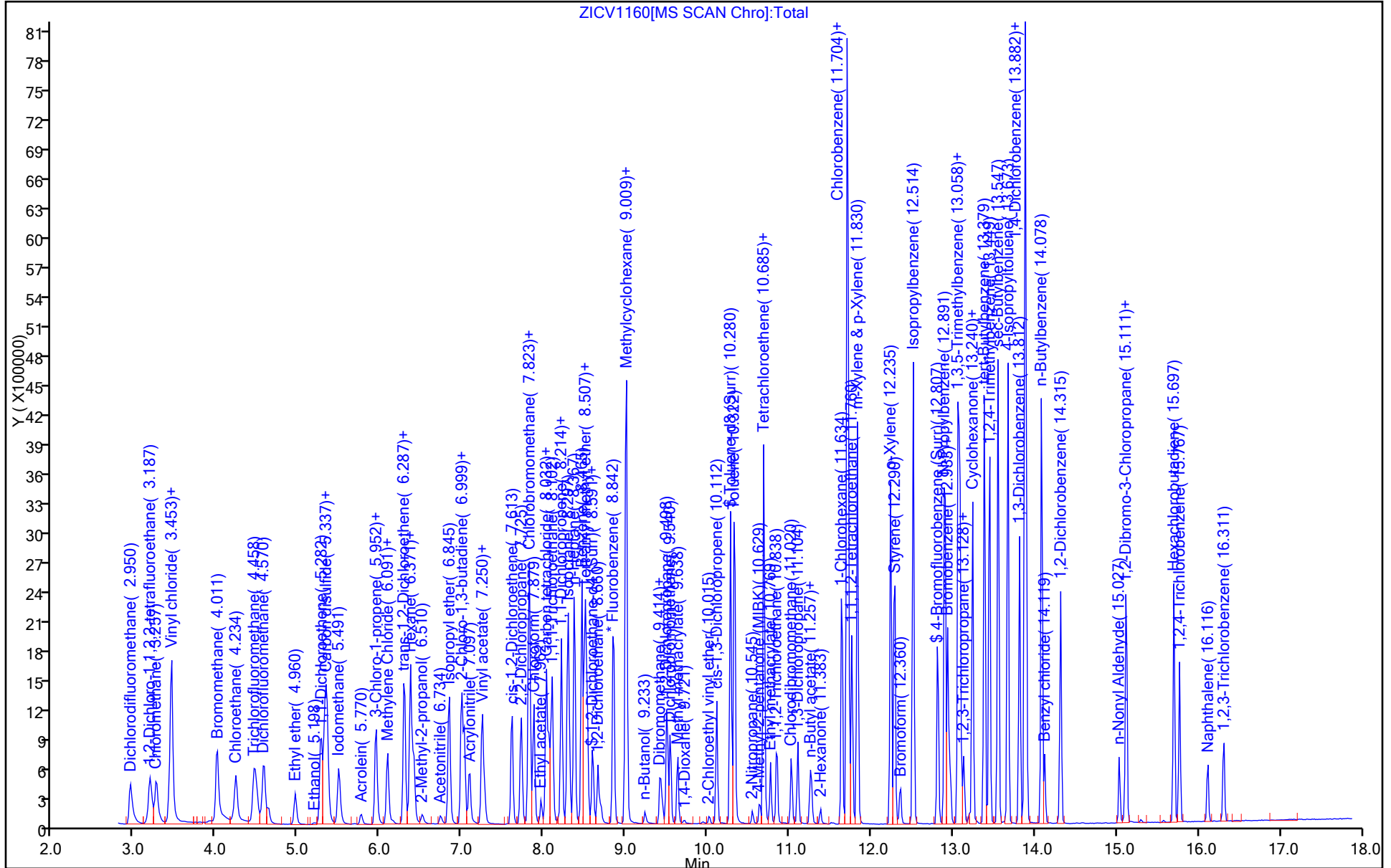
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: CCVIS 160-295720/4 Calibration Date: 03/03/2017 06:57
 Instrument ID: VMSZ Calib Start Date: 01/30/2017 10:06
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 01/30/2017 12:30
 Lab File ID: ZCCV1615.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3318	0.3072	0.1000	9.26	10.0	-7.4	20.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	0.2007	0.2072	0.0100	10.3	10.0	3.2	20.0
Chloromethane	Ave	0.2940	0.2878	0.1000	9.79	10.0	-2.1	20.0
Vinyl chloride	Ave	0.4262	0.4723	0.1000	11.1	10.0	10.8	20.0
Butadiene	Ave	0.4318	0.4577	0.0100	10.6	10.0	6.0	20.0
Methyl bromide	Ave	0.3918	0.3670	0.1000	9.37	10.0	-6.3	20.0
Chloroethane	Ave	0.3281	0.3487	0.1000	10.6	10.0	6.3	20.0
Trichlorofluoromethane	Lin1		0.4983	0.1000	10.5	10.0	4.8	20.0
Dichlorofluoromethane	Ave	0.4447	0.4700	0.0100	10.6	10.0	5.7	20.0
Ethyl ether	Ave	0.1073	0.0937	0.0100	8.73	10.0	-12.7	20.0
Ethanol	Ave	0.0007	0.0006*	0.0010	378	400	-5.6	20.0
1,1-Dichloroethene	Ave	0.2688	0.2729	0.1000	10.2	10.0	1.5	20.0
Carbon disulfide	Ave	0.8401	0.8435	0.1000	10.0	10.0	0.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2761	0.2846	0.1000	10.3	10.0	3.1	20.0
Iodomethane	Ave	0.4904	0.4516	0.0100	9.21	10.0	-7.9	20.0
Acrolein	Ave	0.0156	0.0141	0.0010	45.1	50.0	-9.9	20.0
Allyl chloride	Ave	0.2998	0.3006	0.0100	10.0	10.0	0.2	20.0
Isopropyl alcohol	Ave	0.0044	0.0039*	0.0100	87.7	100	-12.3	20.0
Methylene Chloride	Ave	0.2382	0.2298	0.1000	9.65	10.0	-3.5	20.0
Acetone	Lin1		0.0190*	0.1000	8.78	10.0	-12.2	20.0
trans-1,2-Dichloroethene	Ave	0.3048	0.3047	0.1000	10.0	10.0	-0.0	20.0
Methyl acetate	Ave	0.0151	0.0131*	0.1000	43.4	50.0	-13.2	20.0
Hexane	Ave	0.0978	0.0966	0.0100	9.88	10.0	-1.2	20.0
Methyl tert-butyl ether	Ave	0.4375	0.3881	0.1000	8.87	10.0	-11.3	20.0
tert-Butyl alcohol	Ave	0.0076	0.0063*	0.0100	82.6	100	-17.4	20.0
Acetonitrile	Ave	0.0078	0.0074	0.0010	95.4	100	-4.6	20.0
Isopropyl ether	Ave	0.6340	0.6350	0.0100	10.0	10.0	0.2	20.0
2-Chloro-1,3-butadiene	Ave	0.4121	0.4379	0.0100	10.6	10.0	6.2	20.0
1,1-Dichloroethane	Ave	0.4653	0.4797	0.2000	10.3	10.0	3.1	20.0
Acrylonitrile	Ave	0.0292	0.0269	0.0100	92.4	100	-7.6	20.0
Tert-butyl ethyl ether	Ave	0.5608	0.5284	0.0100	9.42	10.0	-5.8	20.0
Vinyl acetate	Ave	0.2923	0.2806	0.0100	9.60	10.0	-4.0	20.0
cis-1,2-Dichloroethene	Ave	0.2985	0.2972	0.1000	9.96	10.0	-0.4	20.0
2,2-Dichloropropane	Ave	0.3387	0.3592	0.0100	10.6	10.0	6.0	20.0
Bromochloromethane	Ave	0.1158	0.1097	0.0100	9.47	10.0	-5.3	20.0
Cyclohexane	Ave	0.4902	0.5223	0.1000	10.7	10.0	6.5	20.0
Chloroform	Ave	0.4658	0.4533	0.2000	9.73	10.0	-2.7	20.0
Ethyl acetate	Ave	0.0111	0.0092*	0.0100	16.6	20.0	-17.2	20.0
Carbon tetrachloride	Ave	0.4324	0.4455	0.1000	10.3	10.0	3.0	20.0
Tetrahydrofuran	Ave	0.0103	0.0088	0.0010	17.1	20.0	-14.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: CCVIS 160-295720/4 Calibration Date: 03/03/2017 06:57
 Instrument ID: VMSZ Calib Start Date: 01/30/2017 10:06
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 01/30/2017 12:30
 Lab File ID: ZCCV1615.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,1-Trichloroethane	Ave	0.4628	0.4722	0.1000	10.2	10.0	2.0	20.0
2-Butanone	Ave	0.0339	0.0308*	0.1000	9.08	10.0	-9.2	20.0
1,1-Dichloropropene	Ave	0.3901	0.4153	0.0100	10.6	10.0	6.5	20.0
Isooctane	Ave	1.043	1.213	0.0100	11.6	10.0	16.2	20.0
n-Heptane	Ave	0.4344	0.4752	0.0100	10.9	10.0	9.4	20.0
Benzene	Ave	1.049	1.117	0.5000	10.7	10.0	6.5	20.0
Propionitrile	Ave	0.0110	0.0100	0.0010	90.8	100	-9.2	20.0
Methacrylonitrile	Ave	0.0599	0.0555	0.0100	92.6	100	-7.4	20.0
Tert-amyl methyl ether	Ave	0.4762	0.4449	0.0100	9.34	10.0	-6.6	20.0
Isobutanol	Ave	0.0018	0.0016	0.0010	227	250	-9.3	20.0
1,2-Dichloroethane	Ave	0.2417	0.2078	0.1000	8.60	10.0	-14.0	20.0
Methylcyclohexane	Ave	0.3878	0.4304	0.1000	11.1	10.0	11.0	20.0
Trichloroethene	Ave	0.3115	0.3149	0.2000	10.1	10.0	1.1	20.0
n-Butanol	Ave	0.0016	0.0016*	0.0100	242	250	-3.4	20.0
Dibromomethane	Ave	0.0985	0.0867	0.0100	8.80	10.0	-12.0	20.0
Ethyl acrylate	Ave	0.1111	0.0947	0.0100	8.53	10.0	-14.7	20.0
1,2-Dichloropropane	Ave	0.2183	0.2211	0.1000	10.1	10.0	1.3	20.0
Bromodichloromethane	Ave	0.2792	0.2671	0.2000	9.57	10.0	-4.3	20.0
Methyl methacrylate	Ave	0.0711	0.0617	0.0100	17.3	20.0	-13.3	20.0
1,4-Dioxane	Ave	0.0009	0.0008*	0.0010	176	200	-12.1	20.0
2-Chloroethyl vinyl ether	Ave	0.0195	0.0156	0.0100	7.99	10.0	-20.1*	20.0
cis-1,3-Dichloropropene	Ave	0.3252	0.3197	0.2000	9.83	10.0	-1.7	20.0
Toluene	Ave	0.8961	0.9566	0.4000	10.7	10.0	6.8	20.0
2-Nitropropane	Ave	0.0291	0.0253	0.0100	17.4	20.0	-13.1	20.0
4-Methyl-2-pentanone	Ave	0.0970	0.0830*	0.1000	8.56	10.0	-14.4	20.0
Tetrachloroethene	Ave	0.4000	0.4090	0.2000	10.2	10.0	2.3	20.0
trans-1,3-Dichloropropene	Ave	0.3306	0.3244	0.1000	9.81	10.0	-1.9	20.0
Ethyl methacrylate	Ave	0.1814	0.1597	0.0100	8.81	10.0	-11.9	20.0
1,1,2-Trichloroethane	Ave	0.1512	0.1304	0.1000	8.62	10.0	-13.8	20.0
Chlorodibromomethane	Ave	0.2276	0.2143	0.1000	9.42	10.0	-5.8	20.0
1,3-Dichloropropane	Ave	0.3089	0.2828	0.0100	9.15	10.0	-8.5	20.0
n-Butyl acetate	Ave	0.1747	0.1542	0.0100	8.82	10.0	-11.8	20.0
1,2-Dibromoethane	Ave	0.1622	0.1447	0.1000	8.92	10.0	-10.8	20.0
2-Hexanone	Ave	0.0641	0.0543*	0.1000	8.48	10.0	-15.2	20.0
Ethylbenzene	Ave	1.853	1.997	0.1000	10.8	10.0	7.8	20.0
Chlorobenzene	Ave	1.027	1.091	0.5000	10.6	10.0	6.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3274	0.3234	0.0100	9.88	10.0	-1.2	20.0
m-Xylene & p-Xylene	Ave	0.6929	0.7487	0.1000	10.8	10.0	8.1	20.0
o-Xylene	Ave	0.6326	0.6765	0.3000	10.7	10.0	6.9	20.0
Styrene	Ave	0.8794	0.9503	0.3000	10.8	10.0	8.1	20.0
Bromoform	Ave	0.2347	0.2123	0.1000	9.04	10.0	-9.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Lab Sample ID: CCVIS 160-295720/4 Calibration Date: 03/03/2017 06:57
 Instrument ID: VMSZ Calib Start Date: 01/30/2017 10:06
 GC Column: RTX-VMS40 ID: 0.18 (mm) Calib End Date: 01/30/2017 12:30
 Lab File ID: ZCCV1615.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropylbenzene	Ave	3.428	3.693	0.1000	10.8	10.0	7.7	20.0
N-Propylbenzene	Ave	3.825	4.202	0.0100	11.0	10.0	9.8	20.0
Bromobenzene	Ave	0.7829	0.7512	0.0100	9.60	10.0	-4.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.3116	0.2942*	0.3000	9.44	10.0	-5.6	20.0
1,3,5-Trimethylbenzene	Ave	2.546	2.864	0.0100	11.3	10.0	12.5	20.0
2-Chlorotoluene	Ave	2.371	2.546	0.0100	10.7	10.0	7.4	20.0
1,2,3-Trichloropropane	Lin1		0.0916	0.0100	9.70	10.0	-3.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0820	0.0767	0.0100	9.35	10.0	-6.5	20.0
Cyclohexanone	Lin1		0.0049	0.0010	99.7	100	-0.3	20.0
4-Chlorotoluene	Ave	2.061	2.187	0.0100	10.6	10.0	6.1	20.0
tert-Butylbenzene	Ave	2.449	2.720	0.0100	11.1	10.0	11.1	20.0
1,2,4-Trimethylbenzene	Ave	2.558	2.851	0.0100	11.1	10.0	11.5	20.0
sec-Butylbenzene	Ave	3.651	4.103	0.0100	11.2	10.0	12.4	20.0
4-Isopropyltoluene	Ave	3.142	3.574	0.0100	11.4	10.0	13.7	20.0
1,3-Dichlorobenzene	Ave	1.500	1.539	0.6000	10.3	10.0	2.6	20.0
1,2,3-Trimethylbenzene	Ave	2.527	2.702	0.0100	10.7	10.0	6.9	20.0
1,4-Dichlorobenzene	Ave	1.569	1.604	0.5000	10.2	10.0	2.3	20.0
n-Butylbenzene	Ave	0.8436	0.9731	0.0100	11.5	10.0	15.3	20.0
Benzyl chloride	Ave	0.1237	0.1416	0.0100	11.4	10.0	14.5	20.0
1,2-Dichlorobenzene	Ave	1.219	1.185	0.4000	9.72	10.0	-2.8	20.0
Nonanal	Ave	0.1209	0.1355	0.0100	11.2	10.0	12.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0551	0.0470*	0.0500	8.53	10.0	-14.7	20.0
1,3,5-Trichlorobenzene	Ave	1.007	1.071	0.0100	10.6	10.0	6.4	20.0
Hexachlorobutadiene	Ave	0.4971	0.5560	0.0100	11.2	10.0	11.8	20.0
1,2,4-Trichlorobenzene	Ave	0.6475	0.6320	0.2000	9.76	10.0	-2.4	20.0
Naphthalene	Ave	0.6967	0.6332	0.0100	9.09	10.0	-9.1	20.0
1,2,3-Trichlorobenzene	Ave	0.3822	0.3619	0.0100	9.47	10.0	-5.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2186	0.2213	0.0100	10.1	10.0	1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1968	0.1762	0.0100	8.95	10.0	-10.5	20.0
Toluene-d8 (Surr)	Ave	1.231	1.330	0.0100	10.8	10.0	8.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7068	0.6909	0.0100	9.77	10.0	-2.3	20.0

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZCCV1615.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 03-Mar-2017 06:57:30 ALS Bottle#: 1 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-004
 Misc. Info.: VSTD010
 Operator ID: EF Instrument ID: VMSZ
 Sublist: chrom-25mL-8260-MSZ*sub12
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 07:19:47 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fishere

Date: 03-Mar-2017 07:19:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.947	2.947	0.000	100	380704	10.0	9.26	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.185	3.185	0.000	96	256698	10.0	10.3	
3 Chloromethane	50	3.254	3.254	0.000	99	356660	10.0	9.79	
4 Vinyl chloride	62	3.422	3.422	0.000	99	585257	10.0	11.1	
5 Butadiene	39	3.450	3.450	0.000	89	567197	10.0	10.6	
6 Bromomethane	94	4.008	4.008	0.000	90	454837	10.0	9.37	
7 Chloroethane	64	4.232	4.232	0.000	99	432145	10.0	10.6	
8 Trichlorofluoromethane	101	4.469	4.469	0.000	99	617460	10.0	10.5	
9 Dichlorofluoromethane	67	4.581	4.581	0.000	97	582435	10.0	10.6	
10 Ethyl ether	74	4.958	4.958	0.000	91	116096	10.0	8.73	
11 Ethanol	45	5.195	5.195	0.000	97	30832	400.0	377.6	
12 1,1-Dichloroethene	96	5.279	5.279	0.000	98	338156	10.0	10.2	
13 Carbon disulfide	76	5.321	5.321	0.000	100	1045279	10.0	10.0	
14 1,1,2-Trichloro-1,2,2-trif	151	5.349	5.349	0.000	91	352617	10.0	10.3	
15 Iodomethane	142	5.488	5.488	0.000	98	559589	10.0	9.21	
17 Acrolein	56	5.768	5.768	0.000	99	87076	50.0	45.1	
18 3-Chloro-1-propene	39	5.949	5.949	0.000	90	372441	10.0	10.0	
19 Isopropyl alcohol	45	5.963	5.963	0.000	98	48263	100.0	87.7	
20 Methylene Chloride	84	6.089	6.089	0.000	90	284735	10.0	9.65	
21 Acetone	43	6.145	6.145	0.000	97	23536	10.0	8.78	
22 trans-1,2-Dichloroethene	96	6.284	6.284	0.000	98	377630	10.0	10.0	
23 Methyl acetate	74	6.298	6.298	0.000	96	81421	50.0	43.4	
24 Hexane	86	6.368	6.368	0.000	92	119734	10.0	9.88	
25 Methyl tert-butyl ether	73	6.410	6.410	0.000	82	480884	10.0	8.87	
26 2-Methyl-2-propanol	59	6.508	6.508	0.000	97	77546	100.0	82.6	
27 Acetonitrile	41	6.731	6.731	0.000	99	91691	100.0	95.4	
28 Isopropyl ether	45	6.843	6.843	0.000	92	786854	10.0	10.0	
29 2-Chloro-1,3-butadiene	53	6.996	6.996	0.000	92	542618	10.0	10.6	
30 1,1-Dichloroethane	63	7.024	7.024	0.000	97	594419	10.0	10.3	
31 Acrylonitrile	53	7.080	7.080	0.000	97	333678	100.0	92.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59	7.248	7.248	0.000	96	654760	10.0	9.42	
33 Vinyl acetate	43	7.275	7.275	0.000	97	347744	10.0	9.60	
34 cis-1,2-Dichloroethene	96	7.611	7.611	0.000	78	368273	10.0	9.96	
35 2,2-Dichloropropane	77	7.722	7.722	0.000	89	445102	10.0	10.6	
37 Chlorobromomethane	128	7.820	7.820	0.000	58	135923	10.0	9.47	
36 Cyclohexane	84	7.820	7.820	0.000	89	647164	10.0	10.7	
38 Chloroform	83	7.876	7.876	0.000	94	561749	10.0	9.73	
39 Ethyl acetate	45	7.960	7.960	0.000	99	22866	20.0	16.6	
40 Carbon tetrachloride	117	8.029	8.029	0.000	98	552074	10.0	10.3	
41 Tetrahydrofuran	71	8.043	8.043	0.000	84	21850	20.0	17.1	
44 2-Butanone (MEK)	43	8.169	8.169	0.000	99	38157	10.0	9.08	
\$ 42 Dibromofluoromethane (Surr	113	8.057	8.057	0.000	94	274206	10.0	10.1	
43 1,1,1-Trichloroethane	97	8.099	8.099	0.000	97	585141	10.0	10.2	
45 1,1-Dichloropropene	75	8.211	8.211	0.000	96	514572	10.0	10.6	
46 Isooctane	57	8.295	8.295	0.000	96	1502707	10.0	11.6	
47 n-Heptane	43	8.364	8.364	0.000	90	588870	10.0	10.9	
48 Benzene	78	8.462	8.462	0.000	96	1384522	10.0	10.7	
50 Propionitrile	54	8.490	8.490	0.000	89	123970	100.0	90.8	
49 Methacrylonitrile	41	8.504	8.504	0.000	90	687132	100.0	92.6	
51 Tert-amyl methyl ether	73	8.532	8.532	0.000	97	551366	10.0	9.34	
52 Isobutyl alcohol	42	8.588	8.588	0.000	53	50735	250.0	226.8	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.588	8.588	0.000	91	218279	10.0	8.95	
54 1,2-Dichloroethane	62	8.658	8.658	0.000	97	257492	10.0	8.60	
* 55 Fluorobenzene	96	8.853	8.853	0.000	99	1239188	10.0	10.0	
57 Methylcyclohexane	55	8.993	8.993	0.000	89	533367	10.0	11.1	
56 Trichloroethene	95	9.007	9.007	0.000	76	390250	10.0	10.1	
59 n-Butanol	56	9.230	9.230	0.000	89	49295	250.0	241.5	
60 Dibromomethane	93	9.412	9.412	0.000	91	107453	10.0	8.80	
61 Ethyl acrylate	55	9.440	9.440	0.000	98	117370	10.0	8.53	
62 1,2-Dichloropropane	63	9.495	9.495	0.000	94	273954	10.0	10.1	
63 Dichlorobromomethane	83	9.537	9.537	0.000	99	330993	10.0	9.57	
64 Methyl methacrylate	69	9.635	9.635	0.000	87	152859	20.0	17.3	
65 1,4-Dioxane	88	9.705	9.705	0.000	96	18711	200.0	175.8	
66 2-Chloroethyl vinyl ether	63	10.012	10.012	0.000	91	19318	10.0	7.99	
67 cis-1,3-Dichloropropene	75	10.110	10.110	0.000	96	396137	10.0	9.83	
\$ 68 Toluene-d8 (Surr)	98	10.277	10.277	0.000	93	1292804	10.0	10.8	
69 Toluene	92	10.319	10.319	0.000	98	929690	10.0	10.7	
70 2-Nitropropane	43	10.543	10.543	0.000	98	49133	20.0	17.4	
71 4-Methyl-2-pentanone (MIBK	43	10.626	10.626	0.000	97	80702	10.0	8.56	
73 Tetrachloroethene	164	10.682	10.682	0.000	98	397524	10.0	10.2	
72 trans-1,3-Dichloropropene	75	10.682	10.682	0.000	73	315293	10.0	9.81	
74 Ethyl methacrylate	69	10.766	10.766	0.000	88	155238	10.0	8.81	
75 1,1,2-Trichloroethane	83	10.836	10.836	0.000	92	126687	10.0	8.62	
76 Chlorodibromomethane	129	11.017	11.017	0.000	88	208314	10.0	9.42	
77 1,3-Dichloropropane	76	11.101	11.101	0.000	89	274803	10.0	9.15	
78 n-Butyl acetate	43	11.255	11.255	0.000	97	149821	10.0	8.82	
79 Ethylene Dibromide	107	11.269	11.269	0.000	100	140598	10.0	8.92	
80 2-Hexanone	43	11.380	11.380	0.000	94	52807	10.0	8.48	
81 1-Chlorohexane	91	11.645	11.645	0.000	94	604820	10.0	11.8	
82 Ethylbenzene	91	11.701	11.701	0.000	97	1941096	10.0	10.8	
* 83 Chlorobenzene-d5	117	11.701	11.701	0.000	65	971893	10.0	10.0	
84 Chlorobenzene	112	11.715	11.715	0.000	95	1060782	10.0	10.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131	11.757	11.757	0.000	94	314300	10.0	9.88	
86 m-Xylene & p-Xylene	106	11.827	11.827	0.000	99	727681	10.0	10.8	
88 o-Xylene	106	12.232	12.232	0.000	97	657466	10.0	10.7	
89 Styrene	104	12.288	12.288	0.000	94	923602	10.0	10.8	
90 Bromoform	173	12.358	12.358	0.000	98	109200	10.0	9.04	
91 Isopropylbenzene	105	12.511	12.511	0.000	95	1900078	10.0	10.8	
\$ 92 4-Bromofluorobenzene (Surr	95	12.804	12.804	0.000	96	355471	10.0	9.77	
93 N-Propylbenzene	91	12.888	12.888	0.000	99	2161825	10.0	11.0	
94 Bromobenzene	156	12.930	12.930	0.000	88	386503	10.0	9.60	
95 1,1,2,2-Tetrachloroethane	83	12.958	12.958	0.000	96	151378	10.0	9.44	
96 1,3,5-Trimethylbenzene	105	13.056	13.056	0.000	95	1473616	10.0	11.3	
97 2-Chlorotoluene	91	13.084	13.084	0.000	98	1309649	10.0	10.7	
98 1,2,3-Trichloropropane	110	13.125	13.125	0.000	86	47116	10.0	9.70	
99 trans-1,4-Dichloro-2-buten	53	13.125	13.125	0.000	83	39475	10.0	9.35	
100 Cyclohexanone	55	13.195	13.195	0.000	82	25061	100.0	99.7	
101 4-Chlorotoluene	91	13.237	13.237	0.000	96	1125239	10.0	10.6	
102 tert-Butylbenzene	119	13.377	13.377	0.000	92	1399245	10.0	11.1	
103 1,2,4-Trimethylbenzene	105	13.447	13.447	0.000	96	1466831	10.0	11.1	
104 sec-Butylbenzene	105	13.544	13.544	0.000	94	2111135	10.0	11.2	
105 4-Isopropyltoluene	119	13.670	13.670	0.000	96	1838543	10.0	11.4	
106 1,3-Dichlorobenzene	146	13.810	13.810	0.000	98	792018	10.0	10.3	
* 108 1,4-Dichlorobenzene-d4	152	13.879	13.879	0.000	73	514485	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.879	13.879	0.000	95	1390084	10.0	10.7	
109 1,4-Dichlorobenzene	146	13.893	13.893	0.000	97	825488	10.0	10.2	
110 n-Butylbenzene	134	14.075	14.075	0.000	97	500621	10.0	11.5	
111 Benzyl chloride	126	14.117	14.117	0.000	97	72853	10.0	11.4	
112 1,2-Dichlorobenzene	146	14.312	14.312	0.000	98	609678	10.0	9.72	
113 n-Nonyl Aldehyde	57	15.024	15.024	0.000	89	69727	10.0	11.2	
114 1,2-Dibromo-3-Chloropropan	157	15.094	15.094	0.000	84	24162	10.0	8.53	
115 1,3,5-Trichlorobenzene	180	15.108	15.108	0.000	97	551200	10.0	10.6	
116 Hexachlorobutadiene	225	15.694	15.694	0.000	97	286032	10.0	11.2	
117 1,2,4-Trichlorobenzene	180	15.764	15.764	0.000	93	325168	10.0	9.76	
118 Naphthalene	128	16.113	16.113	0.000	96	325789	10.0	9.09	
120 1,2,3-Trichlorobenzene	180	16.309	16.309	0.000	95	186180	10.0	9.47	

