ANALYTICAL REPORT

Job Number: 280-68855-1

Job Description: GSI - McConnell AFB (SWMU207)

For:
GSI Environmental, Inc
9600 Great Hills Trail, Ste 350E
Austin, TX 78759

Attention: Anna Zabierek

Approved for release.
Elaine M Walker
Project Manager II
5/26/2015 3:25 PM

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05/26/2015

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

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

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CASE NARRATIVE
Client: GSI Environmental, Inc
Project: GSI - McConnell AFB (SWMU207)
Report Number: 280-68855-1

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.

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.

RECEIPT

Five samples were received on 05/07/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.9°C.

The Chain of Custody requests that sample 54400-MW48-0515 (280-68855-4) be analyzed on a rapid TAT. Due to current laboratory capacity, the fastest turnaround time that TA Denver is able to provide for the requested analyses is 10 business days. We do apologize for any inconvenience this may cause.

The rapid VOC analyses will be reported under separate cover in SDG 280-68855-2 on a 10 business day turnaround time. All other samples/analyses are reported in this SDG on a standard 15 business day turnaround time.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples 54403-TB12-0515 (280-68855-1), 54402-EB12-0515 (280-68855-2), 54400-MW44D-0515 (280-68855-3) and 54402-EB13-0515 (280-68855-5) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 05/12/2015, 05/13/2015 and 05/14/2015.

Methylene Chloride was detected in method blank MB 280-277378/18 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_G2 Analysis Batch Number: 274898

Lab Sample ID: IC 280-274898/18 Client Sample ID:

Date Analyzed: 04/28/15 16:38 Lab File ID: G2_3694.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	4.90	Assign Peak	contreras e	04/28/15 18:37

8260B

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_G2 Analysis Batch Number: 276788

Lab Sample ID: IC 280-276788/15 Client Sample ID:

Date Analyzed: 05/11/15 09:39 Lab File ID: G2_4158.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene	9.94	Wrong peak	ilczyszyn d	05/11/15 10:10

8260B

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 274661

Lab Sample ID: IC 280-274661/18 Client Sample ID:

Date Analyzed: 04/27/15 11:28 Lab File ID: Z6773.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-amyl methyl ether	6.19	Split Peak	bergerb	04/27/15 20:40

Lab Sample ID: IC 280-274661/19 Client Sample ID:

Date Analyzed: 04/27/15 11:51 Lab File ID: Z6774.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	3.30	Split Peak	bergerb	04/27/15 20:43
Tert-amyl methyl ether	6.19	Split Peak	bergerb	04/27/15 20:40

Lab Sample ID: IC 280-274661/20 Client Sample ID:

Date Analyzed: 04/27/15 12:13 Lab File ID: Z6775.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-amyl methyl ether	6.19	Split Peak	bergerb	04/27/15 20:40

Lab Sample ID: ICIS 280-274661/21 Client Sample ID:

Date Analyzed: 04/27/15 12:36 Lab File ID: Z6776.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-amyl methyl ether	6.18	Split Peak	bergerb	04/27/15 20:40

Lab Sample ID: IC 280-274661/22 Client Sample ID:

Date Analyzed: 04/27/15 12:59 Lab File ID: Z6777.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-amyl methyl ether	6.18	Split Peak	bergerb	04/27/15 20:41

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 274661

Lab Sample ID: IC 280-274661/23 Client Sample ID:

Date Analyzed: 04/27/15 13:21 Lab File ID: Z6778.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-amyl methyl ether	6.20	Split Peak	bergerb	04/27/15 20:41

Lab Sample ID: ICV 280-274661/24 Client Sample ID:

Date Analyzed: 04/27/15 14:12 Lab File ID: Z6780.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-amyl methyl ether	6.18	Split Peak	bergerb	04/27/15 20:41

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 277378

Lab Sample ID: IC 280-277378/9 Client Sample ID:

Date Analyzed: 05/14/15 08:19 Lab File ID: Z7570.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	5.99	Assign Peak	moanm	05/14/15 12:41