Reagents:

8260 NewWkMix_00208

Amount Added: 10.00

Units: uL

8260 Surr 25_00071

Amount Added: 10.00

Units: uL

Run Reagent

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZCCV1615.D

Injection Date: 03-Mar-2017 06:57:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: ccvis

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

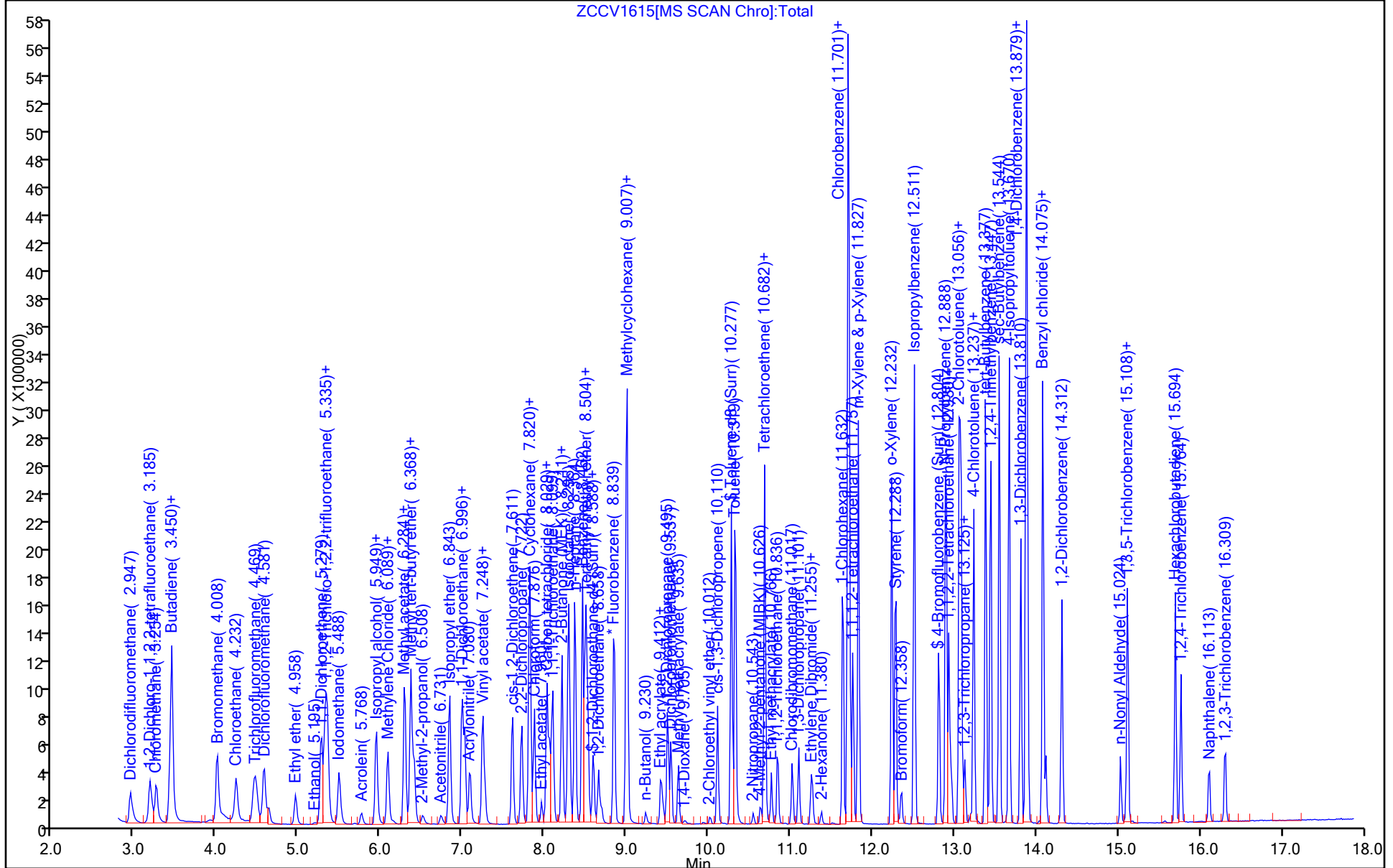
ALS Bottle#: 1

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)

ZCCV1615[MS SCAN Chro]:Total



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LFBFB7556.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 14-Feb-2017 11:34:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 15-Feb-2017 11:41:01 Calib Date: 14-Feb-2017 14:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LICL7564.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK023

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 124 BFB	95	4.036	4.036	0.000	0	1498652	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_00067

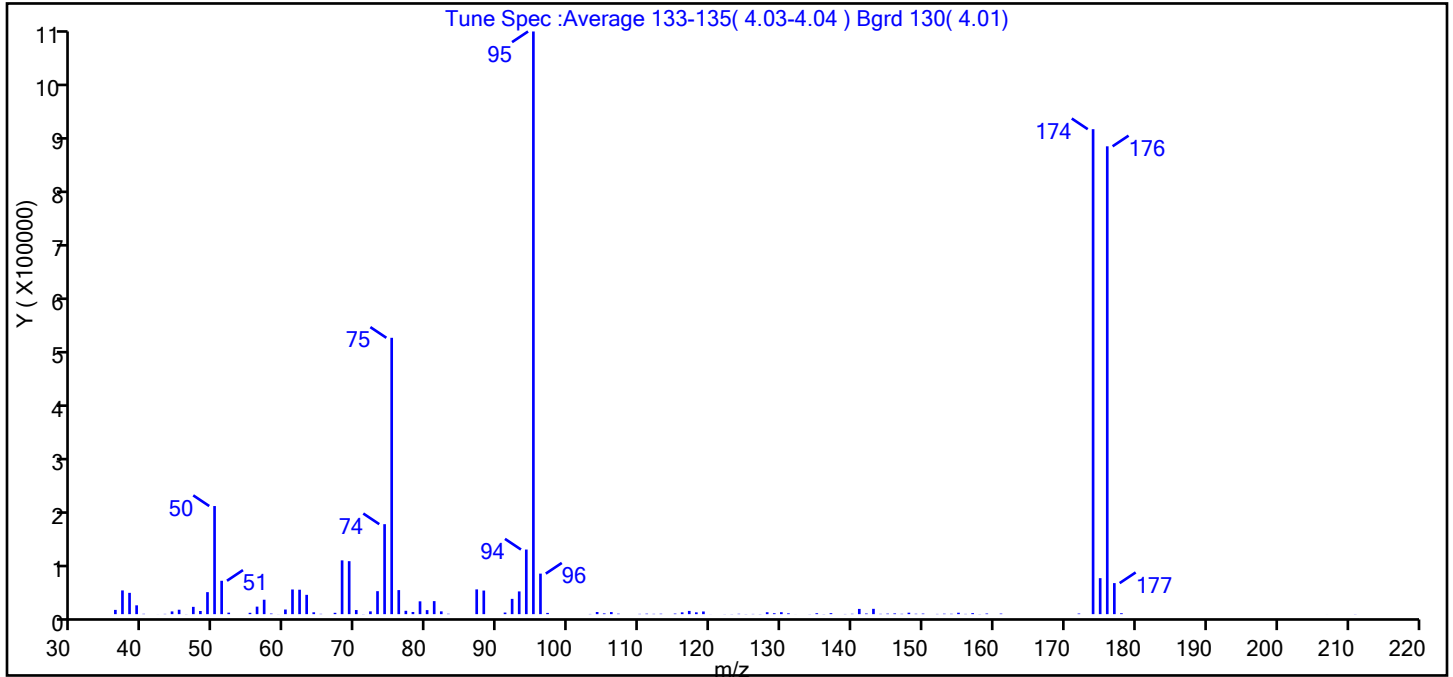
Amount Added: 2.00

Units: uL

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LFBFB7556.D
 Injection Date: 14-Feb-2017 11:34:30 Instrument ID: VMSL
 Lims ID: bfb
 Client ID:
 Operator ID: SMCR ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Method: 25mL-8260-MSL Limit Group: MSV-8260
 Tune Method: BFB Method 8260

\$ 124 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.6
75	30 to 60% of m/z 95	47.4
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	83.2
175	5 to 9% of m/z 174	6.2 (7.4)
176	Greater than 95% but less than 101% of m/z 174	80.3 (96.5)
177	5 to 9% of m/z 176	5.3 (6.6)

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LBFB7556.D\25mL-8260-MSL.rslt\spectra.d
Injection Date: 14-Feb-2017 11:34:30
Spectrum: Tune Spec :Average 133-135(4.03-4.04) Bgrd 130(4.01)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 113

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7860	68.00	99216	107.00	859	142.00	1178
37.00	43768	69.00	97744	110.00	503	143.00	9808
38.00	39312	70.00	7574	111.00	846	144.00	570
39.00	16278	71.00	237	112.00	552	145.00	942
40.00	599	72.00	5132	113.00	762	146.00	1345
41.00	11	73.00	42392	115.00	1046	147.00	606
42.00	85	74.00	166016	116.00	3330	148.00	2658
43.00	474	75.00	509952	117.00	5946	149.00	717
44.00	5032	76.00	44352	118.00	3346	150.00	1031
45.00	8124	77.00	6206	119.00	4899	152.00	413
46.00	194	78.00	4008	120.00	107	153.00	814
47.00	13454	79.00	23648	122.00	199	154.00	651
48.00	5824	80.00	7453	123.00	233	155.00	2604
49.00	40600	81.00	24032	124.00	658	156.00	463
50.00	199488	82.00	5147	125.00	254	157.00	1834
51.00	61600	83.00	688	126.00	407	158.00	251
52.00	2749	87.00	45680	127.00	255	159.00	1152
55.00	2479	88.00	43536	128.00	3520	161.00	1025
56.00	13875	91.00	2936	129.00	1678	172.00	1129
57.00	26624	92.00	28168	130.00	3590	174.00	894912
58.00	1074	93.00	41936	131.00	1507	175.00	66392
59.00	126	94.00	119216	132.00	87	176.00	863296
60.00	8548	95.00	1075200	134.00	202	177.00	57280
61.00	45512	96.00	74792	135.00	1694	178.00	1680
62.00	45064	97.00	2266	136.00	264	207.00	41
63.00	35616	103.00	349	137.00	1817	211.00	240
64.00	3409	104.00	3962	139.00	331		
65.00	545	105.00	1354	140.00	667		
67.00	2473	106.00	3821	141.00	9645		

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170214-9758.b\LBFB7556.D

Injection Date: 14-Feb-2017 11:34:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

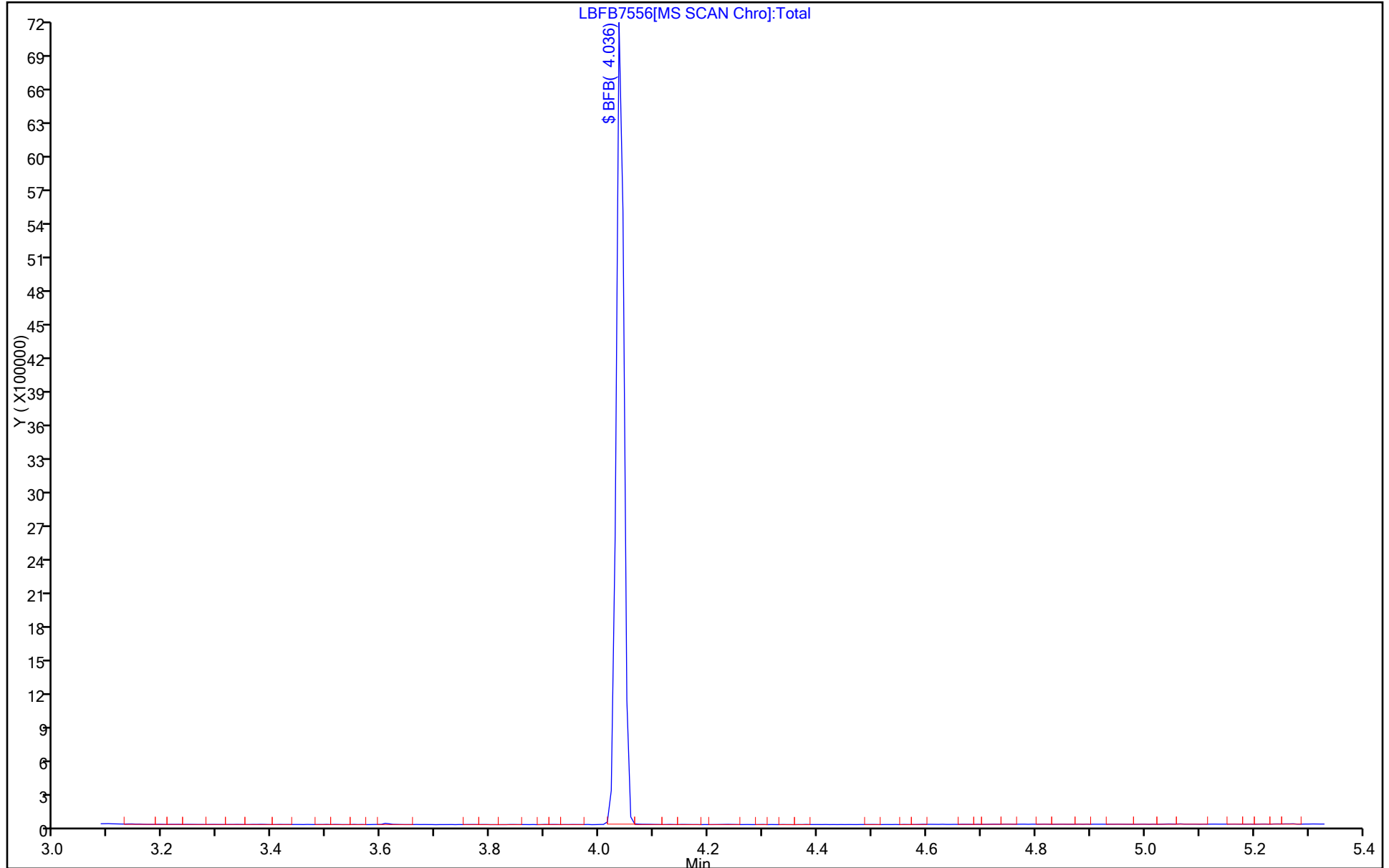
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LFBF7798.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 07-Mar-2017 08:38:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:28 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess Date: 07-Mar-2017 09:22:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 124 BFB	95	4.036	4.036	0.000	0	789421	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_00067

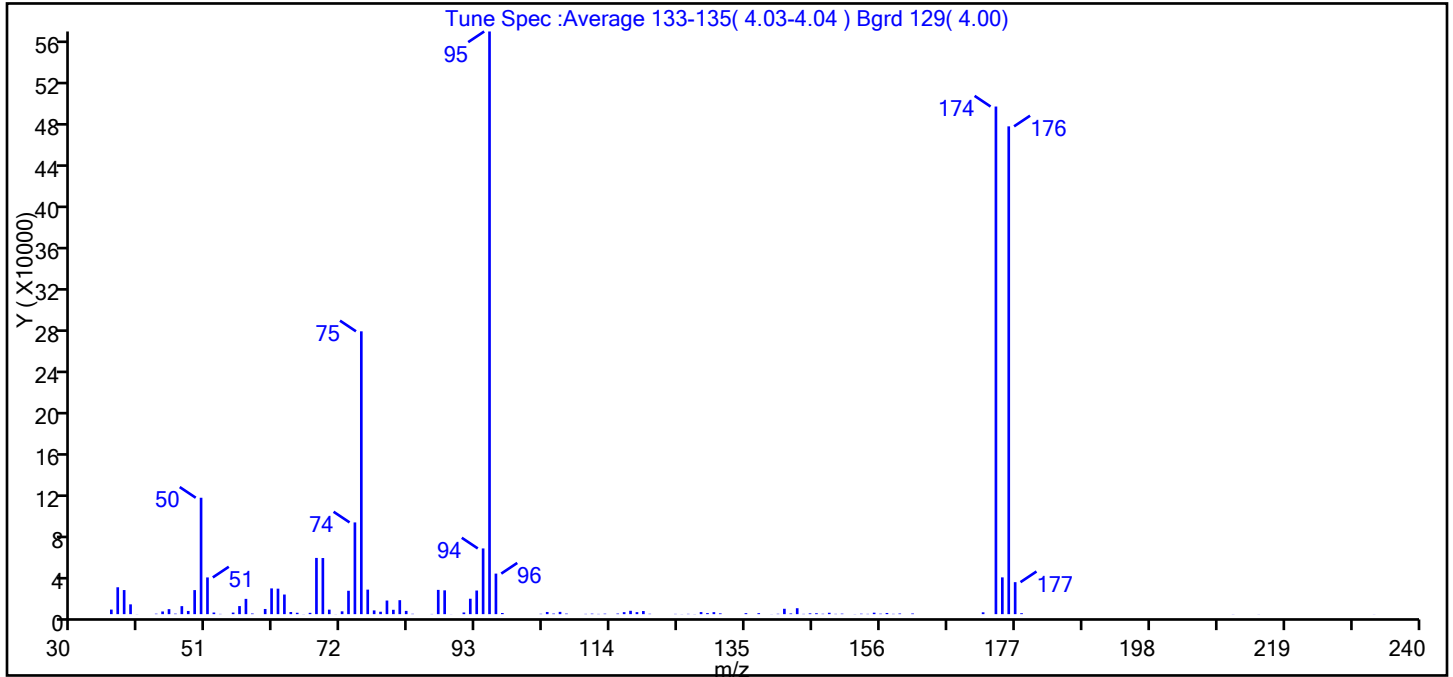
Amount Added: 2.00

Units: uL

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LFBFB7798.D
 Injection Date: 07-Mar-2017 08:38:30 Instrument ID: VMSL
 Lims ID: BFB
 Client ID:
 Operator ID: SMCR ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Method: 25mL-8260-MSL Limit Group: MSV-8260
 Tune Method: BFB Method 8260

\$ 124 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.0
75	30 to 60% of m/z 95	48.5
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	87.1
175	5 to 9% of m/z 174	6.3 (7.2)
176	Greater than 95% but less than 101% of m/z 174	83.7 (96.1)
177	5 to 9% of m/z 176	5.5 (6.6)

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LFBF7798.D\25mL-8260-MSL.rslt\spectra.d
Injection Date: 07-Mar-2017 08:38:30
Spectrum: Tune Spec :Average 133-135(4.03-4.04) Bgrd 129(4.00)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4402	68.00	54120	104.00	2099	143.00	5711
37.00	25872	69.00	54016	105.00	553	144.00	263
38.00	23184	70.00	4325	106.00	2188	145.00	777
39.00	9424	71.00	94	107.00	528	146.00	874
40.00	91	72.00	2701	110.00	260	147.00	361
43.00	420	73.00	22504	111.00	472	148.00	1325
44.00	2571	74.00	88296	112.00	235	149.00	283
45.00	4801	75.00	272256	113.00	453	150.00	474
46.00	479	76.00	23616	115.00	574	152.00	141
47.00	7713	77.00	3598	116.00	1910	153.00	417
48.00	3063	78.00	2315	117.00	3219	154.00	272
49.00	23144	79.00	13097	118.00	1945	155.00	1400
50.00	112056	80.00	4197	119.00	2978	156.00	436
51.00	35344	81.00	13441	120.00	356	157.00	1116
52.00	1557	82.00	3129	124.00	253	158.00	294
53.00	238	83.00	335	125.00	107	159.00	613
55.00	1498	86.00	191	126.00	293	161.00	626
56.00	7770	87.00	23352	127.00	134	172.00	1761
57.00	14700	88.00	22912	128.00	2004	174.00	488640
58.00	610	89.00	85	129.00	1031	175.00	35392
60.00	4986	91.00	1597	130.00	1916	176.00	469568
61.00	24784	92.00	14836	131.00	750	177.00	30792
62.00	24528	93.00	22736	135.00	947	178.00	891
63.00	18888	94.00	63248	137.00	954	211.00	105
64.00	2049	95.00	560896	139.00	93	215.00	88
65.00	1338	96.00	39024	140.00	358	233.00	84
66.00	105	97.00	1097	141.00	5167		
67.00	1264	103.00	333	142.00	666		

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LBFB7798.D

Injection Date: 07-Mar-2017 08:38:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

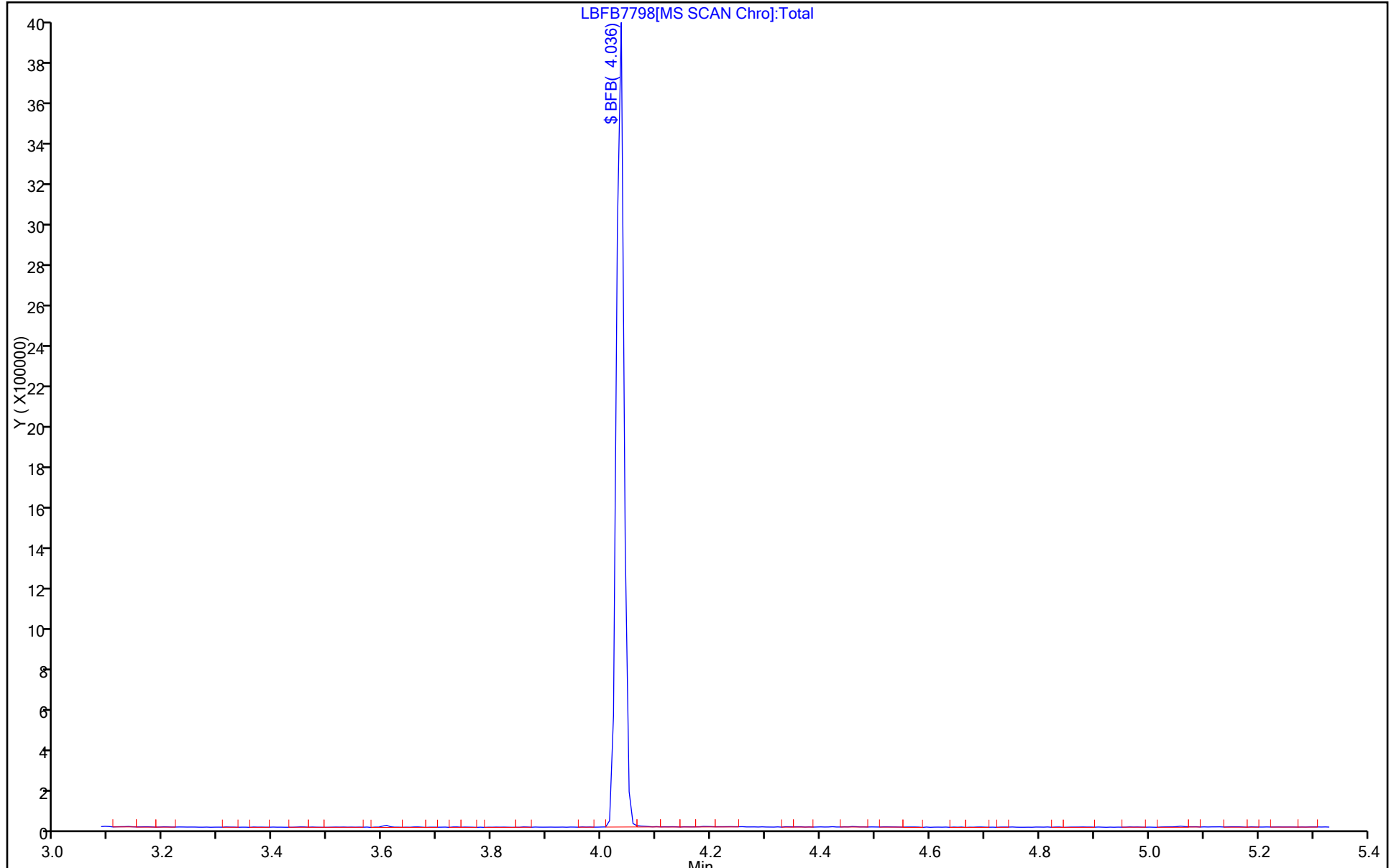
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZBFB1150.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 30-Jan-2017 09:22:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: 160-0009642-001
 Misc. Info.: 50NGBFB
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 30-Jan-2017 09:32:41 Calib Date: 10-Jan-2017 10:45:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170110-9518.b\ZICL0789.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK009

First Level Reviewer: fishere Date: 30-Jan-2017 09:32:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 124 BFB	95	4.434	4.434	0.000	0	853612	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_00066

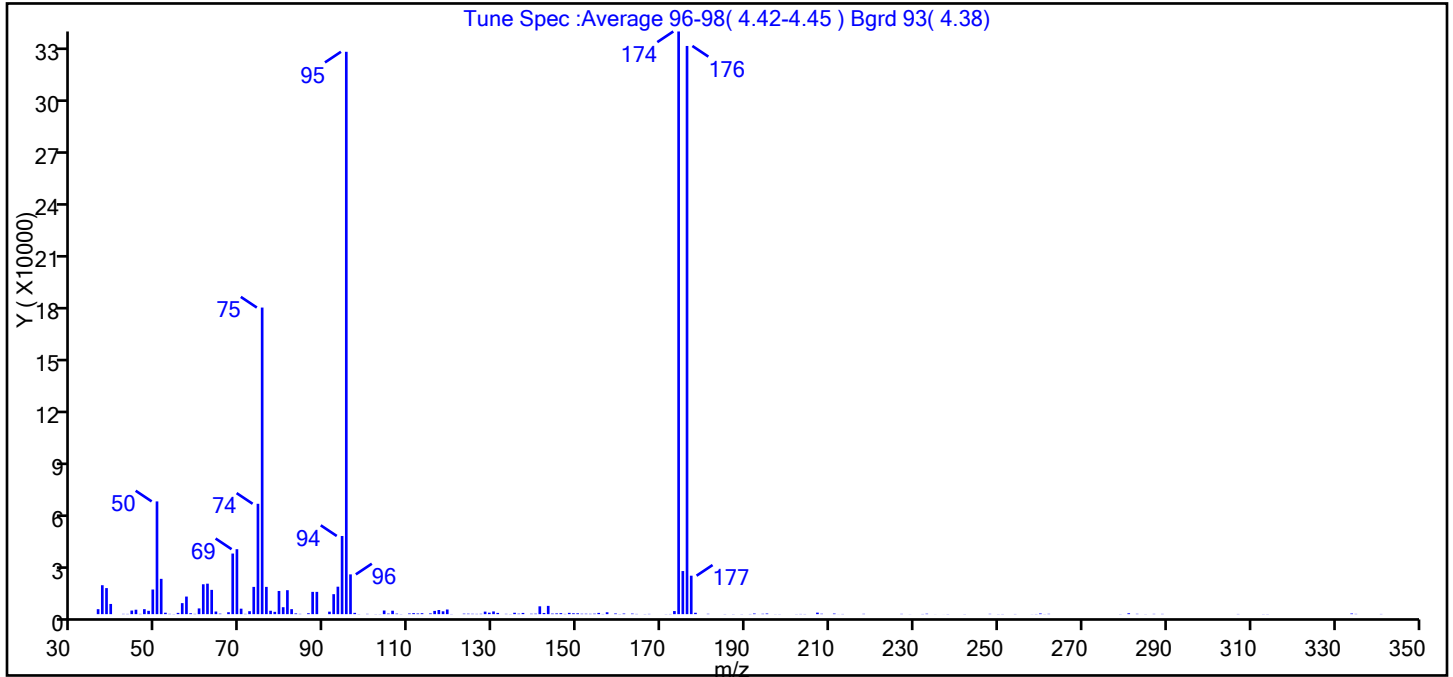
Amount Added: 2.00

Units: uL

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZBFB1150.D
 Injection Date: 30-Jan-2017 09:22:30 Instrument ID: VMSZ
 Lims ID: bfb
 Client ID:
 Operator ID: EF ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Method: 25mL-8260-MSZ Limit Group: MSV-8260
 Tune Method: BFB Method 8260

\$ 124 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.0
75	30 to 60% of m/z 95	54.5
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.5 (0.5)
174	50 to 120% of m/z 95	103.6
175	5 to 9% of m/z 174	7.7 (7.4)
176	Greater than 95% but less than 101% of m/z 174	101.0 (97.5)
177	5 to 9% of m/z 176	6.8 (6.8)

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZBFB1150.D\25mL-8260-MSZ.rslt\spectra.d
Injection Date: 30-Jan-2017 09:22:30
Spectrum: Tune Spec :Average 96-98(4.42-4.45) Bgrd 93(4.38)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 173

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2897	83.00	438	137.00	715	197.00	61
37.00	16872	84.00	164	139.00	237	198.00	66
38.00	15193	86.00	537	140.00	274	202.00	72
39.00	5946	87.00	12993	141.00	4573	203.00	113
42.00	161	88.00	12991	142.00	661	204.00	92
43.00	137	91.00	1452	143.00	4821	207.00	883
44.00	2097	92.00	11649	144.00	328	208.00	241
45.00	2577	93.00	16014	145.00	435	211.00	340
46.00	146	94.00	45584	146.00	596	212.00	25
47.00	2897	95.00	328000	147.00	126	213.00	107
48.00	1934	96.00	23192	148.00	753	218.00	185
49.00	14374	97.00	761	149.00	502	227.00	165
50.00	65752	98.00	78	150.00	485	229.00	44
51.00	20592	100.00	163	151.00	242	232.00	104
52.00	835	102.00	80	152.00	250	233.00	246
53.00	166	103.00	69	153.00	193	235.00	38
54.00	77	104.00	2115	154.00	281	237.00	19
55.00	742	105.00	314	155.00	726	238.00	81
56.00	6420	106.00	2000	156.00	103	242.00	75
57.00	10257	107.00	300	157.00	1096	248.00	178
58.00	529	108.00	83	159.00	395	250.00	67
59.00	154	110.00	395	160.00	77	251.00	92
60.00	3341	111.00	580	161.00	351	254.00	98
61.00	17424	112.00	385	163.00	320	258.00	44
62.00	17768	113.00	538	164.00	129	259.00	90
63.00	14156	115.00	436	166.00	84	260.00	385
64.00	1533	116.00	1889	167.00	142	261.00	55
65.00	291	117.00	2411	171.00	76	262.00	185
67.00	1121	118.00	1660	172.00	101	267.00	7
68.00	35344	119.00	2706	173.00	1802	279.00	73
69.00	37880	120.00	89	174.00	339840	281.00	510
70.00	3193	123.00	279	175.00	25136	283.00	192
71.00	153	124.00	261	176.00	331392	285.00	66

Report Date: 30-Jan-2017 09:32:41

Chrom Revision: 2.2 10-Jan-2017 11:26:10

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZBFB1150.D\25mL-8260-MSZ.rslt\spectra.d

Injection Date: 30-Jan-2017 09:22:30

Spectrum: Tune Spec :Average 96-98(4.42-4.45) Bgrd 93(4.38)

Base Peak: 174.00

Minimum % Base Peak: 0

Number of Points: 173

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	1713	125.00	207	177.00	22424	287.00	164
73.00	15899	126.00	157	178.00	804	289.00	149
74.00	64368	127.00	200	181.00	197	307.00	109
75.00	178816	128.00	1472	185.00	87	313.00	69
76.00	15900	129.00	853	187.00	82	314.00	70
77.00	1986	130.00	1581	189.00	82	334.00	371
78.00	1350	131.00	720	191.00	98	335.00	148
79.00	13511	133.00	175	192.00	368	341.00	114
80.00	4048	134.00	71	193.00	15		
81.00	13967	135.00	806	194.00	210		
82.00	2920	136.00	268	195.00	368		

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZBFB1150.D

Injection Date: 30-Jan-2017 09:22:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

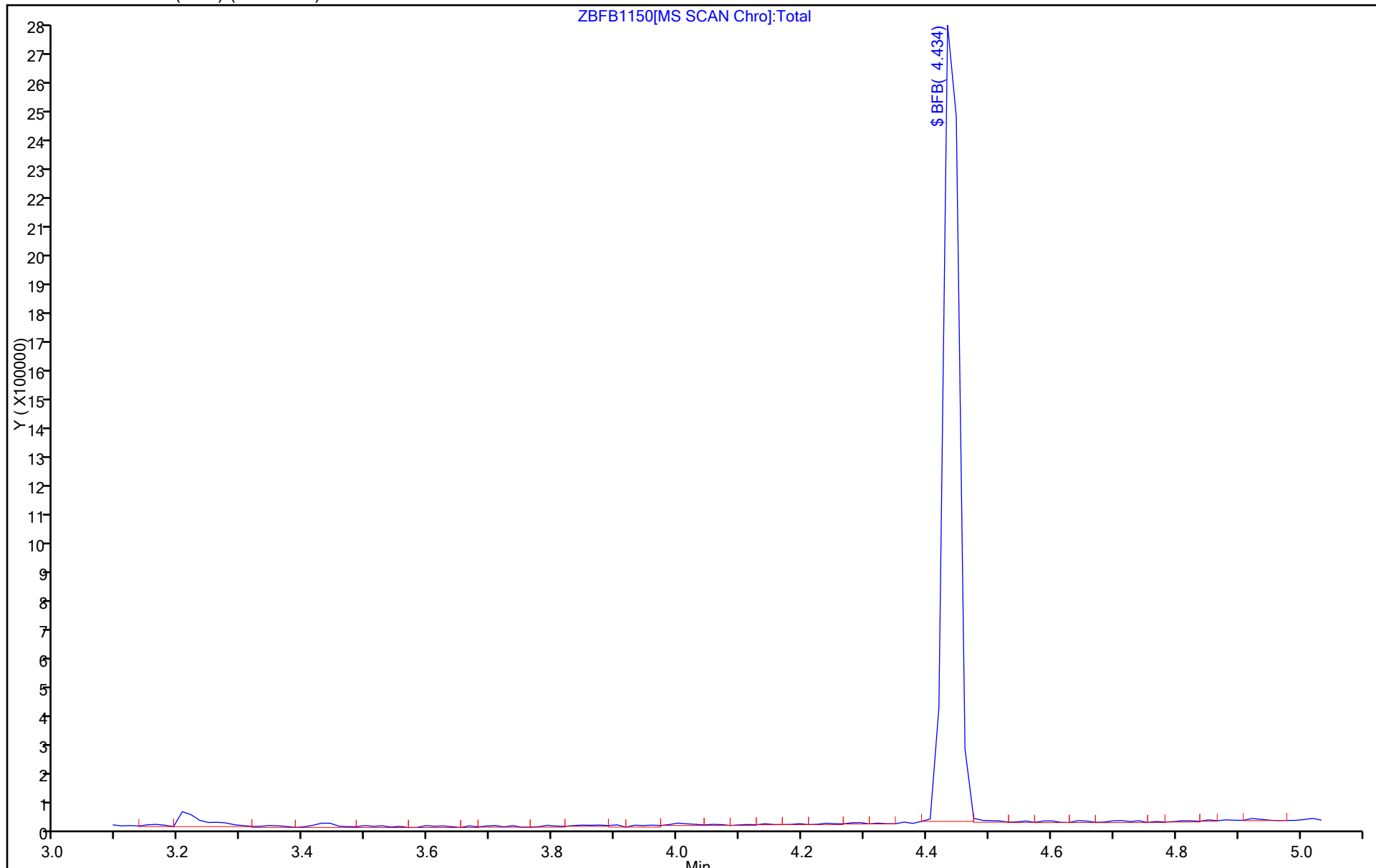
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZBFB1614.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 03-Mar-2017 06:41:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: 160-0009913-001
 Misc. Info.: 50NGBFB
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 06:52:44 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fishere Date: 03-Mar-2017 06:52:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 124 BFB	95	4.434	4.434	0.000	0	477643	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

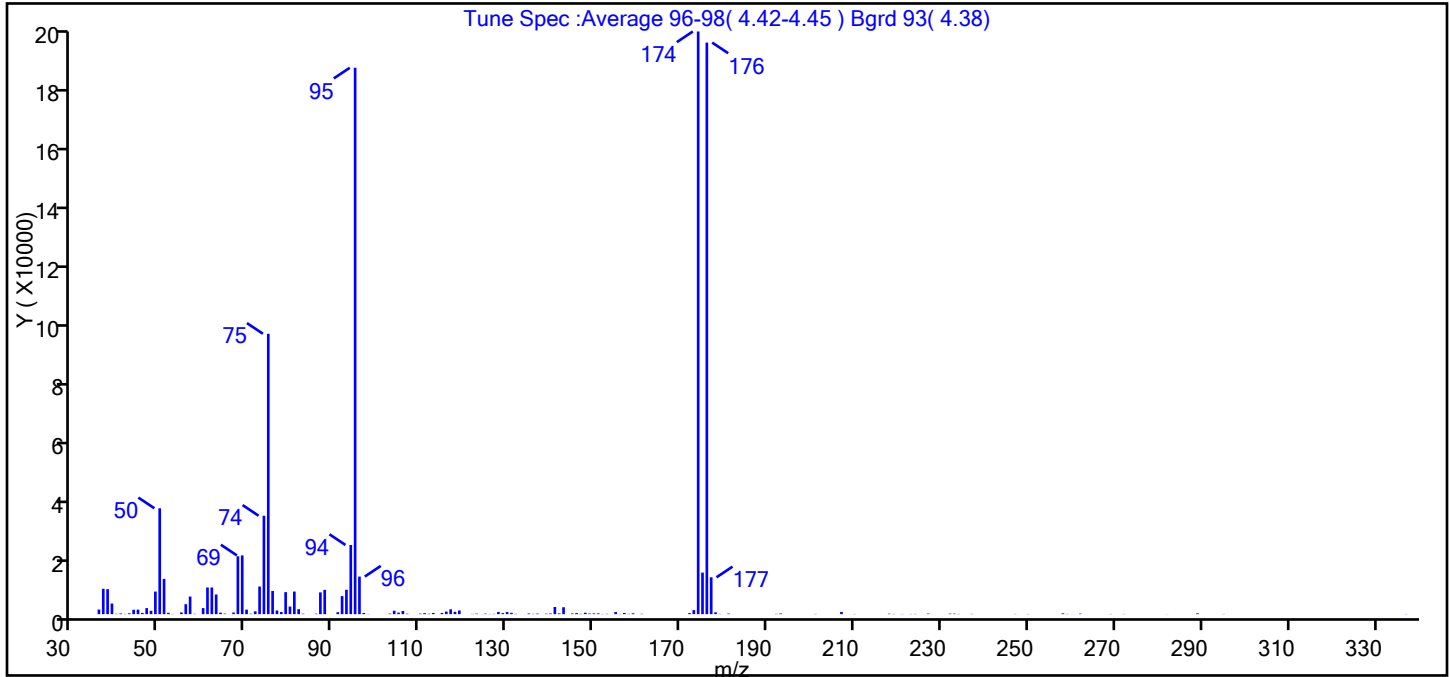
Reagents:

BFB_00067 Amount Added: 2.00 Units: uL

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZBFB1614.D
 Injection Date: 03-Mar-2017 06:41:30 Instrument ID: VMSZ
 Lims ID: bfb
 Client ID:
 Operator ID: EF ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Method: 25mL-8260-MSZ Limit Group: MSV-8260
 Tune Method: BFB Method 8260

\$ 124 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	51.3
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	106.6
175	5 to 9% of m/z 174	7.6 (7.1)
176	Greater than 95% but less than 101% of m/z 174	104.6 (98.1)
177	5 to 9% of m/z 176	6.7 (6.4)