Lab Sample ID: IC 280-277378/10 Client Sample ID:

Date Analyzed: 05/14/15 08:42 Lab File ID: Z7571.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	2.79	Wrong peak	moanm	05/14/15 11:38
2,2-Dichloropropane	4.90	Shouldering	moanm	05/14/15 12:43
Tetrahydrofuran	5.25	Assign Peak	moanm	05/14/15 11:38
1,2-Dichloroethane	5.99	Assign Peak	moanm	05/14/15 11:38
2-Chlorotoluene	13.67	Assign Peak	moanm	05/14/15 11:38

Lab Sample ID: IC 280-277378/11 Client Sample ID:

Date Analyzed: 05/14/15 09:05 Lab File ID: Z7572.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.94	Shouldering	moanm	05/14/15 12:47
tert-Butyl alcohol	3.54	Baseline	moanm	05/14/15 12:47
Isobutyl alcohol	5.84	Assign Peak	moanm	05/14/15 12:47
2-Chlorotoluene	13.67	Assign Peak	moanm	05/14/15 12:47

Lab Sample ID: IC 280-277378/12 Client Sample ID:

Date Analyzed: 05/14/15 09:28 Lab File ID: Z7573.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Shouldering	moanm	05/14/15 12:49
2-Chlorotoluene	13.67	Assign Peak	moanm	05/14/15 12:49

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 277378

Lab Sample ID: IC 280-277378/13 Client Sample ID:

Date Analyzed: 05/14/15 09:50 Lab File ID: Z7574.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Shouldering	moanm	05/14/15 12:50
2-Chlorotoluene	13.67	Assign Peak	moanm	05/14/15 12:50

Lab Sample ID: IC 280-277378/14 Client Sample ID:

Date Analyzed: 05/14/15 10:13 Lab File ID: Z7575.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Shouldering	moanm	05/14/15 12:52
2-Chlorotoluene	13.67	Assign Peak	moanm	05/14/15 12:52

Lab Sample ID: IC 280-277378/15 Client Sample ID:

Date Analyzed: 05/14/15 10:35 Lab File ID: Z7576.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Shouldering	moanm	05/14/15 12:54
tert-Butyl alcohol	3.59	Peak Tail	moanm	05/14/15 12:54
2-Chlorotoluene	13.67	Assign Peak	moanm	05/14/15 12:54

Lab Sample ID: ICV 280-277378/16 Client Sample ID:

Date Analyzed: 05/14/15 11:21 Lab File ID: Z7578.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Baseline	moanm	05/14/15 12:08
tert-Butyl alcohol	3.58	Baseline	moanm	05/14/15 12:08
2-Chlorotoluene	13.65	Assign Peak	moanm	05/14/15 12:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 277378

Lab Sample ID: LCS 280-277378/17 Client Sample ID:

Date Analyzed: 05/14/15 11:44 Lab File ID: Z7579.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chlorotoluene	13.67	Assign Peak	moanm	05/14/15 12:57

Lab Sample ID: CCVC 280-277378/22 Client Sample ID:

Date Analyzed: 05/14/15 14:47 Lab File ID: Z7586.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Shouldering	moanm	05/15/15 11:16
2-Chlorotoluene	13.67	Assign Peak	moanm	05/15/15 11:16

8260B

SAMPLE SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-68855-1TB	54403-TB12-0515	Water	05/04/2015 0000	05/07/2015 0910
280-68855-2EB	54402-EB12-0515	Water	05/04/2015 1840	05/07/2015 0910
280-68855-3	54400-MW44D-0515	Water	05/05/2015 1215	05/07/2015 0910
280-68855-5EB	54402-EB13-0515	Water	05/05/2015 1830	05/07/2015 0910