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZBFB1614.D\25mL-8260-MSZ.rslt\spectra.d
Injection Date: 03-Mar-2017 06:41:30
Spectrum: Tune Spec :Average 96-98(4.42-4.45) Bgrd 93(4.38)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1569	74.00	33504	123.00	164	174.00	198400
37.00	8643	75.00	95472	124.00	30	175.00	14147
38.00	8503	76.00	7901	125.00	166	176.00	194624
39.00	3606	77.00	1246	126.00	67	177.00	12551
40.00	126	78.00	714	127.00	102	178.00	606
41.00	234	79.00	7495	128.00	746	179.00	84
42.00	88	80.00	2582	129.00	363	181.00	192
43.00	291	81.00	7691	130.00	717	192.00	103
44.00	1493	82.00	1695	131.00	454	193.00	223
45.00	1530	83.00	153	132.00	101	201.00	71
46.00	422	86.00	164	134.00	15	207.00	753
47.00	2053	87.00	7412	135.00	226	210.00	67
48.00	1145	88.00	8281	136.00	105	218.00	151
49.00	7691	91.00	659	137.00	189	219.00	69
50.00	36048	92.00	6145	139.00	158	221.00	70
51.00	12000	93.00	8291	140.00	216	223.00	70
52.00	452	94.00	23560	141.00	2436	224.00	81
53.00	74	95.00	186048	142.00	258	227.00	186
55.00	578	96.00	12794	143.00	2354	232.00	181
56.00	3390	97.00	411	145.00	229	233.00	161
57.00	5994	98.00	66	146.00	363	234.00	67
58.00	109	103.00	177	147.00	109	237.00	91
59.00	14	104.00	1171	148.00	483	247.00	69
60.00	2063	105.00	520	149.00	210	250.00	68
61.00	9087	106.00	1070	150.00	250	258.00	269
62.00	9083	107.00	162	151.00	260	259.00	81
63.00	6699	110.00	180	152.00	70	260.00	26
64.00	515	111.00	336	153.00	111	262.00	176
65.00	182	112.00	142	155.00	715	269.00	68
67.00	542	113.00	399	156.00	68	272.00	69
68.00	19704	115.00	415	157.00	397	282.00	33
69.00	20000	116.00	885	158.00	93	289.00	269
70.00	1535	117.00	1647	159.00	300	295.00	73

Report Date: 03-Mar-2017 06:52:44

Chrom Revision: 2.2 10-Jan-2017 11:26:10

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZBFB1614.D\25mL-8260-MSZ.rslt\spectra.d

Injection Date: 03-Mar-2017 06:41:30

Spectrum: Tune Spec :Average 96-98(4.42-4.45) Bgrd 93(4.38)

Base Peak: 174.00

Minimum % Base Peak: 0

Number of Points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	146	118.00	812	161.00	121	337.00	67
72.00	953	119.00	1244	172.00	364		
73.00	9403	122.00	84	173.00	1376		

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZFBF1614.D

Injection Date: 03-Mar-2017 06:41:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

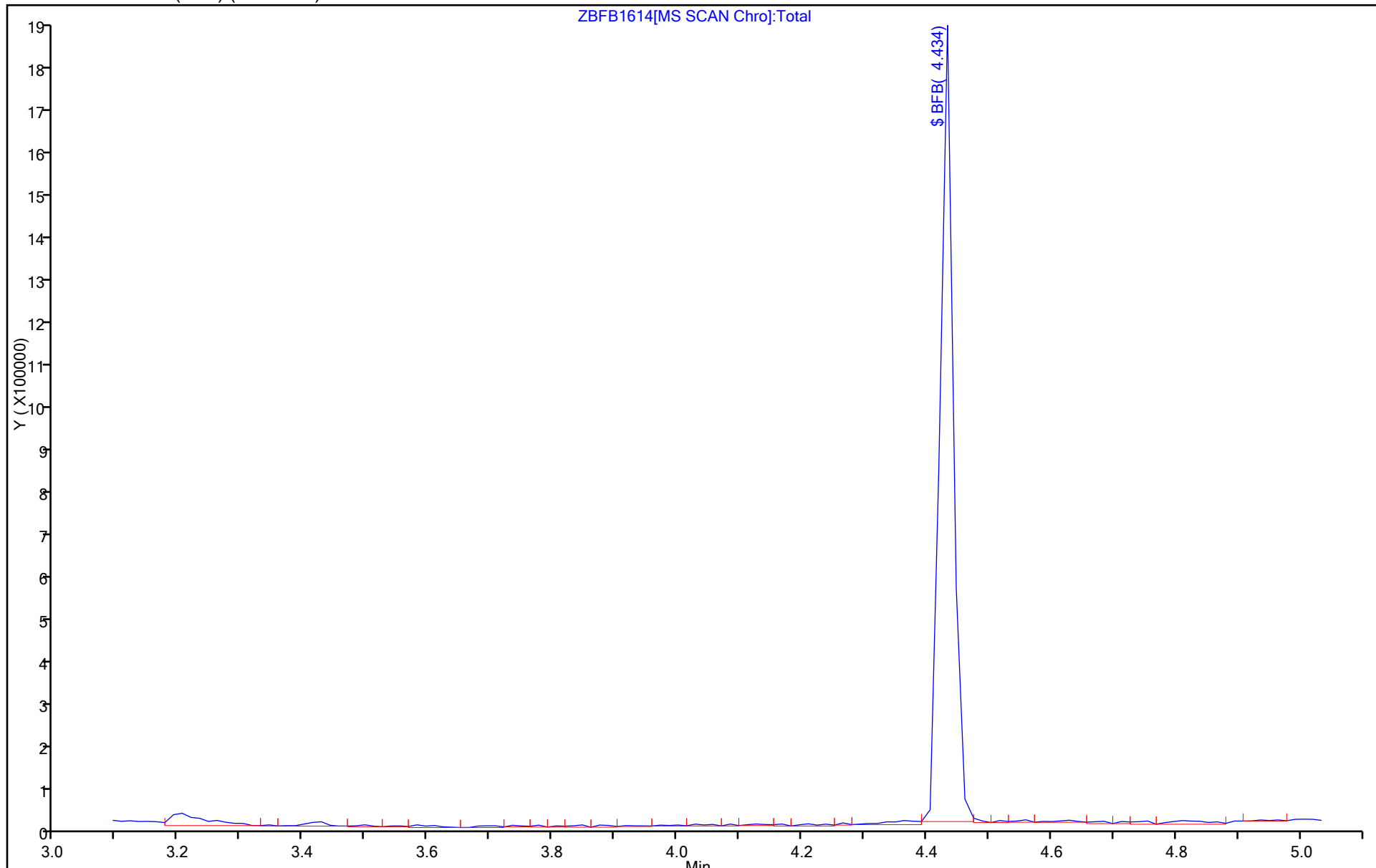
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 160-295720/8
 Matrix: Water Lab File ID: ZBLK1619.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 08:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.17
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.10
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.13
75-35-4	1,1-Dichloroethene	ND		1.0	0.10
75-34-3	1,1-Dichloroethane	ND		1.0	0.070
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.41
107-06-2	1,2-Dichloroethane	ND		1.0	0.22
540-59-0	1,2-Dichloroethene, Total	ND		2.0	0.14
78-87-5	1,2-Dichloropropane	ND		1.0	0.10
78-93-3	2-Butanone	ND		5.0	0.47
591-78-6	2-Hexanone	ND		5.0	0.25
108-10-1	4-Methyl-2-pentanone	ND		5.0	0.22
67-64-1	Acetone	ND		2.0	0.55
71-43-2	Benzene	ND		1.0	0.10
75-25-2	Bromoform	ND		1.0	0.17
74-83-9	Methyl bromide	ND		2.0	0.25
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		1.0	0.18
108-90-7	Chlorobenzene	ND		1.0	0.11
124-48-1	Chlorodibromomethane	ND		1.0	0.14
75-00-3	Chloroethane	ND		2.0	0.16
67-66-3	Chloroform	ND		1.0	0.10
74-87-3	Chloromethane	ND		2.0	0.10
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
75-27-4	Bromodichloromethane	ND		1.0	0.14
100-41-4	Ethylbenzene	ND		1.0	0.12
106-93-4	1,2-Dibromoethane	ND		1.0	0.13
75-09-2	Methylene Chloride	ND		1.0	0.27
71-36-3	n-Butanol	ND		50	12
100-42-5	Styrene	ND		1.0	0.13
127-18-4	Tetrachloroethene	ND		1.0	0.18
108-88-3	Toluene	ND		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 160-295720/8
 Matrix: Water Lab File ID: ZBLK1619.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 08:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		1.0	0.25
108-05-4	Vinyl acetate	ND		2.0	0.18
75-01-4	Vinyl chloride	ND		2.0	0.19
1330-20-7	Xylenes, Total	ND		3.0	0.27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		75-129
460-00-4	4-Bromofluorobenzene (Surr)	107		81-130
1868-53-7	Dibromofluoromethane (Surr)	97		81-124
2037-26-5	Toluene-d8 (Surr)	115		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZBLK1619.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 03-Mar-2017 08:33:30 ALS Bottle#: 5 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-008
 Misc. Info.: MB
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 09:07:23 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: fishere

Date: 03-Mar-2017 09:22:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		2.947					ND	
2 1,2-Dichloro-1,1,2,2-tetra	135		3.185					ND	
3 Chloromethane	50		3.254					ND	
4 Vinyl chloride	62		3.422					ND	
5 Butadiene	39		3.450					ND	
6 Bromomethane	94		4.008					ND	
7 Chloroethane	64		4.232					ND	
8 Trichlorofluoromethane	101		4.469					ND	
9 Dichlorofluoromethane	67		4.581					ND	
10 Ethyl ether	74		4.958					ND	
11 Ethanol	45		5.195					ND	
12 1,1-Dichloroethene	96		5.279					ND	
13 Carbon disulfide	76		5.321					ND	
14 1,1,2-Trichloro-1,2,2-trif	151		5.349					ND	
15 Iodomethane	142		5.488					ND	
17 Acrolein	56		5.768					ND	
S 16 1,2-Dichloroethene, Total	96		5.816					ND	
18 3-Chloro-1-propene	39		5.949					ND	
19 Isopropyl alcohol	45		5.963					ND	
20 Methylene Chloride	84		6.089					ND	
21 Acetone	43		6.145					ND	
22 trans-1,2-Dichloroethene	96		6.284					ND	
23 Methyl acetate	74		6.298					ND	
24 Hexane	86		6.368					ND	
25 Methyl tert-butyl ether	73		6.410					ND	
26 2-Methyl-2-propanol	59		6.508					ND	
27 Acetonitrile	41		6.731					ND	
28 Isopropyl ether	45		6.843					ND	
29 2-Chloro-1,3-butadiene	53		6.996					ND	
30 1,1-Dichloroethane	63		7.024					ND	
31 Acrylonitrile	53		7.080					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Tert-butyl ethyl ether	59		7.248					ND	
33 Vinyl acetate	43		7.275					ND	
34 cis-1,2-Dichloroethene	96		7.611					ND	
35 2,2-Dichloropropane	77		7.722					ND	
37 Chlorobromomethane	128		7.820					ND	
36 Cyclohexane	84		7.820					ND	
38 Chloroform	83		7.876					ND	
39 Ethyl acetate	45		7.960					ND	
40 Carbon tetrachloride	117		8.029					ND	
41 Tetrahydrofuran	71		8.043					ND	
\$ 42 Dibromofluoromethane (Surr	113	8.057	8.057	0.000	93	265604	10.0	9.71	
43 1,1,1-Trichloroethane	97		8.099					ND	
44 2-Butanone (MEK)	43		8.169					ND	
45 1,1-Dichloropropene	75		8.211					ND	
46 Isooctane	57		8.295					ND	
47 n-Heptane	43		8.364					ND	
48 Benzene	78		8.462					ND	
50 Propionitrile	54		8.490					ND	
49 Methacrylonitrile	41		8.504					ND	
51 Tert-amyl methyl ether	73		8.532					ND	
52 Isobutyl alcohol	42		8.588					ND	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.587	8.588	-0.001	91	224134	10.0	9.10	
54 1,2-Dichloroethane	62		8.658					ND	
* 55 Fluorobenzene	96	8.839	8.853	-0.014	99	1251839	10.0	10.0	
57 Methylcyclohexane	55		8.993					ND	
56 Trichloroethene	95		9.007					ND	
58 1,4-Difluorobenzene	114		9.107					ND	
59 n-Butanol	56		9.230					ND	
60 Dibromomethane	93		9.412					ND	
61 Ethyl acrylate	55		9.440					ND	
62 1,2-Dichloropropane	63		9.495					ND	
63 Dichlorobromomethane	83		9.537					ND	
64 Methyl methacrylate	69		9.635					ND	
65 1,4-Dioxane	88		9.705					ND	
66 2-Chloroethyl vinyl ether	63		10.012					ND	
67 cis-1,3-Dichloropropene	75		10.110					ND	
\$ 68 Toluene-d8 (Surr)	98	10.277	10.277	0.000	93	1269573	10.0	11.5	
69 Toluene	92		10.319					ND	
70 2-Nitropropane	43		10.543					ND	
71 4-Methyl-2-pentanone (MIBK	43		10.626					ND	
73 Tetrachloroethene	164		10.682					ND	
72 trans-1,3-Dichloropropene	75		10.682					ND	
74 Ethyl methacrylate	69		10.766					ND	
75 1,1,2-Trichloroethane	83		10.836					ND	
76 Chlorodibromomethane	129		11.017					ND	
77 1,3-Dichloropropane	76		11.101					ND	
78 n-Butyl acetate	43		11.255					ND	
79 Ethylene Dibromide	107		11.269					ND	
80 2-Hexanone	43		11.380					ND	
81 1-Chlorohexane	91		11.645					ND	
82 Ethylbenzene	91		11.701					ND	
* 83 Chlorobenzene-d5	117	11.701	11.701	0.000	84	900346	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		11.715					ND	
85 1,1,1,2-Tetrachloroethane	131		11.757					ND	
86 m-Xylene & p-Xylene	106		11.827					ND	
88 o-Xylene	106		12.232					ND	
89 Styrene	104		12.288					ND	
90 Bromoform	173		12.358					ND	
91 Isopropylbenzene	105		12.511					ND	
\$ 92 4-Bromofluorobenzene (Surr	95	12.804	12.804	0.000	95	332800	10.0	10.7	
93 N-Propylbenzene	91		12.888					ND	
94 Bromobenzene	156		12.930					ND	
95 1,1,2,2-Tetrachloroethane	83		12.958					ND	
96 1,3,5-Trimethylbenzene	105		13.056					ND	
97 2-Chlorotoluene	91		13.084					ND	
98 1,2,3-Trichloropropane	110		13.125					ND	
99 trans-1,4-Dichloro-2-buten	53		13.125					ND	
100 Cyclohexanone	55		13.195					ND	
101 4-Chlorotoluene	91		13.237					ND	
102 tert-Butylbenzene	119		13.377					ND	
103 1,2,4-Trimethylbenzene	105		13.447					ND	
87 Pentachloroethane	167		13.520					ND	
104 sec-Butylbenzene	105		13.544					ND	
105 4-Isopropyltoluene	119		13.670					ND	
106 1,3-Dichlorobenzene	146		13.810					ND	
* 108 1,4-Dichlorobenzene-d4	152	13.879	13.879	0.000	92	438359	10.0	10.0	
107 1,2,3-Trimethylbenzene	105		13.879					ND	
109 1,4-Dichlorobenzene	146		13.893					ND	
110 n-Butylbenzene	134		14.075					ND	
111 Benzyl chloride	126		14.117					ND	
112 1,2-Dichlorobenzene	146		14.312					ND	
113 n-Nonyl Aldehyde	57		15.024					ND	
114 1,2-Dibromo-3-Chloropropan	157		15.094					ND	
115 1,3,5-Trichlorobenzene	180		15.108					ND	
116 Hexachlorobutadiene	225		15.694					ND	
117 1,2,4-Trichlorobenzene	180		15.764					ND	
118 Naphthalene	128		16.113					ND	
120 1,2,3-Trichlorobenzene	180		16.309					ND	
S 119 Xylenes, Total	106		16.500					ND	
S 130 Trihalomethanes, Total	1		0.000					ND	
121 2-Pentanone	1		0.000					ND	

Reagents:

8260 Surr 25_00071

Amount Added: 10.00

Units: uL

Run Reagent

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZBLK1619.D

Injection Date: 03-Mar-2017 08:33:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: mb

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

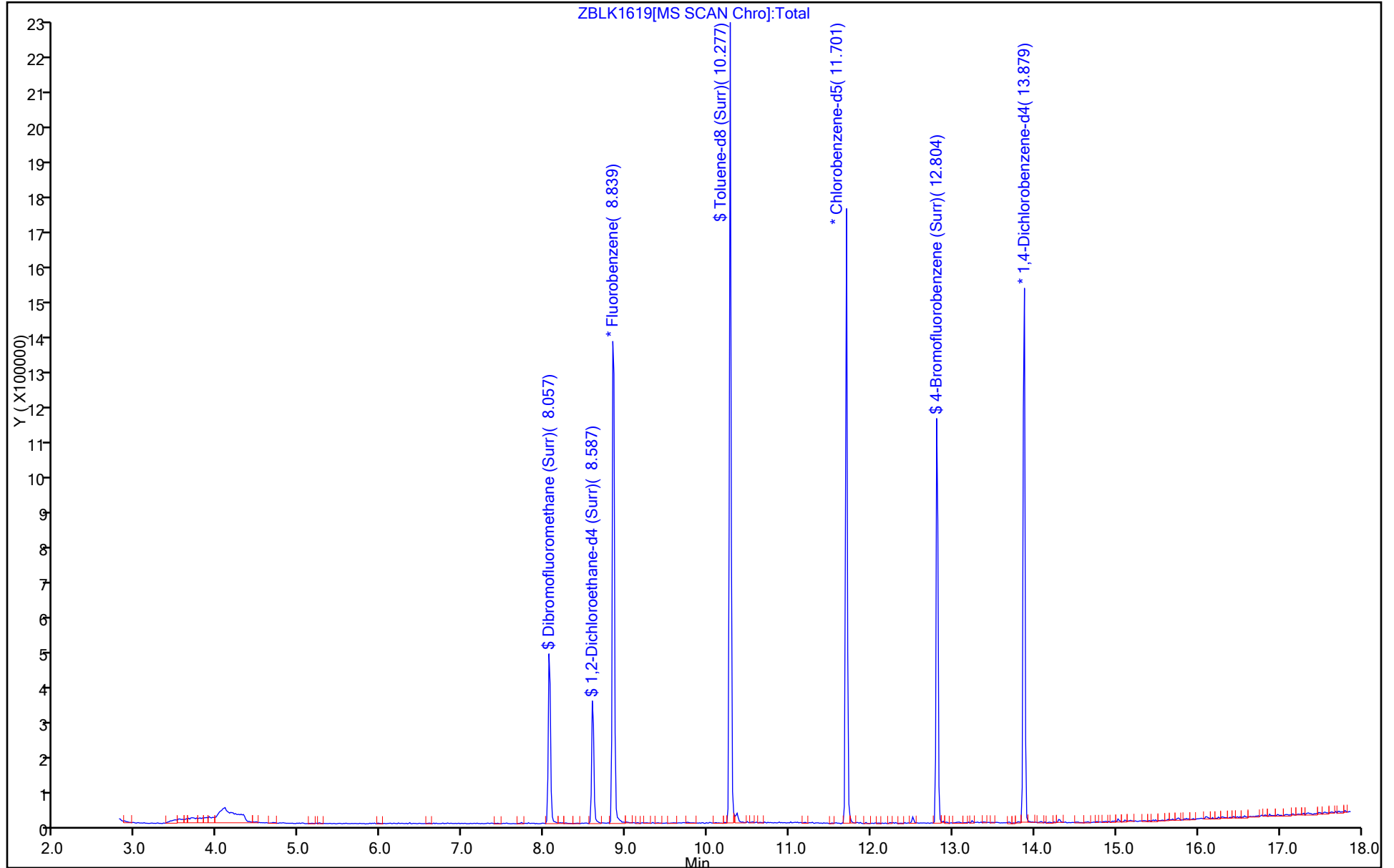
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZBLK1619.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 03-Mar-2017 08:33:30 ALS Bottle#: 5 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-008
 Misc. Info.: MB
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 09:07:23 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: fishere Date: 03-Mar-2017 09:22:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	9.71	97.06
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.10	90.98
\$ 68 Toluene-d8 (Surr)	10.0	11.5	114.55
\$ 92 4-Bromofluorobenzene (Surr)	10.0	10.7	107.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 160-296328/6
 Matrix: Water Lab File ID: LBLK7803.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 10:42
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.17
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.10
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.13
75-35-4	1,1-Dichloroethene	ND		1.0	0.10
75-34-3	1,1-Dichloroethane	ND		1.0	0.070
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.41
107-06-2	1,2-Dichloroethane	ND		1.0	0.22
540-59-0	1,2-Dichloroethene, Total	ND		2.0	0.14
78-87-5	1,2-Dichloropropane	ND		1.0	0.10
78-93-3	2-Butanone	ND		5.0	0.47
591-78-6	2-Hexanone	ND		5.0	0.25
108-10-1	4-Methyl-2-pentanone	ND		5.0	0.22
67-64-1	Acetone	ND		2.0	0.55
71-43-2	Benzene	ND		1.0	0.10
75-25-2	Bromoform	ND		1.0	0.17
74-83-9	Methyl bromide	ND		2.0	0.25
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		1.0	0.18
108-90-7	Chlorobenzene	ND		1.0	0.11
124-48-1	Chlorodibromomethane	ND		1.0	0.14
75-00-3	Chloroethane	ND		2.0	0.16
67-66-3	Chloroform	ND		1.0	0.10
74-87-3	Chloromethane	ND		2.0	0.10
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
75-27-4	Bromodichloromethane	ND		1.0	0.14
100-41-4	Ethylbenzene	ND		1.0	0.12
106-93-4	1,2-Dibromoethane	ND		1.0	0.13
75-09-2	Methylene Chloride	ND		1.0	0.27
71-36-3	n-Butanol	ND		50	12
100-42-5	Styrene	ND		1.0	0.13
127-18-4	Tetrachloroethene	ND		1.0	0.18
108-88-3	Toluene	ND		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 160-296328/6
 Matrix: Water Lab File ID: LBLK7803.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 10:42
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		1.0	0.25
108-05-4	Vinyl acetate	ND		2.0	0.18
75-01-4	Vinyl chloride	ND		2.0	0.19
1330-20-7	Xylenes, Total	ND		3.0	0.27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		75-129
460-00-4	4-Bromofluorobenzene (Surr)	112		81-130
1868-53-7	Dibromofluoromethane (Surr)	104		81-124
2037-26-5	Toluene-d8 (Surr)	116		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LBLK7803.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Mar-2017 10:42:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:36 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 08-Mar-2017 09:46:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		3.011					ND	
2 1,2-Dichloro-1,1,2,2-tetra	135		3.248					ND	
3 Chloromethane	50		3.346					ND	
4 Vinyl chloride	62		3.500					ND	
5 Butadiene	39		3.527					ND	
6 Bromomethane	94		4.100					ND	
7 Chloroethane	64		4.324					ND	
8 Trichlorofluoromethane	101		4.561					ND	
9 Dichlorofluoromethane	67		4.659					ND	
10 Ethyl ether	74		5.078					ND	
11 Ethanol	45		5.315					ND	
12 1,1-Dichloroethene	96		5.371					ND	
13 Carbon disulfide	76		5.413					ND	
14 1,1,2-Trichloro-1,2,2-trif	151		5.427					ND	
16 Iodomethane	142		5.581					ND	
S 15 1,2-Dichloroethene, Total	96		5.816					ND	
17 Acrolein	56		5.860					ND	
18 3-Chloro-1-propene	39		6.027					ND	
19 Isopropyl alcohol	45		6.069					ND	
20 Methylene Chloride	84		6.167					ND	
21 Acetone	43		6.251					ND	
22 trans-1,2-Dichloroethene	96		6.377					ND	
23 Methyl acetate	74		6.391					ND	
24 Hexane	86		6.446					ND	
25 Methyl tert-butyl ether	73		6.502					ND	
26 2-Methyl-2-propanol	59		6.614					ND	
27 Acetonitrile	41		6.810					ND	
28 Isopropyl ether	45		6.921					ND	
29 2-Chloro-1,3-butadiene	53		7.061					ND	
30 1,1-Dichloroethane	63		7.103					ND	
31 Acrylonitrile	53		7.159					ND	
32 Tert-butyl ethyl ether	59		7.326					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Vinyl acetate	43		7.340					ND	
34 cis-1,2-Dichloroethene	96		7.675					ND	
35 2,2-Dichloropropane	77		7.787					ND	
36 Cyclohexane	84		7.885					ND	
37 Chlorobromomethane	128		7.885					ND	
38 Chloroform	83		7.941					ND	
39 Ethyl acetate	45		8.039					ND	
40 Carbon tetrachloride	117		8.094					ND	
41 Tetrahydrofuran	71		8.122					ND	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.122	0.000	93	315438	10.0	10.4	
43 1,1,1-Trichloroethane	97		8.164					ND	
45 2-Butanone (MEK)	43		8.248					ND	
47 1,1-Dichloropropene	75		8.276					ND	
44 Isooctane	57		8.360					ND	
46 n-Heptane	43		8.430					ND	
48 Benzene	78		8.527					ND	
49 Propionitrile	54		8.555					ND	
50 Methacrylonitrile	41		8.555					ND	
51 Tert-amyl methyl ether	73		8.597					ND	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	92	322804	10.0	10.8	
52 Isobutyl alcohol	42		8.667					ND	
54 1,2-Dichloroethane	62		8.723					ND	
* 55 Fluorobenzene	96	8.904	8.904	0.000	98	1631856	10.0	10.0	
57 Trichloroethene	95		9.058					ND	
58 Methylcyclohexane	55		9.058					ND	
56 1,4-Difluorobenzene	114		9.256					ND	
59 n-Butanol	56		9.296					ND	
61 Dibromomethane	93		9.477					ND	
60 Ethyl acrylate	55		9.505					ND	
62 1,2-Dichloropropane	63		9.561					ND	
63 Dichlorobromomethane	83		9.603					ND	
64 Methyl methacrylate	69		9.687					ND	
65 1,4-Dioxane	88		9.784					ND	
66 2-Chloroethyl vinyl ether	63		10.064					ND	
67 cis-1,3-Dichloropropene	75		10.161					ND	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	1603439	10.0	11.6	
69 Toluene	92		10.371					ND	
70 2-Nitropropane	43		10.594					ND	
71 4-Methyl-2-pentanone (MIBK	43		10.692					ND	
73 Tetrachloroethene	164		10.734					ND	
72 trans-1,3-Dichloropropene	75		10.734					ND	
74 Ethyl methacrylate	69		10.818					ND	
75 1,1,2-Trichloroethane	83		10.888					ND	
76 Chlorodibromomethane	129		11.069					ND	
77 1,3-Dichloropropane	76		11.153					ND	
78 n-Butyl acetate	43		11.293					ND	
79 Ethylene Dibromide	107		11.321					ND	
80 2-Hexanone	43		11.418					ND	
81 1-Chlorohexane	91		11.684					ND	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	88	1027577	10.0	10.0	
82 Ethylbenzene	91		11.754					ND	
84 Chlorobenzene	112		11.768					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		11.809					ND	
86 m-Xylene & p-Xylene	106		11.879					ND	
88 o-Xylene	106		12.284					ND	
89 Styrene	104		12.326					ND	
90 Bromoform	173		12.396					ND	
91 Isopropylbenzene	105		12.550					ND	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	93	448737	10.0	11.2	
93 N-Propylbenzene	91		12.941					ND	
94 Bromobenzene	156		12.983					ND	
95 1,1,2,2-Tetrachloroethane	83		13.011					ND	
96 1,3,5-Trimethylbenzene	105		13.094					ND	
97 2-Chlorotoluene	91		13.122					ND	
99 1,2,3-Trichloropropane	110		13.164					ND	
98 trans-1,4-Dichloro-2-buten	53		13.178					ND	
100 Cyclohexanone	55		13.248					ND	
101 4-Chlorotoluene	91		13.276					ND	
102 tert-Butylbenzene	119		13.430					ND	
87 Pentachloroethane	167		13.485					ND	
103 1,2,4-Trimethylbenzene	105		13.485					ND	
104 sec-Butylbenzene	105		13.597					ND	
105 4-Isopropyltoluene	119		13.709					ND	
106 1,3-Dichlorobenzene	146		13.849					ND	
107 1,2,3-Trimethylbenzene	105		13.918					ND	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.918	0.000	96	471730	10.0	10.0	
109 1,4-Dichlorobenzene	146		13.932					ND	
111 n-Butylbenzene	134		14.128					ND	
110 Benzyl chloride	126		14.156					ND	
112 1,2-Dichlorobenzene	146		14.351					ND	
113 n-Nonyl Aldehyde	57		15.064					ND	
115 1,2-Dibromo-3-Chloropropan	157		15.133					ND	
114 1,3,5-Trichlorobenzene	180		15.161					ND	
116 Hexachlorobutadiene	225		15.734					ND	
117 1,2,4-Trichlorobenzene	180		15.804					ND	
118 Naphthalene	128		16.153					ND	
120 1,2,3-Trichlorobenzene	180		16.348					ND	
S 119 Xylenes, Total	106		16.500					ND	
S 130 Trihalomethanes, Total	1		0.000					ND	
121 2-Pentanone	1		0.000					ND	

Reagents:

I.S. Working_00144
8260 Surr 25_00072

Amount Added: 10.00
Amount Added: 10.00

Units: uL
Units: uL

Run Reagent
Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LBLK7803.D

Injection Date: 07-Mar-2017 10:42:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

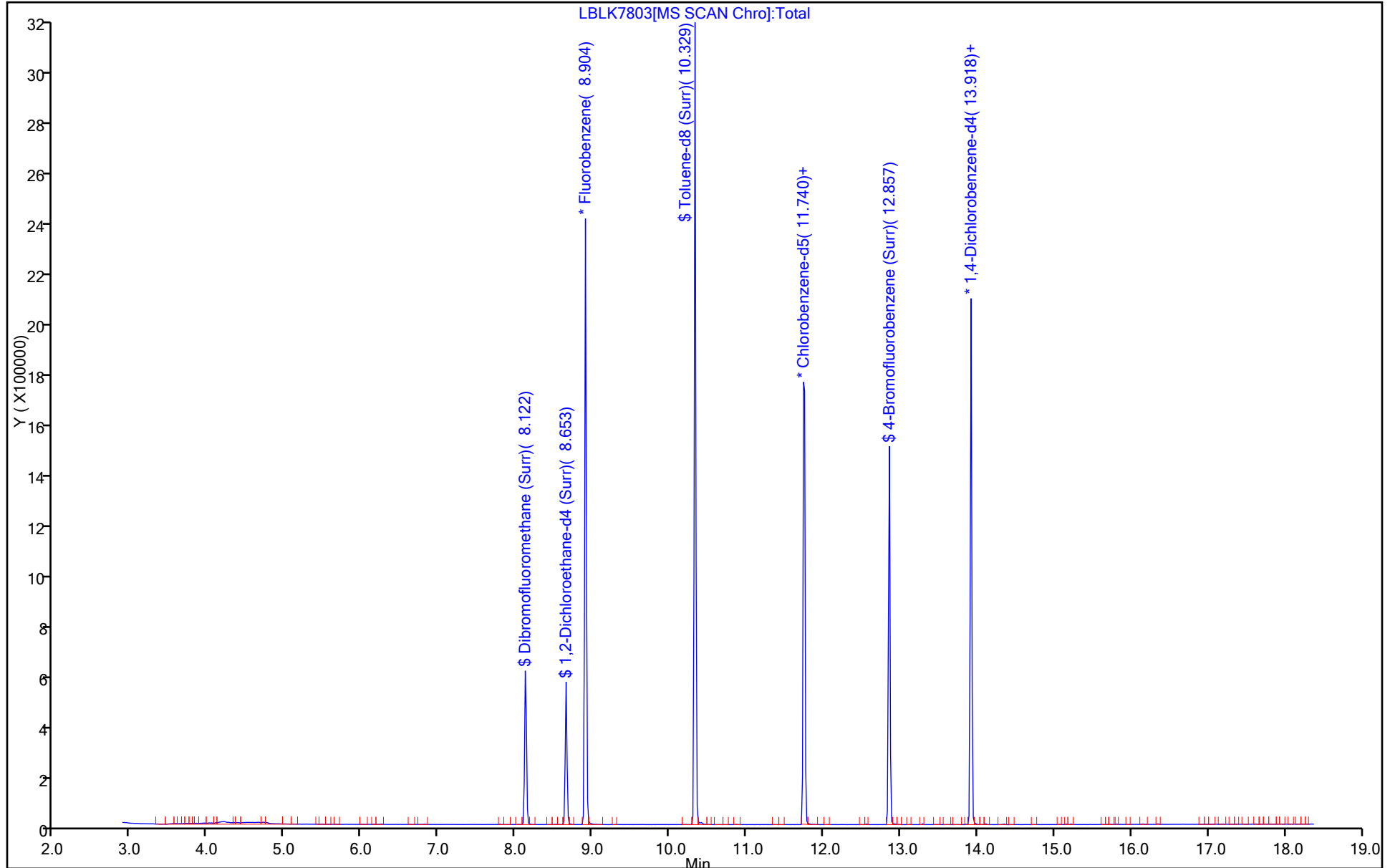
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LBLK7803.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Mar-2017 10:42:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:36 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 08-Mar-2017 09:46:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	10.4	104.48
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	108.48
\$ 68 Toluene-d8 (Surr)	10.0	11.6	115.84
\$ 92 4-Bromofluorobenzene (Surr)	10.0	11.2	111.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 160-295720/5
 Matrix: Water Lab File ID: ZLCS1616.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 07:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	10.0		1.0	0.17
79-34-5	1,1,2,2-Tetrachloroethane	9.05		1.0	0.10
79-00-5	1,1,2-Trichloroethane	8.64		1.0	0.13
75-35-4	1,1-Dichloroethene	10.2		1.0	0.10
75-34-3	1,1-Dichloroethane	10.1		1.0	0.070
120-82-1	1,2,4-Trichlorobenzene	8.91		1.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	7.98		1.0	0.41
107-06-2	1,2-Dichloroethane	8.52		1.0	0.22
540-59-0	1,2-Dichloroethene, Total	19.5		2.0	0.14
78-87-5	1,2-Dichloropropane	10.1		1.0	0.10
78-93-3	2-Butanone	8.40		5.0	0.47
591-78-6	2-Hexanone	8.80		5.0	0.25
108-10-1	4-Methyl-2-pentanone	8.87		5.0	0.22
67-64-1	Acetone	10.3		2.0	0.55
71-43-2	Benzene	10.6		1.0	0.10
75-25-2	Bromoform	8.93		1.0	0.17
74-83-9	Methyl bromide	9.38		2.0	0.25
75-15-0	Carbon disulfide	9.85		1.0	0.10
56-23-5	Carbon tetrachloride	10.2		1.0	0.18
108-90-7	Chlorobenzene	10.3		1.0	0.11
124-48-1	Chlorodibromomethane	9.20		1.0	0.14
75-00-3	Chloroethane	10.3		2.0	0.16
67-66-3	Chloroform	9.49		1.0	0.10
74-87-3	Chloromethane	9.11		2.0	0.10
156-59-2	cis-1,2-Dichloroethene	9.70		1.0	0.10
10061-01-5	cis-1,3-Dichloropropene	9.75		1.0	0.16
75-27-4	Bromodichloromethane	9.16		1.0	0.14
100-41-4	Ethylbenzene	10.6		1.0	0.12
106-93-4	1,2-Dibromoethane	8.91		1.0	0.13
75-09-2	Methylene Chloride	9.24		1.0	0.27
71-36-3	n-Butanol	230		50	12
100-42-5	Styrene	10.7		1.0	0.13
127-18-4	Tetrachloroethene	10.1		1.0	0.18
108-88-3	Toluene	10.6		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	9.79		1.0	0.10
10061-02-6	trans-1,3-Dichloropropene	9.80		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 160-295720/5
 Matrix: Water Lab File ID: ZLCS1616.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 07:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	10.1		1.0	0.25
108-05-4	Vinyl acetate	9.21		2.0	0.18
75-01-4	Vinyl chloride	10.2		2.0	0.19
1330-20-7	Xylenes, Total	21.1		3.0	0.27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-129
460-00-4	4-Bromofluorobenzene (Surr)	95		81-130
1868-53-7	Dibromofluoromethane (Surr)	97		81-124
2037-26-5	Toluene-d8 (Surr)	103		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZLCS1616.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 03-Mar-2017 07:21:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-005
 Misc. Info.: LCS
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 07:44:04 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fishere

Date: 03-Mar-2017 07:44:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.950	2.947	0.003	100	388996	10.0	8.82	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.187	3.185	0.002	97	260472	10.0	9.77	
3 Chloromethane	50	3.257	3.254	0.003	99	355773	10.0	9.11	
4 Vinyl chloride	62	3.425	3.422	0.002	97	578230	10.0	10.2	
5 Butadiene	39	3.452	3.450	0.002	89	565372	10.0	9.85	
6 Bromomethane	94	4.011	4.008	0.003	90	488309	10.0	9.38	
7 Chloroethane	64	4.234	4.232	0.002	99	448104	10.0	10.3	
8 Trichlorofluoromethane	101	4.472	4.469	0.003	99	591032	10.0	9.38	
9 Dichlorofluoromethane	67	4.569	4.581	-0.012	97	626461	10.0	10.6	
10 Ethyl ether	74	4.960	4.958	0.002	91	125980	10.0	8.84	
11 Ethanol	45	5.184	5.195	-0.011	98	30126	400.0	344.1	
12 1,1-Dichloroethene	96	5.267	5.279	-0.012	97	363860	10.0	10.2	
13 Carbon disulfide	76	5.323	5.321	0.002	99	1099732	10.0	9.85	
14 1,1,2-Trichloro-1,2,2-trif	151	5.351	5.349	0.002	93	374228	10.0	10.2	
15 Iodomethane	142	5.491	5.488	0.003	98	593420	10.0	9.11	
17 Acrolein	56	5.756	5.768	-0.012	98	91956	50.0	44.4	
18 3-Chloro-1-propene	39	5.938	5.949	-0.011	88	381491	10.0	9.58	
19 Isopropyl alcohol	45	5.966	5.963	0.003	97	45730	100.0	77.5	
20 Methylene Chloride	84	6.091	6.089	0.002	90	292618	10.0	9.24	
21 Acetone	43	6.147	6.145	0.003	99	29312	10.0	10.3	
22 trans-1,2-Dichloroethene	96	6.287	6.284	0.003	97	396398	10.0	9.79	
23 Methyl acetate	74	6.301	6.298	0.003	97	83395	50.0	41.4	
24 Hexane	86	6.370	6.368	0.002	92	119538	10.0	9.20	
25 Methyl tert-butyl ether	73	6.398	6.410	-0.012	81	502742	10.0	8.65	
26 2-Methyl-2-propanol	59	6.510	6.508	0.002	97	76586	100.0	76.1	
27 Acetonitrile	41	6.733	6.731	0.002	98	93374	100.0	90.6	
28 Isopropyl ether	45	6.831	6.843	-0.012	93	842560	10.0	10.0	
29 2-Chloro-1,3-butadiene	53	6.985	6.996	-0.011	92	553846	10.0	10.1	
30 1,1-Dichloroethane	63	7.027	7.024	0.003	95	621661	10.0	10.1	
31 Acrylonitrile	53	7.083	7.080	0.003	98	355154	100.0	91.7	
32 Tert-butyl ethyl ether	59	7.236	7.248	-0.012	97	684571	10.0	9.19	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Vinyl acetate	43	7.264	7.275	-0.011	97	357833	10.0	9.21	
34 cis-1,2-Dichloroethene	96	7.599	7.611	-0.011	77	384835	10.0	9.70	
35 2,2-Dichloropropane	77	7.725	7.722	0.003	90	466830	10.0	10.4	
37 Chlorobromomethane	128	7.822	7.820	0.002	57	143252	10.0	9.31	
36 Cyclohexane	84	7.822	7.820	0.002	87	689778	10.0	10.6	
38 Chloroform	83	7.878	7.876	0.002	95	587326	10.0	9.49	
39 Ethyl acetate	45	7.962	7.960	0.002	99	24292	20.0	16.4	
40 Carbon tetrachloride	117	8.032	8.029	0.003	98	588126	10.0	10.2	
41 Tetrahydrofuran	71	8.046	8.043	0.003	83	24495	20.0	17.9	
\$ 42 Dibromofluoromethane (Surr	113	8.060	8.057	0.003	94	281563	10.0	9.69	
43 1,1,1-Trichloroethane	97	8.102	8.099	0.003	97	615030	10.0	10.0	
44 2-Butanone (MEK)	43	8.172	8.172	0.003	99	37854	10.0	8.40	
45 1,1-Dichloropropene	75	8.213	8.211	0.002	98	528952	10.0	10.2	
46 Isooctane	57	8.297	8.295	0.002	96	1572239	10.0	11.3	
47 n-Heptane	43	8.367	8.364	0.003	90	631915	10.0	10.9	
48 Benzene	78	8.465	8.462	0.003	95	1477652	10.0	10.6	
50 Propionitrile	54	8.479	8.479	-0.011	49	131726	100.0	90.0	
49 Methacrylonitrile	41	8.493	8.504	-0.011	92	740342	100.0	93.0	
51 Tert-amyl methyl ether	73	8.521	8.532	-0.011	98	565429	10.0	8.94	
52 Isobutyl alcohol	42	8.590	8.588	0.002	53	52997	250.0	221.0	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.590	8.588	0.002	91	231978	10.0	8.87	
54 1,2-Dichloroethane	62	8.660	8.658	0.002	97	273541	10.0	8.52	
* 55 Fluorobenzene	96	8.842	8.853	-0.011	99	1328753	10.0	10.0	
57 Methylcyclohexane	55	8.995	8.993	0.002	90	566427	10.0	11.0	
56 Trichloroethene	95	9.009	9.007	0.002	89	416705	10.0	10.1	
59 n-Butanol	56	9.233	9.230	0.003	90	50343	250.0	230.0	
60 Dibromomethane	93	9.414	9.412	0.002	91	117378	10.0	8.97	
61 Ethyl acrylate	55	9.442	9.440	0.002	98	128086	10.0	8.68	
62 1,2-Dichloropropane	63	9.498	9.495	0.003	94	292258	10.0	10.1	
63 Dichlorobromomethane	83	9.540	9.537	0.003	99	339915	10.0	9.16	
64 Methyl methacrylate	69	9.624	9.635	-0.011	89	161768	20.0	17.1	
65 1,4-Dioxane	88	9.707	9.705	0.002	94	19016	200.0	166.7	
66 2-Chloroethyl vinyl ether	63	10.015	10.012	0.002	92	23490	10.0	9.06	
67 cis-1,3-Dichloropropene	75	10.112	10.110	0.002	96	421200	10.0	9.75	
\$ 68 Toluene-d8 (Surr)	98	10.280	10.277	0.003	93	1332835	10.0	10.3	
69 Toluene	92	10.322	10.319	0.003	99	993822	10.0	10.6	
70 2-Nitropropane	43	10.545	10.543	0.003	99	47810	20.0	15.7	
71 4-Methyl-2-pentanone (MIBK	43	10.629	10.626	0.003	97	89951	10.0	8.87	
73 Tetrachloroethene	164	10.685	10.682	0.003	97	422502	10.0	10.1	
72 trans-1,3-Dichloropropene	75	10.685	10.682	0.003	73	339151	10.0	9.80	
74 Ethyl methacrylate	69	10.768	10.766	0.002	87	167911	10.0	8.85	
75 1,1,2-Trichloroethane	83	10.838	10.836	0.002	91	136714	10.0	8.64	
76 Chlorodibromomethane	129	11.020	11.017	0.003	90	219208	10.0	9.20	
77 1,3-Dichloropropane	76	11.104	11.101	0.003	89	293511	10.0	9.08	
78 n-Butyl acetate	43	11.243	11.255	-0.012	98	162703	10.0	8.90	
79 Ethylene Dibromide	107	11.271	11.269	0.002	98	151190	10.0	8.91	
80 2-Hexanone	43	11.369	11.380	-0.011	94	59010	10.0	8.80	
81 1-Chlorohexane	91	11.634	11.645	-0.011	97	614844	10.0	11.1	
82 Ethylbenzene	91	11.704	11.701	0.003	97	2051434	10.0	10.6	
* 83 Chlorobenzene-d5	117	11.704	11.701	0.003	84	1046312	10.0	10.0	
84 Chlorobenzene	112	11.718	11.715	0.003	96	1108991	10.0	10.3	
85 1,1,1,2-Tetrachloroethane	131	11.760	11.757	0.003	96	333897	10.0	9.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106	11.830	11.827	0.003	99	777907	10.0	10.7	
88 o-Xylene	106	12.234	12.232	0.002	96	689888	10.0	10.4	
89 Styrene	104	12.276	12.288	-0.012	95	989172	10.0	10.7	
90 Bromoform	173	12.346	12.358	-0.012	97	113876	10.0	8.93	
91 Isopropylbenzene	105	12.514	12.511	0.003	95	2002534	10.0	10.8	
\$ 92 4-Bromofluorobenzene (Surr	95	12.807	12.804	0.003	95	365380	10.0	9.52	
93 N-Propylbenzene	91	12.891	12.888	0.003	98	2250610	10.0	10.8	
94 Bromobenzene	156	12.933	12.930	0.003	82	408252	10.0	9.60	
95 1,1,2,2-Tetrachloroethane	83	12.960	12.958	0.002	96	153168	10.0	9.05	
96 1,3,5-Trimethylbenzene	105	13.058	13.056	0.002	96	1550830	10.0	11.2	
97 2-Chlorotoluene	91	13.086	13.084	0.002	98	1381718	10.0	10.7	
98 1,2,3-Trichloropropane	110	13.128	13.125	0.003	84	50513	10.0	9.85	
99 trans-1,4-Dichloro-2-buten	53	13.128	13.125	0.003	85	37915	10.0	8.51	
100 Cyclohexanone	55	13.198	13.195	0.003	87	24300	100.0	91.2	
101 4-Chlorotoluene	91	13.240	13.237	0.003	96	1178481	10.0	10.5	
102 tert-Butylbenzene	119	13.379	13.377	0.002	91	1488609	10.0	11.2	
103 1,2,4-Trimethylbenzene	105	13.435	13.447	-0.012	97	1538088	10.0	11.1	
104 sec-Butylbenzene	105	13.547	13.544	0.003	94	2198744	10.0	11.1	
105 4-Isopropyltoluene	119	13.673	13.670	0.003	96	1897369	10.0	11.1	
106 1,3-Dichlorobenzene	146	13.812	13.810	0.002	98	814684	10.0	10.0	
* 108 1,4-Dichlorobenzene-d4	152	13.882	13.879	0.003	82	543189	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.882	13.879	0.003	95	1464862	10.0	10.7	
109 1,4-Dichlorobenzene	146	13.896	13.893	0.003	97	871255	10.0	10.2	
110 n-Butylbenzene	134	14.077	14.075	0.002	97	516426	10.0	11.3	
111 Benzyl chloride	126	14.119	14.119	0.002	1	75392	10.0	11.2	
112 1,2-Dichlorobenzene	146	14.315	14.312	0.003	99	635363	10.0	9.59	
113 n-Nonyl Aldehyde	57	15.027	15.024	0.003	91	74633	10.0	11.4	
114 1,2-Dibromo-3-Chloropropan	157	15.097	15.094	0.003	86	23872	10.0	7.98	
115 1,3,5-Trichlorobenzene	180	15.111	15.108	0.003	97	554237	10.0	10.1	
116 Hexachlorobutadiene	225	15.697	15.694	0.003	95	267841	10.0	9.92	
117 1,2,4-Trichlorobenzene	180	15.767	15.764	0.003	93	313497	10.0	8.91	
118 Naphthalene	128	16.102	16.113	-0.011	97	308202	10.0	8.14	
120 1,2,3-Trichlorobenzene	180	16.297	16.309	-0.012	94	173656	10.0	8.36	