EXECUTIVE SUMMARY - Detections

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-68855-2EB	**54402-EB12-0515**					
Acetone		9.4	J	10	ug/L	8260B
280-68855-3	**54400-MW44D-0515**					
1,2,3-Trichlorobenzene		0.49	J	1.0	ug/L	8260B
1,2,4-Trichlorobenzene		0.36	J	1.0	ug/L	8260B
Methylene Chloride		1.4	J	5.0	ug/L	8260B
Naphthalene		0.75	J	1.0	ug/L	8260B
280-68855-5EB	**54402-EB13-0515**					
1,2,3-Trichlorobenzene		0.19	J	1.0	ug/L	8260B
2-Butanone (MEK)		14		6.0	ug/L	8260B
Acetone		10		10	ug/L	8260B
Methylene Chloride		1.4	J	5.0	ug/L	8260B

METHOD SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B

Lab References:

TAL DEN = TestAmerica Denver

Method References:

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

METHOD / ANALYST SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Method	Analyst	Analyst ID
SW846 8260B	Dukes, Aaron D	ADD
SW846 8260B	Moan, Matthew R	MRM

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: **54403-TB12-0515**

Lab Sample ID: 280-68855-1TB

Client Matrix: Water

Date Sampled: 05/04/2015 0000

Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_4275.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/13/2015 0430			Final Weight/Volume:	20 mL
Prep Date:	05/13/2015 0430				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: **54403-TB12-0515**

Lab Sample ID: 280-68855-1TB

Client Matrix: Water

Date Sampled: 05/04/2015 0000

Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_4275.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/13/2015 0430			Final Weight/Volume:	20 mL
Prep Date:	05/13/2015 0430				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.80	U	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		81 - 118
4-Bromofluorobenzene (Surr)	98		85 - 114
Dibromofluoromethane (Surr)	95		80 - 119
Toluene-d8 (Surr)	92		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: **54402-EB12-0515**

Lab Sample ID: 280-68855-2EB

Client Matrix: Water

Date Sampled: 05/04/2015 1840

Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_4248.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/12/2015 1954			Final Weight/Volume:	20 mL
Prep Date:	05/12/2015 1954				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	9.4	J	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: 54402-EB12-0515

Lab Sample ID: 280-68855-2EB
Client Matrix: Water

Date Sampled: 05/04/2015 1840
Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_4248.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/12/2015 1954			Final Weight/Volume:	20 mL
Prep Date:	05/12/2015 1954				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.80	U	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		81 - 118
4-Bromofluorobenzene (Surr)	103		85 - 114
Dibromofluoromethane (Surr)	93		80 - 119
Toluene-d8 (Surr)	99		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: **54400-MW44D-0515**

Lab Sample ID: 280-68855-3

Client Matrix: Water

Date Sampled: 05/05/2015 1215

Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7581.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1233			Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1233				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.49	J	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.36	J	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: 54400-MW44D-0515

Lab Sample ID: 280-68855-3
Client Matrix: Water

Date Sampled: 05/05/2015 1215
Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7581.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1233			Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1233				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	1.4	J	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.75	J	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	82		81 - 118
4-Bromofluorobenzene (Surr)	113		85 - 114
Dibromofluoromethane (Surr)	103		80 - 119
Toluene-d8 (Surr)	111		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: 54402-EB13-0515

Lab Sample ID: 280-68855-5EB
Client Matrix: Water

Date Sampled: 05/05/2015 1830
Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7584.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1401			Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1401				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.19	J	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	14		1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	10		1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0
Hexachlorobutadiene	0.80	U	0.36	1.0

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Client Sample ID: **54402-EB13-0515**

Lab Sample ID: 280-68855-5EB

Client Matrix: Water

Date Sampled: 05/05/2015 1830

Date Received: 05/07/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7584.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1401			Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1401				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	1.4	J	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		81 - 118
4-Bromofluorobenzene (Surr)	108		85 - 114
Dibromofluoromethane (Surr)	102		80 - 119
Toluene-d8 (Surr)	103		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-68855-1	54403-TB12-0515	95	96	92	98
280-68855-2	54402-EB12-0515	93	93	99	103
280-68855-3	54400-MW44D-0515	103	82	111	113
280-68855-5	54402-EB13-0515	102	85	103	108
MB 280-277119/6		104	107	109	114
MB 280-277378/18		105	86	108	109
LCS 280-277119/4		95	96	99	101
LCS 280-277378/17		101	89	111	104