Reagents:

8260 NewWkMix_00208

Amount Added: 10.00

Units: uL

8260 Surr 25_00071

Amount Added: 10.00

Units: uL

Run Reagent

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZLCS1616.D

Injection Date: 03-Mar-2017 07:21:30

Instrument ID: VMSZ

Operator ID: EF

Lims ID: lcs

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

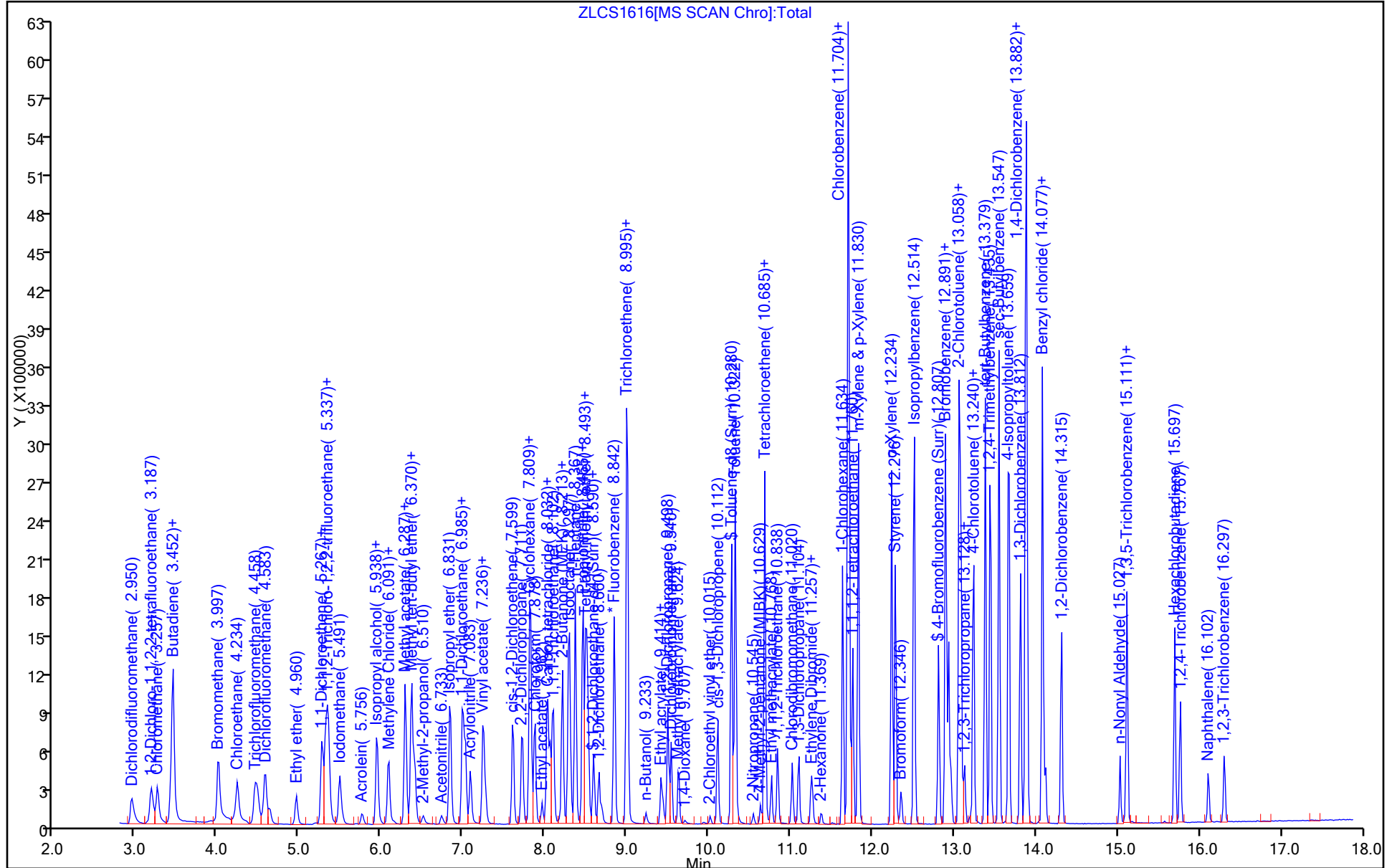
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: 25mL-8260-MSZ

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZLCS1616.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 03-Mar-2017 07:21:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-005
 Misc. Info.: LCS
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 07:44:04 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fishere Date: 03-Mar-2017 07:44:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	9.69	96.93
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	8.87	88.71
\$ 68 Toluene-d8 (Surr)	10.0	10.3	103.48
\$ 92 4-Bromofluorobenzene (Surr)	10.0	9.52	95.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 160-296328/3
 Matrix: Water Lab File ID: LLCS7800.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 09:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	10.9		1.0	0.17
79-34-5	1,1,2,2-Tetrachloroethane	10.7		1.0	0.10
79-00-5	1,1,2-Trichloroethane	10.3		1.0	0.13
75-35-4	1,1-Dichloroethene	10.7		1.0	0.10
75-34-3	1,1-Dichloroethane	10.9		1.0	0.070
120-82-1	1,2,4-Trichlorobenzene	10.7		1.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	10.9		1.0	0.41
107-06-2	1,2-Dichloroethane	10.7		1.0	0.22
540-59-0	1,2-Dichloroethene, Total	21.2		2.0	0.14
78-87-5	1,2-Dichloropropane	10.9		1.0	0.10
78-93-3	2-Butanone	10.4		5.0	0.47
591-78-6	2-Hexanone	9.98		5.0	0.25
108-10-1	4-Methyl-2-pentanone	9.39		5.0	0.22
67-64-1	Acetone	10.9		2.0	0.55
71-43-2	Benzene	10.5		1.0	0.10
75-25-2	Bromoform	10.4		1.0	0.17
74-83-9	Methyl bromide	10.6		2.0	0.25
75-15-0	Carbon disulfide	11.1		1.0	0.10
56-23-5	Carbon tetrachloride	10.9		1.0	0.18
108-90-7	Chlorobenzene	10.3		1.0	0.11
124-48-1	Chlorodibromomethane	10.5		1.0	0.14
75-00-3	Chloroethane	11.1		2.0	0.16
67-66-3	Chloroform	10.6		1.0	0.10
74-87-3	Chloromethane	10.8		2.0	0.10
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.10
10061-01-5	cis-1,3-Dichloropropene	11.8		1.0	0.16
75-27-4	Bromodichloromethane	10.8		1.0	0.14
100-41-4	Ethylbenzene	10.9		1.0	0.12
106-93-4	1,2-Dibromoethane	10.5		1.0	0.13
75-09-2	Methylene Chloride	10.3		1.0	0.27
71-36-3	n-Butanol	253		50	12
100-42-5	Styrene	11.7		1.0	0.13
127-18-4	Tetrachloroethene	10.7		1.0	0.18
108-88-3	Toluene	11.1		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	10.7		1.0	0.10
10061-02-6	trans-1,3-Dichloropropene	11.9		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 160-296328/3
 Matrix: Water Lab File ID: LLCS7800.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 09:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	10.4		1.0	0.25
108-05-4	Vinyl acetate	14.8		2.0	0.18
75-01-4	Vinyl chloride	10.9		2.0	0.19
1330-20-7	Xylenes, Total	22.8		3.0	0.27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-129
460-00-4	4-Bromofluorobenzene (Surr)	106		81-130
1868-53-7	Dibromofluoromethane (Surr)	106		81-124
2037-26-5	Toluene-d8 (Surr)	109		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LLCS7800.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Mar-2017 09:27:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:32 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 07-Mar-2017 10:12:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	653626	10.0	10.3	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	339612	10.0	10.7	
3 Chloromethane	50	3.346	3.346	0.000	100	734914	10.0	10.8	
4 Vinyl chloride	62	3.514	3.514	0.000	100	743898	10.0	10.9	
5 Butadiene	39	3.541	3.541	0.000	91	843109	10.0	11.6	
6 Bromomethane	94	4.100	4.100	0.000	91	328204	10.0	10.6	
7 Chloroethane	64	4.324	4.324	0.000	100	440278	10.0	11.1	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	880866	10.0	10.5	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	970563	10.0	10.9	
10 Ethyl ether	74	5.064	5.064	0.000	95	167148	10.0	11.1	
11 Ethanol	45	5.301	5.301	0.000	99	61735	400.0	451.0	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	96	507306	10.0	10.7	
13 Carbon disulfide	76	5.413	5.413	0.000	100	1849746	10.0	11.1	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	92	471166	10.0	10.3	
16 Iodomethane	142	5.581	5.581	0.000	100	362740	10.0	9.96	
S 15 1,2-Dichloroethene, Total	96				0			21.2	
17 Acrolein	56	5.860	5.860	0.000	99	125471	50.0	65.6	
18 3-Chloro-1-propene	39	6.027	6.027	0.000	90	664511	10.0	12.1	
19 Isopropyl alcohol	45	6.069	6.069	0.000	97	73546	100.0	117.6	
20 Methylene Chloride	84	6.167	6.167	0.000	98	405733	10.0	10.3	
21 Acetone	43	6.237	6.237	0.000	99	46188	10.0	10.9	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	96	526086	10.0	10.7	
23 Methyl acetate	74	6.391	6.391	0.000	99	113985	50.0	57.2	
24 Hexane	86	6.446	6.446	0.000	92	198748	10.0	11.7	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	94	577004	10.0	11.2	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	88	90939	100.0	122.2	
27 Acetonitrile	41	6.810	6.810	0.000	99	178449	100.0	104.4	
28 Isopropyl ether	45	6.921	6.921	0.000	94	1350034	10.0	11.9	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	95	1021266	10.0	12.1	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	979330	10.0	10.9	
31 Acrylonitrile	53	7.159	7.159	0.000	98	587780	100.0	112.9	
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	96	906758	10.0	11.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Vinyl acetate	43	7.340	7.340	0.000	97	536277	10.0	14.8	
34 cis-1,2-Dichloroethene	96	7.675	7.675	0.000	84	490462	10.0	10.5	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	92	749235	10.0	12.3	
36 Cyclohexane	84	7.885	7.885	0.000	92	985330	10.0	11.5	
37 Chlorobromomethane	128	7.885	7.885	0.000	49	152054	10.0	10.2	
38 Chloroform	83	7.941	7.941	0.000	94	828181	10.0	10.6	
39 Ethyl acetate	45	8.039	8.039	0.000	99	39753	20.0	20.7	
40 Carbon tetrachloride	117	8.094	8.094	0.000	99	765503	10.0	10.9	
41 Tetrahydrofuran	71	8.122	8.122	0.000	45	25893	20.0	18.7	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.122	0.000	95	351461	10.0	10.6	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	880792	10.0	10.9	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	98	68424	10.0	10.4	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	788213	10.0	11.4	
44 Isooctane	57	8.360	8.360	0.000	96	2835426	10.0	11.9	
46 n-Heptane	43	8.430	8.430	0.000	94	1256789	10.0	12.5	
48 Benzene	78	8.527	8.527	0.000	97	2056997	10.0	10.5	
49 Propionitrile	54	8.541	8.541	0.000	95	222513	100.0	112.0	
50 Methacrylonitrile	41	8.555	8.555	0.000	95	1237881	100.0	115.6	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	90	589803	10.0	11.6	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	92	338443	10.0	10.3	
52 Isobutyl alcohol	42	8.667	8.667	0.000	92	83680	250.0	308.2	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	97	419469	10.0	10.7	
* 55 Fluorobenzene	96	8.905	8.905	0.000	98	1799587	10.0	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	61	562021	10.0	10.4	
58 Methylcyclohexane	55	9.058	9.058	0.000	94	1023161	10.0	11.6	
59 n-Butanol	56	9.296	9.296	0.000	93	77104	250.0	252.6	
61 Dibromomethane	93	9.477	9.477	0.000	95	143936	10.0	10.2	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	178287	10.0	9.45	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	92	438103	10.0	10.9	
63 Dichlorobromomethane	83	9.603	9.603	0.000	99	475772	10.0	10.8	
64 Methyl methacrylate	69	9.687	9.687	0.000	94	217978	20.0	19.1	
65 1,4-Dioxane	88	9.770	9.770	0.000	98	25112	200.0	195.8	
66 2-Chloroethyl vinyl ether	63	10.064	10.064	0.000	94	60269	10.0	8.29	
67 cis-1,3-Dichloropropene	75	10.161	10.161	0.000	93	555074	10.0	11.8	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	1767785	10.0	10.9	
69 Toluene	92	10.371	10.371	0.000	98	1323393	10.0	11.1	
70 2-Nitropropane	43	10.594	10.594	0.000	97	72903	20.0	19.9	
71 4-Methyl-2-pentanone (MIBK	43	10.678	10.678	0.000	98	113816	10.0	9.39	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	491268	10.0	10.7	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	80	422559	10.0	11.9	
74 Ethyl methacrylate	69	10.818	10.818	0.000	91	220405	10.0	9.06	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	94	183540	10.0	10.3	
76 Chlorodibromomethane	129	11.069	11.069	0.000	91	253540	10.0	10.5	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	95	397037	10.0	10.3	
78 n-Butyl acetate	43	11.293	11.293	0.000	97	201794	10.0	9.60	
79 Ethylene Dibromide	107	11.321	11.321	0.000	98	189723	10.0	10.5	
80 2-Hexanone	43	11.418	11.418	0.000	98	91981	10.0	9.98	
81 1-Chlorohexane	91	11.684	11.684	0.000	93	810632	10.0	12.4	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	96	1204996	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	98	2570820	10.0	10.9	
84 Chlorobenzene	112	11.768	11.768	0.000	98	1265379	10.0	10.3	
85 1,1,1,2-Tetrachloroethane	131	11.809	11.809	0.000	95	389402	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	983922	10.0	11.2	
88 o-Xylene	106	12.284	12.284	0.000	97	859037	10.0	11.6	
89 Styrene	104	12.326	12.326	0.000	95	1295194	10.0	11.7	
90 Bromoform	173	12.396	12.396	0.000	96	125729	10.0	10.4	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	2611583	10.0	11.6	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	95	533216	10.0	10.6	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	3084877	10.0	12.1	
94 Bromobenzene	156	12.983	12.983	0.000	95	471269	10.0	10.3	
95 1,1,2,2-Tetrachloroethane	83	12.997	12.997	0.000	96	216434	10.0	10.7	
96 1,3,5-Trimethylbenzene	105	13.094	13.094	0.000	93	2073670	10.0	11.9	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	1903226	10.0	11.0	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	88	67383	10.0	10.0	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	78	67597	10.0	11.3	
100 Cyclohexanone	55	13.248	13.248	0.000	94	32470	100.0	83.6	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	1667987	10.0	11.4	
102 tert-Butylbenzene	119	13.416	13.416	0.000	94	1899780	10.0	11.6	
103 1,2,4-Trimethylbenzene	105	13.485	13.485	0.000	97	2049026	10.0	11.5	
104 sec-Butylbenzene	105	13.583	13.583	0.000	95	3030637	10.0	11.8	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	2455759	10.0	12.0	
106 1,3-Dichlorobenzene	146	13.849	13.849	0.000	98	1013039	10.0	10.4	
107 1,2,3-Trimethylbenzene	105	13.918	13.918	0.000	97	1833628	10.0	10.9	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.918	0.000	71	591508	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	95	1000906	10.0	10.3	
111 n-Butylbenzene	134	14.128	14.128	0.000	97	653613	10.0	12.1	
110 Benzyl chloride	126	14.156	14.156	0.000	92	80052	10.0	11.4	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	793747	10.0	10.3	
113 n-Nonyl Aldehyde	57	15.064	15.064	0.000	87	136180	10.0	11.1	
115 1,2-Dibromo-3-Chloropropan	157	15.133	15.133	0.000	83	34992	10.0	10.9	
114 1,3,5-Trichlorobenzene	180	15.161	15.161	0.000	98	839389	10.0	11.0	
116 Hexachlorobutadiene	225	15.734	15.734	0.000	98	509075	10.0	11.0	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	598767	10.0	10.7	
118 Naphthalene	128	16.153	16.153	0.000	97	598001	10.0	8.80	
120 1,2,3-Trichlorobenzene	180	16.349	16.349	0.000	96	462233	10.0	10.4	
S 119 Xylenes, Total	106				0			22.8	
S 130 Trihalomethanes, Total	1				0			42.3	

Reagents:

8260 NewWkMix_00209

Amount Added: 10.00

Units: uL

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

8260 Surr 25_00072

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LLCS7800.D

Injection Date: 07-Mar-2017 09:27:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: LCS

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

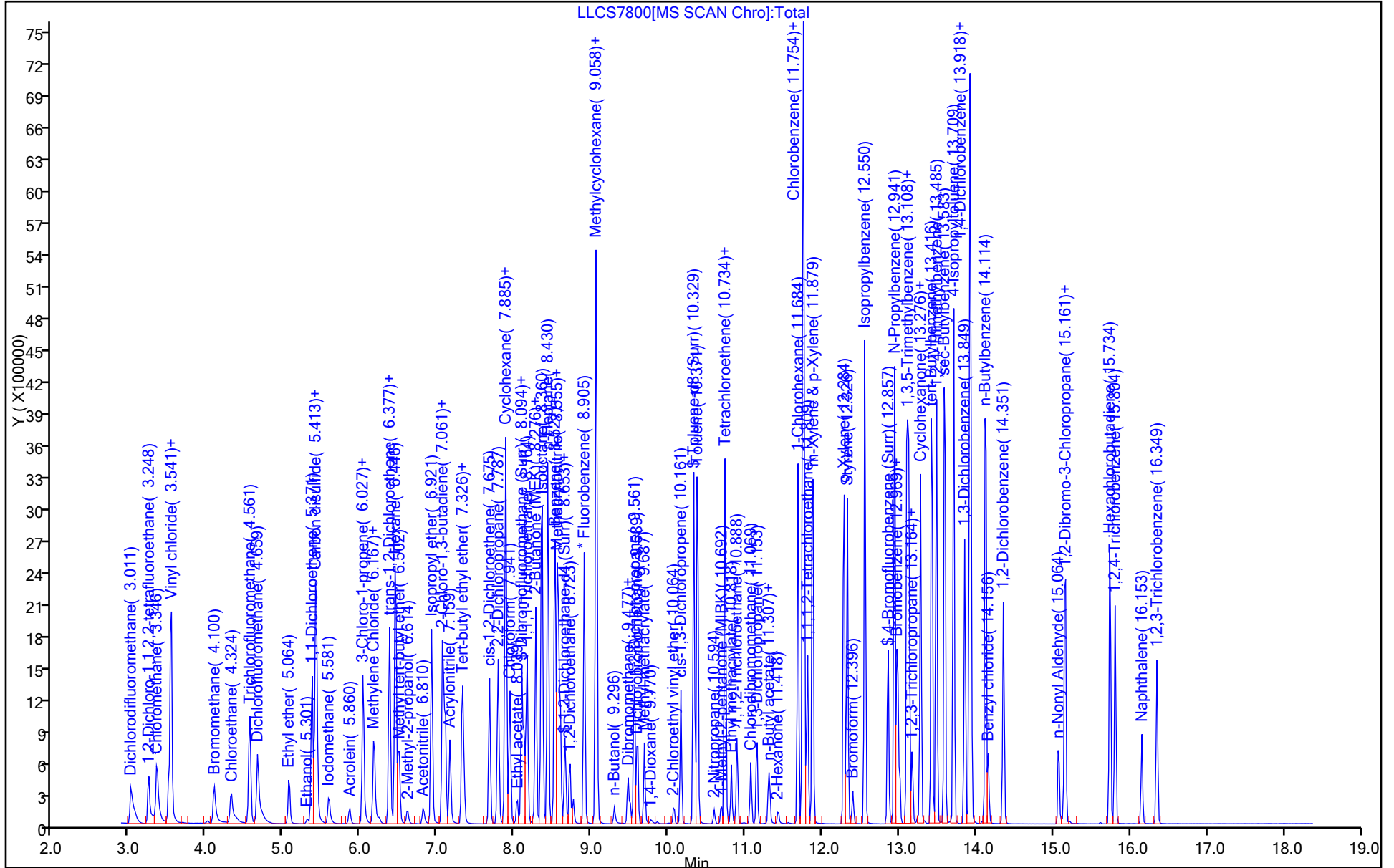
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LLCS7800.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Mar-2017 09:27:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:32 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 07-Mar-2017 10:12:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	10.6	105.56
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.13
\$ 68 Toluene-d8 (Surr)	10.0	10.9	108.91
\$ 92 4-Bromofluorobenzene (Surr)	10.0	10.6	105.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 160-295720/6
 Matrix: Water Lab File ID: ZLCS1617.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 07:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	9.93		1.0	0.17
79-34-5	1,1,2,2-Tetrachloroethane	8.78		1.0	0.10
79-00-5	1,1,2-Trichloroethane	8.70		1.0	0.13
75-35-4	1,1-Dichloroethene	9.93		1.0	0.10
75-34-3	1,1-Dichloroethane	9.97		1.0	0.070
120-82-1	1,2,4-Trichlorobenzene	8.68		1.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	8.05		1.0	0.41
107-06-2	1,2-Dichloroethane	8.52		1.0	0.22
540-59-0	1,2-Dichloroethene, Total	19.1		2.0	0.14
78-87-5	1,2-Dichloropropane	9.79		1.0	0.10
78-93-3	2-Butanone	8.15		5.0	0.47
591-78-6	2-Hexanone	8.81		5.0	0.25
108-10-1	4-Methyl-2-pentanone	8.47		5.0	0.22
67-64-1	Acetone	8.55		2.0	0.55
71-43-2	Benzene	10.4		1.0	0.10
75-25-2	Bromoform	8.79		1.0	0.17
74-83-9	Methyl bromide	9.20		2.0	0.25
75-15-0	Carbon disulfide	9.69		1.0	0.10
56-23-5	Carbon tetrachloride	10.1		1.0	0.18
108-90-7	Chlorobenzene	10.1		1.0	0.11
124-48-1	Chlorodibromomethane	9.15		1.0	0.14
75-00-3	Chloroethane	10.5		2.0	0.16
67-66-3	Chloroform	9.49		1.0	0.10
74-87-3	Chloromethane	9.11		2.0	0.10
156-59-2	cis-1,2-Dichloroethene	9.52		1.0	0.10
10061-01-5	cis-1,3-Dichloropropene	9.51		1.0	0.16
75-27-4	Bromodichloromethane	9.33		1.0	0.14
100-41-4	Ethylbenzene	10.4		1.0	0.12
106-93-4	1,2-Dibromoethane	8.75		1.0	0.13
75-09-2	Methylene Chloride	9.41		1.0	0.27
71-36-3	n-Butanol	216		50	12
100-42-5	Styrene	10.3		1.0	0.13
127-18-4	Tetrachloroethene	9.89		1.0	0.18
108-88-3	Toluene	10.4		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	9.59		1.0	0.10
10061-02-6	trans-1,3-Dichloropropene	9.75		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 160-295720/6
 Matrix: Water Lab File ID: ZLCS1617.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2017 07:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 295720 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	9.94		1.0	0.25
108-05-4	Vinyl acetate	9.21		2.0	0.18
75-01-4	Vinyl chloride	10.3		2.0	0.19
1330-20-7	Xylenes, Total	20.6		3.0	0.27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		75-129
460-00-4	4-Bromofluorobenzene (Surr)	95		81-130
1868-53-7	Dibromofluoromethane (Surr)	99		81-124
2037-26-5	Toluene-d8 (Surr)	104		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZLCS1617.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 03-Mar-2017 07:45:30 ALS Bottle#: 3 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-006
 Misc. Info.: LCSD
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 08:24:42 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: fishere

Date: 03-Mar-2017 08:24:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	2.947	2.947	0.000	100	385773	10.0	8.45	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.184	3.185	-0.001	97	278757	10.0	10.1	
3 Chloromethane	50	3.268	3.254	0.014	99	368502	10.0	9.11	
4 Vinyl chloride	62	3.436	3.422	0.014	99	603505	10.0	10.3	
5 Butadiene	39	3.450	3.450	0.000	90	574905	10.0	9.68	
6 Bromomethane	94	4.008	4.008	0.000	90	496166	10.0	9.20	
7 Chloroethane	64	4.232	4.232	0.000	99	474465	10.0	10.5	
8 Trichlorofluoromethane	101	4.469	4.469	0.000	100	611944	10.0	9.38	
9 Dichlorofluoromethane	67	4.581	4.581	0.000	97	635568	10.0	10.4	
10 Ethyl ether	74	4.958	4.958	0.000	90	126676	10.0	8.58	
11 Ethanol	45	5.195	5.195	0.000	97	29410	400.0	324.4	
12 1,1-Dichloroethene	96	5.279	5.279	0.000	98	367228	10.0	9.93	
13 Carbon disulfide	76	5.321	5.321	0.000	99	1120165	10.0	9.69	
14 1,1,2-Trichloro-1,2,2-trif	151	5.349	5.349	0.000	91	378051	10.0	9.95	
15 Iodomethane	142	5.488	5.488	0.000	98	608424	10.0	9.02	
17 Acrolein	56	5.767	5.768	-0.001	99	92570	50.0	43.2	
18 3-Chloro-1-propene	39	5.949	5.949	0.000	89	394974	10.0	9.57	
19 Isopropyl alcohol	45	5.963	5.963	0.000	98	48038	100.0	78.6	
20 Methylene Chloride	84	6.089	6.089	0.000	89	308429	10.0	9.41	
21 Acetone	43	6.144	6.145	0.000	99	25501	10.0	8.55	
22 trans-1,2-Dichloroethene	96	6.284	6.284	0.000	97	402362	10.0	9.59	
23 Methyl acetate	74	6.298	6.298	0.000	97	84470	50.0	40.5	
24 Hexane	86	6.368	6.368	0.000	91	130416	10.0	9.69	
25 Methyl tert-butyl ether	73	6.410	6.410	0.000	82	517754	10.0	8.60	
26 2-Methyl-2-propanol	59	6.507	6.508	-0.001	98	77273	100.0	74.1	
27 Acetonitrile	41	6.731	6.731	0.000	98	94287	100.0	88.3	
28 Isopropyl ether	45	6.842	6.843	-0.001	92	852172	10.0	9.77	
29 2-Chloro-1,3-butadiene	53	6.996	6.996	0.000	91	571295	10.0	10.1	
30 1,1-Dichloroethane	63	7.024	7.024	0.000	97	638638	10.0	9.97	
31 Acrylonitrile	53	7.094	7.080	0.014	99	356469	100.0	88.9	
32 Tert-butyl ethyl ether	59	7.247	7.248	-0.001	96	695717	10.0	9.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Vinyl acetate	43	7.275	7.275	0.000	97	370551	10.0	9.21	
34 cis-1,2-Dichloroethene	96	7.610	7.611	0.000	78	390879	10.0	9.52	
35 2,2-Dichloropropane	77	7.722	7.722	0.000	89	471015	10.0	10.1	
37 Chlorobromomethane	128	7.820	7.820	0.000	58	147776	10.0	9.27	
36 Cyclohexane	84	7.820	7.820	0.000	88	693066	10.0	10.3	
38 Chloroform	83	7.876	7.876	0.000	93	608158	10.0	9.49	
39 Ethyl acetate	45	7.959	7.960	-0.001	99	25979	20.0	16.9	
40 Carbon tetrachloride	117	8.029	8.029	0.000	98	599294	10.0	10.1	
41 Tetrahydrofuran	71	8.043	8.043	0.000	84	24715	20.0	17.4	
\$ 42 Dibromofluoromethane (Surr	113	8.057	8.057	0.000	94	298843	10.0	9.93	
43 1,1,1-Trichloroethane	97	8.099	8.099	0.000	97	632162	10.0	9.93	
44 2-Butanone (MEK)	43	8.183	8.169	0.014	98	38051	10.0	8.15	
45 1,1-Dichloropropene	75	8.211	8.211	0.000	97	551674	10.0	10.3	
46 Isooctane	57	8.295	8.295	0.000	96	1576995	10.0	11.0	
47 n-Heptane	43	8.364	8.364	0.000	89	640025	10.0	10.7	
48 Benzene	78	8.462	8.462	0.000	96	1501270	10.0	10.4	
50 Propionitrile	54	8.490	8.490	0.000	89	136115	100.0	89.8	
49 Methacrylonitrile	41	8.504	8.504	0.000	92	750090	100.0	91.0	
51 Tert-amyl methyl ether	73	8.518	8.532	-0.014	98	605741	10.0	9.24	
52 Isobutyl alcohol	42	8.588	8.588	0.000	53	51357	250.0	206.8	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.588	8.588	0.000	91	232829	10.0	8.60	
54 1,2-Dichloroethane	62	8.658	8.658	0.000	98	283503	10.0	8.52	
* 55 Fluorobenzene	96	8.839	8.853	-0.014	99	1375993	10.0	10.0	
57 Methylcyclohexane	55	8.993	8.993	0.000	89	574574	10.0	10.8	
56 Trichloroethene	95	9.007	9.007	0.000	76	425911	10.0	9.94	
59 n-Butanol	56	9.230	9.230	0.000	88	48853	250.0	215.6	
60 Dibromomethane	93	9.411	9.412	-0.001	91	116508	10.0	8.60	
61 Ethyl acrylate	55	9.439	9.440	-0.001	98	129562	10.0	8.48	
62 1,2-Dichloropropane	63	9.495	9.495	0.000	94	293955	10.0	9.79	
63 Dichlorobromomethane	83	9.537	9.537	0.000	99	358521	10.0	9.33	
64 Methyl methacrylate	69	9.635	9.635	0.000	87	166681	20.0	17.0	
65 1,4-Dioxane	88	9.705	9.705	0.000	95	18054	200.0	152.8	
66 2-Chloroethyl vinyl ether	63	10.012	10.012	0.000	91	23099	10.0	8.61	
67 cis-1,3-Dichloropropene	75	10.110	10.110	0.000	96	425641	10.0	9.51	
\$ 68 Toluene-d8 (Surr)	98	10.277	10.277	0.000	92	1372689	10.0	10.4	
69 Toluene	92	10.319	10.319	0.000	98	1003943	10.0	10.4	
70 2-Nitropropane	43	10.542	10.543	0.000	97	46780	20.0	15.0	
71 4-Methyl-2-pentanone (MIBK	43	10.626	10.626	0.000	97	88040	10.0	8.47	
73 Tetrachloroethene	164	10.682	10.682	0.000	98	424189	10.0	9.89	
72 trans-1,3-Dichloropropene	75	10.682	10.682	0.000	73	345731	10.0	9.75	
74 Ethyl methacrylate	69	10.766	10.766	0.000	88	176340	10.0	9.07	
75 1,1,2-Trichloroethane	83	10.836	10.836	0.000	90	141099	10.0	8.70	
76 Chlorodibromomethane	129	11.017	11.017	0.000	90	223488	10.0	9.15	
77 1,3-Dichloropropane	76	11.101	11.101	0.000	90	296805	10.0	8.96	
78 n-Butyl acetate	43	11.254	11.255	-0.001	98	162455	10.0	8.67	
79 Ethylene Dibromide	107	11.268	11.269	-0.001	98	152240	10.0	8.75	
80 2-Hexanone	43	11.380	11.380	0.000	96	60545	10.0	8.81	
81 1-Chlorohexane	91	11.631	11.645	-0.014	98	632218	10.0	11.1	
82 Ethylbenzene	91	11.701	11.701	0.000	96	2059801	10.0	10.4	
* 83 Chlorobenzene-d5	117	11.701	11.701	0.000	66	1072633	10.0	10.0	
84 Chlorobenzene	112	11.715	11.715	0.000	94	1111142	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	11.757	11.757	0.000	94	347105	10.0	9.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106	11.827	11.827	0.000	99	781009	10.0	10.5	
88 o-Xylene	106	12.232	12.232	0.000	97	685512	10.0	10.1	
89 Styrene	104	12.288	12.288	0.000	94	975462	10.0	10.3	
90 Bromoform	173	12.357	12.358	-0.001	98	117437	10.0	8.79	
91 Isopropylbenzene	105	12.511	12.511	0.000	95	2002645	10.0	10.3	
\$ 92 4-Bromofluorobenzene (Surr	95	12.804	12.804	0.000	95	382423	10.0	9.51	
93 N-Propylbenzene	91	12.888	12.888	0.000	98	2253723	10.0	10.4	
94 Bromobenzene	156	12.930	12.930	0.000	88	406440	10.0	9.12	
95 1,1,2,2-Tetrachloroethane	83	12.958	12.958	0.000	96	155669	10.0	8.78	
96 1,3,5-Trimethylbenzene	105	13.056	13.056	0.000	96	1574556	10.0	10.9	
97 2-Chlorotoluene	91	13.083	13.084	-0.001	98	1404502	10.0	10.4	
98 1,2,3-Trichloropropane	110	13.125	13.125	0.000	86	52133	10.0	9.70	
99 trans-1,4-Dichloro-2-buten	53	13.125	13.125	0.000	82	40227	10.0	8.62	
100 Cyclohexanone	55	13.195	13.195	0.000	81	24890	100.0	89.0	
101 4-Chlorotoluene	91	13.237	13.237	0.000	96	1192640	10.0	10.2	
102 tert-Butylbenzene	119	13.377	13.377	0.000	92	1502276	10.0	10.8	
103 1,2,4-Trimethylbenzene	105	13.446	13.447	-0.001	96	1527662	10.0	10.5	
104 sec-Butylbenzene	105	13.544	13.544	0.000	94	2232641	10.0	10.7	
105 4-Isopropyltoluene	119	13.670	13.670	0.000	96	1906323	10.0	10.7	
106 1,3-Dichlorobenzene	146	13.809	13.810	-0.001	98	819039	10.0	9.59	
* 108 1,4-Dichlorobenzene-d4	152	13.879	13.879	0.000	74	569185	10.0	10.0	
107 1,2,3-Trimethylbenzene	105	13.879	13.879	0.000	95	1454868	10.0	10.1	
109 1,4-Dichlorobenzene	146	13.893	13.893	0.000	96	854773	10.0	9.57	
110 n-Butylbenzene	134	14.075	14.075	0.000	98	521765	10.0	10.9	
111 Benzyl chloride	126	14.117	14.117	0.000	29	69988	10.0	9.94	
112 1,2-Dichlorobenzene	146	14.312	14.312	0.000	99	647334	10.0	9.33	
113 n-Nonyl Aldehyde	57	15.024	15.024	0.000	89	70892	10.0	10.3	
114 1,2-Dibromo-3-Chloropropan	157	15.094	15.094	0.000	83	25226	10.0	8.05	
115 1,3,5-Trichlorobenzene	180	15.108	15.108	0.000	98	561749	10.0	9.80	
116 Hexachlorobutadiene	225	15.694	15.694	0.000	97	282120	10.0	9.97	
117 1,2,4-Trichlorobenzene	180	15.764	15.764	0.000	94	319786	10.0	8.68	
118 Naphthalene	128	16.113	16.113	0.000	96	328548	10.0	8.28	
120 1,2,3-Trichlorobenzene	180	16.309	16.309	0.000	95	179199	10.0	8.24	

Reagents:

8260 NewWkMix_00208

Amount Added: 10.00

Units: uL

8260 Surr 25_00071

Amount Added: 10.00

Units: uL

Run Reagent

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\ZLCS1617.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 03-Mar-2017 07:45:30 ALS Bottle#: 3 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 160-0009913-006
 Misc. Info.: LCSD
 Operator ID: EF Instrument ID: VMSZ
 Method: \\ChromNA\StLouis\ChromData\VMSZ\20170303-9913.b\25mL-8260-MSZ.m
 Limit Group: MSV-8260
 Last Update: 03-Mar-2017 08:24:42 Calib Date: 30-Jan-2017 12:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSZ\20170130-9642.b\ZICL1158.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: fishere Date: 03-Mar-2017 08:24:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	9.93	99.35
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	8.60	85.98
\$ 68 Toluene-d8 (Surr)	10.0	10.4	103.96
\$ 92 4-Bromofluorobenzene (Surr)	10.0	9.51	95.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 160-296328/4
 Matrix: Water Lab File ID: LLCS7801.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 09:52
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	10.8		1.0	0.17
79-34-5	1,1,2,2-Tetrachloroethane	10.4		1.0	0.10
79-00-5	1,1,2-Trichloroethane	10.2		1.0	0.13
75-35-4	1,1-Dichloroethene	10.9		1.0	0.10
75-34-3	1,1-Dichloroethane	10.8		1.0	0.070
120-82-1	1,2,4-Trichlorobenzene	10.6		1.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	10.3		1.0	0.41
107-06-2	1,2-Dichloroethane	10.4		1.0	0.22
540-59-0	1,2-Dichloroethene, Total	21.2		2.0	0.14
78-87-5	1,2-Dichloropropane	10.9		1.0	0.10
78-93-3	2-Butanone	9.88		5.0	0.47
591-78-6	2-Hexanone	9.69		5.0	0.25
108-10-1	4-Methyl-2-pentanone	9.25		5.0	0.22
67-64-1	Acetone	11.0		2.0	0.55
71-43-2	Benzene	10.4		1.0	0.10
75-25-2	Bromoform	10.3		1.0	0.17
74-83-9	Methyl bromide	9.90		2.0	0.25
75-15-0	Carbon disulfide	11.1		1.0	0.10
56-23-5	Carbon tetrachloride	10.9		1.0	0.18
108-90-7	Chlorobenzene	10.4		1.0	0.11
124-48-1	Chlorodibromomethane	10.4		1.0	0.14
75-00-3	Chloroethane	10.8		2.0	0.16
67-66-3	Chloroform	10.5		1.0	0.10
74-87-3	Chloromethane	10.9		2.0	0.10
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.10
10061-01-5	cis-1,3-Dichloropropene	11.6		1.0	0.16
75-27-4	Bromodichloromethane	10.6		1.0	0.14
100-41-4	Ethylbenzene	11.1		1.0	0.12
106-93-4	1,2-Dibromoethane	10.4		1.0	0.13
75-09-2	Methylene Chloride	10.1		1.0	0.27
71-36-3	n-Butanol	232		50	12
100-42-5	Styrene	11.7		1.0	0.13
127-18-4	Tetrachloroethene	10.9		1.0	0.18
108-88-3	Toluene	11.3		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	10.7		1.0	0.10
10061-02-6	trans-1,3-Dichloropropene	11.7		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 160-296328/4
 Matrix: Water Lab File ID: LLCS7801.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 03/07/2017 09:52
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-VMS40 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 296328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	10.3		1.0	0.25
108-05-4	Vinyl acetate	14.1		2.0	0.18
75-01-4	Vinyl chloride	10.9		2.0	0.19
1330-20-7	Xylenes, Total	23.2		3.0	0.27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		75-129
460-00-4	4-Bromofluorobenzene (Surr)	109		81-130
1868-53-7	Dibromofluoromethane (Surr)	103		81-124
2037-26-5	Toluene-d8 (Surr)	112		87-128

TestAmerica St. Louis
Target Compound Quantitation Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LLCS7801.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Mar-2017 09:52:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:34 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 07-Mar-2017 11:30:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	3.011	3.011	0.000	99	659954	10.0	10.2	
2 1,2-Dichloro-1,1,2,2-tetra	135	3.248	3.248	0.000	99	343772	10.0	10.6	
3 Chloromethane	50	3.346	3.346	0.000	99	753937	10.0	10.9	
4 Vinyl chloride	62	3.513	3.513	0.000	99	755559	10.0	10.9	
5 Butadiene	39	3.527	3.527	0.000	92	850717	10.0	11.4	
6 Bromomethane	94	4.100	4.100	0.000	91	311778	10.0	9.90	
7 Chloroethane	64	4.323	4.323	0.000	100	440419	10.0	10.8	
8 Trichlorofluoromethane	101	4.561	4.561	0.000	100	888597	10.0	10.4	
9 Dichlorofluoromethane	67	4.659	4.659	0.000	98	975457	10.0	10.7	
10 Ethyl ether	74	5.064	5.064	0.000	96	166150	10.0	10.8	
11 Ethanol	45	5.315	5.315	0.000	100	60547	400.0	433.9	
12 1,1-Dichloroethene	96	5.371	5.371	0.000	96	525765	10.0	10.9	
13 Carbon disulfide	76	5.413	5.413	0.000	100	1885234	10.0	11.1	
14 1,1,2-Trichloro-1,2,2-trif	151	5.427	5.427	0.000	90	479726	10.0	10.2	
16 Iodomethane	142	5.580	5.580	0.000	99	333211	10.0	9.01	
S 15 1,2-Dichloroethene, Total	96				0			21.2	
17 Acrolein	56	5.860	5.860	0.000	99	120063	50.0	61.6	
18 3-Chloro-1-propene	39	6.027	6.027	0.000	90	670568	10.0	12.0	
19 Isopropyl alcohol	45	6.069	6.069	0.000	97	69783	100.0	109.5	
20 Methylene Chloride	84	6.167	6.167	0.000	98	405131	10.0	10.1	
21 Acetone	43	6.237	6.237	0.000	99	47221	10.0	11.0	
22 trans-1,2-Dichloroethene	96	6.377	6.377	0.000	96	537973	10.0	10.7	
23 Methyl acetate	74	6.390	6.390	0.000	99	108343	50.0	53.4	
24 Hexane	86	6.446	6.446	0.000	92	204178	10.0	11.8	
25 Methyl tert-butyl ether	73	6.502	6.502	0.000	95	559425	10.0	10.6	
26 2-Methyl-2-propanol	59	6.614	6.614	0.000	89	83246	100.0	109.7	
27 Acetonitrile	41	6.809	6.809	0.000	99	177057	100.0	101.6	
28 Isopropyl ether	45	6.921	6.921	0.000	94	1358041	10.0	11.7	
29 2-Chloro-1,3-butadiene	53	7.061	7.061	0.000	95	1051147	10.0	12.2	
30 1,1-Dichloroethane	63	7.103	7.103	0.000	97	990569	10.0	10.8	
31 Acrylonitrile	53	7.159	7.159	0.000	99	566242	100.0	106.7	
32 Tert-butyl ethyl ether	59	7.326	7.326	0.000	96	904344	10.0	11.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Vinyl acetate	43	7.340	7.340	0.000	98	522549	10.0	14.1	
34 cis-1,2-Dichloroethene	96	7.675	7.675	0.000	84	497547	10.0	10.5	
35 2,2-Dichloropropane	77	7.787	7.787	0.000	92	756930	10.0	12.2	
36 Cyclohexane	84	7.885	7.885	0.000	93	1004385	10.0	11.5	
37 Chlorobromomethane	128	7.885	7.885	0.000	49	149468	10.0	9.81	
38 Chloroform	83	7.941	7.941	0.000	96	835007	10.0	10.5	
39 Ethyl acetate	45	8.038	8.038	0.000	99	38193	20.0	19.6	
40 Carbon tetrachloride	117	8.094	8.094	0.000	98	781991	10.0	10.9	
41 Tetrahydrofuran	71	8.122	8.122	0.000	45	25404	20.0	18.0	
\$ 42 Dibromofluoromethane (Surr	113	8.122	8.122	0.000	94	351204	10.0	10.3	
43 1,1,1-Trichloroethane	97	8.164	8.164	0.000	98	888651	10.0	10.8	
45 2-Butanone (MEK)	43	8.248	8.248	0.000	98	66631	10.0	9.88	
47 1,1-Dichloropropene	75	8.276	8.276	0.000	95	808824	10.0	11.5	
44 Isooctane	57	8.360	8.360	0.000	96	2914160	10.0	12.0	
46 n-Heptane	43	8.430	8.430	0.000	94	1277420	10.0	12.5	
48 Benzene	78	8.527	8.527	0.000	97	2081545	10.0	10.4	
49 Propionitrile	54	8.541	8.541	0.000	89	215165	100.0	106.3	
50 Methacrylonitrile	41	8.555	8.555	0.000	95	1196507	100.0	109.6	
51 Tert-amyl methyl ether	73	8.597	8.597	0.000	91	577687	10.0	11.2	
\$ 53 1,2-Dichloroethane-d4 (Sur	65	8.653	8.653	0.000	93	337808	10.0	10.1	
52 Isobutyl alcohol	42	8.667	8.667	0.000	92	80129	250.0	289.5	
54 1,2-Dichloroethane	62	8.723	8.723	0.000	97	415912	10.0	10.4	
* 55 Fluorobenzene	96	8.904	8.904	0.000	98	1834369	10.0	10.0	
57 Trichloroethene	95	9.058	9.058	0.000	60	567978	10.0	10.3	
58 Methylcyclohexane	55	9.058	9.058	0.000	94	1041832	10.0	11.6	
59 n-Butanol	56	9.295	9.295	0.000	93	71413	250.0	232.1	
61 Dibromomethane	93	9.477	9.477	0.000	94	140740	10.0	9.83	
60 Ethyl acrylate	55	9.505	9.505	0.000	99	171304	10.0	8.93	
62 1,2-Dichloropropane	63	9.561	9.561	0.000	93	447252	10.0	10.9	
63 Dichlorobromomethane	83	9.603	9.603	0.000	99	476129	10.0	10.6	
64 Methyl methacrylate	69	9.687	9.687	0.000	95	209746	20.0	18.1	
65 1,4-Dioxane	88	9.770	9.770	0.000	99	23984	200.0	184.0	
66 2-Chloroethyl vinyl ether	63	10.064	10.064	0.000	93	56447	10.0	7.64	
67 cis-1,3-Dichloropropene	75	10.161	10.161	0.000	94	557324	10.0	11.6	
\$ 68 Toluene-d8 (Surr)	98	10.329	10.329	0.000	94	1809086	10.0	11.2	
69 Toluene	92	10.371	10.371	0.000	98	1343105	10.0	11.3	
70 2-Nitropropane	43	10.594	10.594	0.000	97	69655	20.0	19.1	
71 4-Methyl-2-pentanone (MIBK	43	10.692	10.692	0.000	98	111420	10.0	9.25	
73 Tetrachloroethene	164	10.734	10.734	0.000	98	497845	10.0	10.9	
72 trans-1,3-Dichloropropene	75	10.734	10.734	0.000	78	412451	10.0	11.7	
74 Ethyl methacrylate	69	10.818	10.818	0.000	91	214841	10.0	8.89	
75 1,1,2-Trichloroethane	83	10.888	10.888	0.000	94	179931	10.0	10.2	
76 Chlorodibromomethane	129	11.069	11.069	0.000	91	248001	10.0	10.4	
77 1,3-Dichloropropane	76	11.153	11.153	0.000	95	393208	10.0	10.3	
78 n-Butyl acetate	43	11.293	11.293	0.000	98	195944	10.0	9.39	
79 Ethylene Dibromide	107	11.321	11.321	0.000	98	186458	10.0	10.4	
80 2-Hexanone	43	11.418	11.418	0.000	98	88869	10.0	9.69	
81 1-Chlorohexane	91	11.684	11.684	0.000	93	823698	10.0	12.6	
* 83 Chlorobenzene-d5	117	11.754	11.754	0.000	93	1199232	10.0	10.0	
82 Ethylbenzene	91	11.754	11.754	0.000	98	2591724	10.0	11.1	
84 Chlorobenzene	112	11.767	11.767	0.000	97	1268605	10.0	10.4	
85 1,1,1,2-Tetrachloroethane	131	11.809	11.809	0.000	95	392559	10.0	10.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106	11.879	11.879	0.000	98	1003461	10.0	11.5	
88 o-Xylene	106	12.284	12.284	0.000	96	867124	10.0	11.7	
89 Styrene	104	12.326	12.326	0.000	95	1289017	10.0	11.7	
90 Bromoform	173	12.396	12.396	0.000	96	121464	10.0	10.3	
91 Isopropylbenzene	105	12.550	12.550	0.000	97	2640102	10.0	12.0	
\$ 92 4-Bromofluorobenzene (Surr	95	12.857	12.857	0.000	94	534662	10.0	10.9	
93 N-Propylbenzene	91	12.941	12.941	0.000	98	3100044	10.0	12.4	
94 Bromobenzene	156	12.983	12.983	0.000	92	466439	10.0	10.5	
95 1,1,2,2-Tetrachloroethane	83	13.010	13.010	0.000	96	204879	10.0	10.4	
96 1,3,5-Trimethylbenzene	105	13.094	13.094	0.000	93	2066106	10.0	12.2	
97 2-Chlorotoluene	91	13.122	13.122	0.000	96	1899846	10.0	11.3	
99 1,2,3-Trichloropropane	110	13.164	13.164	0.000	88	63984	10.0	9.79	
98 trans-1,4-Dichloro-2-buten	53	13.178	13.178	0.000	79	64496	10.0	11.1	
100 Cyclohexanone	55	13.248	13.248	0.000	93	31618	100.0	83.6	
101 4-Chlorotoluene	91	13.276	13.276	0.000	99	1648191	10.0	11.5	
102 tert-Butylbenzene	119	13.429	13.429	0.000	94	1906379	10.0	12.0	
103 1,2,4-Trimethylbenzene	105	13.485	13.485	0.000	97	2035823	10.0	11.8	
104 sec-Butylbenzene	105	13.583	13.583	0.000	96	3034977	10.0	12.1	
105 4-Isopropyltoluene	119	13.709	13.709	0.000	97	2455292	10.0	12.3	
106 1,3-Dichlorobenzene	146	13.848	13.848	0.000	98	1000935	10.0	10.6	
107 1,2,3-Trimethylbenzene	105	13.918	13.918	0.000	97	1804147	10.0	11.0	
* 108 1,4-Dichlorobenzene-d4	152	13.918	13.918	0.000	71	576140	10.0	10.0	
109 1,4-Dichlorobenzene	146	13.932	13.932	0.000	94	972070	10.0	10.3	
111 n-Butylbenzene	134	14.128	14.128	0.000	97	643522	10.0	12.2	
110 Benzyl chloride	126	14.156	14.156	0.000	92	74256	10.0	10.9	
112 1,2-Dichlorobenzene	146	14.351	14.351	0.000	97	770450	10.0	10.3	
113 n-Nonyl Aldehyde	57	15.064	15.064	0.000	87	124136	10.0	10.5	
115 1,2-Dibromo-3-Chloropropan	157	15.147	15.147	0.000	81	32104	10.0	10.3	
114 1,3,5-Trichlorobenzene	180	15.161	15.161	0.000	98	822294	10.0	11.1	
116 Hexachlorobutadiene	225	15.734	15.734	0.000	98	499639	10.0	11.1	
117 1,2,4-Trichlorobenzene	180	15.804	15.804	0.000	94	579205	10.0	10.6	
118 Naphthalene	128	16.153	16.153	0.000	97	564563	10.0	8.54	
120 1,2,3-Trichlorobenzene	180	16.348	16.348	0.000	96	437083	10.0	10.1	
S 119 Xylenes, Total	106				0			23.2	
S 130 Trihalomethanes, Total	1				0			41.7	

Reagents:

8260 NewWkMix_00209

Amount Added: 10.00

Units: uL

I.S. Working_00144

Amount Added: 10.00

Units: uL

Run Reagent

8260 Surr 25_00072

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica St. Louis

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LLCS7801.D

Injection Date: 07-Mar-2017 09:52:30

Instrument ID: VMSL

Operator ID: SMCR

Lims ID: LCSD

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

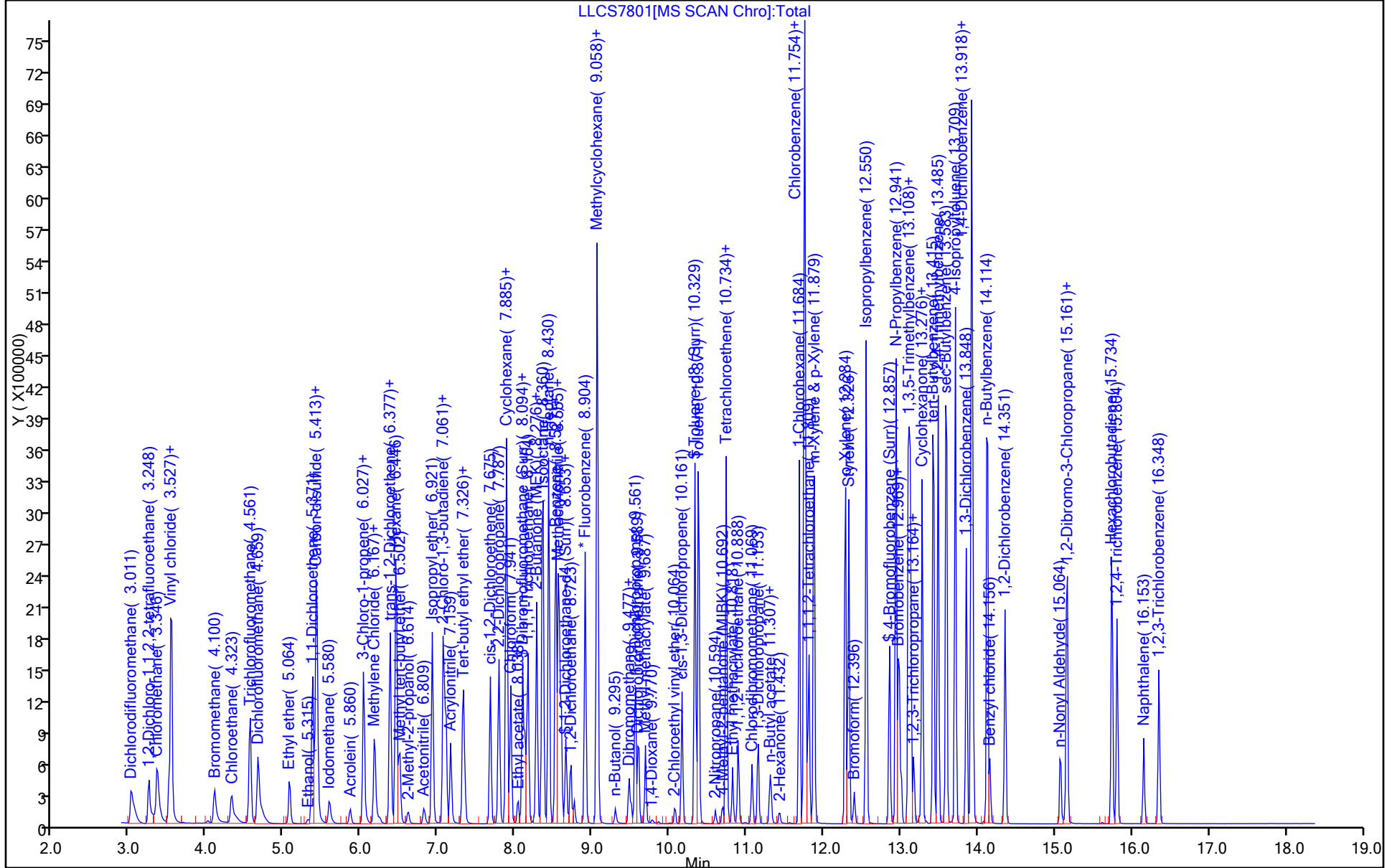
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: 25mL-8260-MSL

Limit Group: MSV-8260

Column: RTX-VMS (40m) (0.18 mm)



TestAmerica St. Louis
Recovery Report

Data File: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\LLCS7801.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Mar-2017 09:52:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Operator ID: SMCR Instrument ID: VMSL
 Method: \\ChromNA\StLouis\ChromData\VMSL\20170307-9939.b\25mL-8260-MSL.m
 Limit Group: MSV-8260
 Last Update: 08-Mar-2017 09:58:34 Calib Date: 22-Feb-2017 15:53:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\StLouis\ChromData\VMSL\20170222-9830.b\LICL7629.D
 Column 1 : RTX-VMS (40m) (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: rhoadess

Date: 07-Mar-2017 11:30:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 42 Dibromofluoromethane (Surr)	10.0	10.3	103.48
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.99
\$ 68 Toluene-d8 (Surr)	10.0	11.2	111.99
\$ 92 4-Bromofluorobenzene (Surr)	10.0	10.9	109.05

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1

SDG No.: _____

Instrument ID: VMSZ Start Date: 01/30/2017 09:22

Analysis Batch Number: 290044 End Date: 01/30/2017 16:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-290044/1		01/30/2017 09:22	1	ZBFB1150.D	RTX-VMS40 0.18 (mm)
IC 160-290044/5		01/30/2017 10:06	1	ZICL1152.D	RTX-VMS40 0.18 (mm)
IC 160-290044/6		01/30/2017 10:30	1	ZICL1153.D	RTX-VMS40 0.18 (mm)
IC 160-290044/7		01/30/2017 10:53	1	ZICL1154.D	RTX-VMS40 0.18 (mm)
IC 160-290044/8		01/30/2017 11:17	1	ZICL1155.D	RTX-VMS40 0.18 (mm)
ICIS 160-290044/9		01/30/2017 11:41	1	ZICL1156.D	RTX-VMS40 0.18 (mm)
IC 160-290044/10		01/30/2017 12:06	1	ZICL1157.D	RTX-VMS40 0.18 (mm)
IC 160-290044/11		01/30/2017 12:30	1	ZICL1158.D	RTX-VMS40 0.18 (mm)
ICV 160-290044/13		01/30/2017 13:18	1	ZICV1160.D	RTX-VMS40 0.18 (mm)
ZZZZZ		01/30/2017 14:06	1		RTX-VMS40 0.18 (mm)
ZZZZZ		01/30/2017 14:29	1		RTX-VMS40 0.18 (mm)
ZZZZZ		01/30/2017 14:53	1		RTX-VMS40 0.18 (mm)
ZZZZZ		01/30/2017 15:18	1		RTX-VMS40 0.18 (mm)
ZZZZZ		01/30/2017 15:42	1		RTX-VMS40 0.18 (mm)
ZZZZZ		01/30/2017 16:06	1		RTX-VMS40 0.18 (mm)
ZZZZZ		01/30/2017 16:30	1		RTX-VMS40 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1

SDG No.: _____

Instrument ID: VMSL Start Date: 02/14/2017 11:34Analysis Batch Number: 292232 End Date: 02/14/2017 15:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-292232/1		02/14/2017 11:34	1	LBFB7556.D	RTX-VMS40 0.18 (mm)
IC 160-292232/6		02/14/2017 12:23	1	LICL7558.D	RTX-VMS40 0.18 (mm)
IC 160-292232/7		02/14/2017 12:49	1	LICL7559.D	RTX-VMS40 0.18 (mm)
IC 160-292232/8		02/14/2017 13:14	1	LICL7560.D	RTX-VMS40 0.18 (mm)
IC 160-292232/9		02/14/2017 13:39	1	LICL7561.D	RTX-VMS40 0.18 (mm)
ICIS 160-292232/10		02/14/2017 14:05	1	LICL7562.D	RTX-VMS40 0.18 (mm)
IC 160-292232/11		02/14/2017 14:30	1	LICL7563.D	RTX-VMS40 0.18 (mm)
IC 160-292232/12		02/14/2017 14:56	1	LICL7564.D	RTX-VMS40 0.18 (mm)
ICV 160-292232/14		02/14/2017 15:47	1	LICV7566.D	RTX-VMS40 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-21259-1

SDG No.: _____

Instrument ID: VMSZ Start Date: 03/03/2017 06:41

Analysis Batch Number: 295720 End Date: 03/03/2017 18:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-295720/1		03/03/2017 06:41	1	ZBFB1614.D	RTX-VMS40 0.18 (mm)
CCVIS 160-295720/4		03/03/2017 06:57	1	ZCCV1615.D	RTX-VMS40 0.18 (mm)
LCS 160-295720/5		03/03/2017 07:21	1	ZLCS1616.D	RTX-VMS40 0.18 (mm)
LCSD 160-295720/6		03/03/2017 07:45	1	ZLCS1617.D	RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 08:09	1		RTX-VMS40 0.18 (mm)
MB 160-295720/8		03/03/2017 08:33	1	ZBLK1619.D	RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 08:57	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 09:21	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 09:46	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 10:10	1000		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 10:34	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 10:58	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 11:22	2		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 11:46	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 12:10	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 12:34	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 12:58	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 13:23	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 13:47	25		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 14:35	10		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 14:59	1		RTX-VMS40 0.18 (mm)
160-21259-1		03/03/2017 15:24	1	ZSMP1636.D	RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 15:48	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 16:12	1		RTX-VMS40 0.18 (mm)
160-20837-A-4 MDLV		03/03/2017 17:00	1		RTX-VMS40 0.18 (mm)
160-20837-A-4 MDLV		03/03/2017 17:25	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 17:49	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/03/2017 18:13	1		RTX-VMS40 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. LouisJob No.: 160-21259-1

SDG No.: _____

Instrument ID: VMSLStart Date: 03/07/2017 08:38Analysis Batch Number: 296328End Date: 03/07/2017 19:59

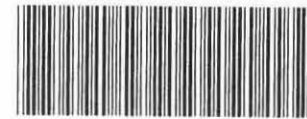
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-296328/1		03/07/2017 08:38	1	LBFB7798.D	RTX-VMS40 0.18 (mm)
CCVIS 160-296328/2		03/07/2017 09:01	1	LCCV7799.D	RTX-VMS40 0.18 (mm)
LCS 160-296328/3		03/07/2017 09:27	1	LLCS7800.D	RTX-VMS40 0.18 (mm)
LCSD 160-296328/4		03/07/2017 09:52	1	LLCS7801.D	RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 10:17	1		RTX-VMS40 0.18 (mm)
MB 160-296328/6		03/07/2017 10:42	1	LBLK7803.D	RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 11:08	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 11:33	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 11:59	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 12:49	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 13:14	1		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 13:40	10		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 14:05	1		RTX-VMS40 0.18 (mm)
160-21259-2		03/07/2017 14:30	200	LSMP7812.D	RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 14:55	100		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 15:21	500		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 15:46	50		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 16:11	25		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 16:37	50		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 17:02	500		RTX-VMS40 0.18 (mm)
160-21259-2		03/07/2017 17:27	20	LSMP7819.D	RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 17:52	10		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 18:17	50		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 18:43	5		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 19:08	2.5		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 19:33	5		RTX-VMS40 0.18 (mm)
ZZZZZ		03/07/2017 19:59	50		RTX-VMS40 0.18 (mm)

Shipping and Receiving Documents

FORM HDP-PR-QA-006-1
CHAIN OF CUSTODY

Instructions: Each time the container is transferred to another organization, a person from each organization should sign the CoC. The Laboratory/End User must verify that the sample is correctly identified before the sample is released for use or analysis and send the completed CoC to HDP.

Chain of Custody ID No. 022817-01 Page 1/1				Requested Analysis								Laboratory Name:				
Project Name: Westinghouse Electric Company				Comp (C) or Grab (G)	Gross Alpha/Beta (Total)	Isotopic Uranium	Tc-99	TSS	VOCs					Total Containers	Laboratory Name: TA-MO	
Contact Person: W. Clark Evers															Laboratory Address: 13715 Rider Trail North Earth City, MO 63045	
Phone Number: 314-810-3336															Phone No.: 314-298-8566	
Sampler Name: Thomas Yardy															Laboratory Contact Person: Ivan Vania	
				Phone No.: 708-870-8453		Turn Around Time										
				Normal		(21 days)										
														Remarks		
Sample ID	Date	Time	Matrix													
TB-022817	2/28/2017	7:00	L	G					X				2			Trip Blank
GW-BR09JC-022817	2/28/2017	9:00	L	G					X				2			IQ17 IGMP Sampling Event



160-21259 Chain of Custody

Relinquished by: <i>Walter Swanson</i>	Date/Time: 3-2-17	Received by: <i>AGM</i> 3815	Date/Time: 3-2-17	Total Number of Containers: 4	Cooler Temperature: 4 Degrees C
Company Name: <i>WEC</i>	0840	Company Name: <i>CROSS ROADS</i>	0840	Container ID: N/A	Shipper and Number:
Received by:	Date/Time:	Relinquished by:	Date/Time:	Comments: PO #4500404709	
Company Name:		Company Name:			
Relinquished by: <i>AGM</i> 3815	Date/Time: 3-2-17	Received by: <i>Walter Swanson</i>	Date/Time: 3-2-17	Verified By: <i>Walter Swanson</i> / 2-28-17	
Company Name: <i>CROSS ROADS</i>	12:25	Company Name: <i>WEC</i>	12:25		

Login Sample Receipt Checklist

Client: Westinghouse Electric Company LLC

Job Number: 160-21259-1

Login Number: 21259
List Number: 1
Creator: Dedner, Connie L

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
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	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	