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	80-119
DCA = 1,2-Dichloroethane-d4 (Surr)	81-118
TOL = Toluene-d8 (Surr)	89-112
BFB = 4-Bromofluorobenzene (Surr)	85-114

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Method Blank - Batch: 280-277119

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-277119/6	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_4246.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/12/2015 1913	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/12/2015 1913				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Method Blank - Batch: 280-277119

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-277119/6	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_4246.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/12/2015 1913	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/12/2015 1913				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Hexachlorobutadiene	0.80	U	0.36	1.0
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	0.80	U	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107	81 - 118
4-Bromofluorobenzene (Surr)	114	85 - 114
Dibromofluoromethane (Surr)	104	80 - 119
Toluene-d8 (Surr)	109	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Lab Control Sample - Batch: 280-277119

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-277119/4	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_4245.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/12/2015 1853	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/12/2015 1853				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	5.00	5.38	108	78 - 124	
1,1,1-Trichloroethane	5.00	5.02	100	74 - 131	
1,1,2,2-Tetrachloroethane	5.00	5.22	104	71 - 121	
1,1,2-Trichloroethane	5.00	5.15	103	80 - 119	
1,1-Dichloroethane	5.00	5.02	100	77 - 125	
1,1-Dichloroethene	5.00	4.72	94	71 - 131	
1,1-Dichloropropene	5.00	5.26	105	79 - 125	
1,2,3-Trichlorobenzene	5.00	5.02	100	69 - 129	
1,2,3-Trichloropropane	5.00	5.38	108	73 - 122	
1,2,4-Trichlorobenzene	5.00	5.14	103	69 - 130	
1,2,4-Trimethylbenzene	5.00	5.39	108	76 - 124	
1,2-Dibromo-3-Chloropropane	5.00	4.89	98	62 - 128	J
1,2-Dibromoethane	5.00	5.15	103	77 - 121	
1,2-Dichlorobenzene	5.00	5.31	106	80 - 119	
1,2-Dichloroethane	5.00	5.65	113	73 - 128	
1,2-Dichloropropane	5.00	5.01	100	78 - 122	
1,3,5-Trimethylbenzene	5.00	5.47	109	75 - 124	
1,3-Dichlorobenzene	5.00	5.33	107	80 - 119	
1,3-Dichloropropane	5.00	5.25	105	80 - 119	
1,4-Dichlorobenzene	5.00	5.65	113	79 - 118	
2,2-Dichloropropane	5.00	5.09	102	60 - 139	
2-Butanone (MEK)	20.0	17.8	89	56 - 143	
2-Chlorotoluene	5.00	5.37	107	79 - 122	
2-Hexanone	20.0	17.3	86	57 - 139	
4-Chlorotoluene	5.00	5.36	107	78 - 122	
4-Methyl-2-pentanone (MIBK)	20.0	17.7	88	67 - 130	
Acetone	20.0	18.5	93	39 - 160	
Benzene	5.00	5.29	106	79 - 120	
Bromobenzene	5.00	5.28	106	80 - 120	
Bromochloromethane	5.00	5.20	104	78 - 123	
Bromodichloromethane	5.00	5.12	102	79 - 125	
Bromoform	5.00	4.90	98	66 - 130	
Bromomethane	5.00	4.63	93	53 - 141	
Carbon disulfide	5.00	4.91	98	64 - 133	
Carbon tetrachloride	5.00	5.24	105	72 - 136	
Chlorobenzene	5.00	5.44	109	82 - 118	
Chlorodibromomethane	5.00	5.20	104	74 - 126	
Chloroethane	5.00	4.61	92	60 - 138	
Chloroform	5.00	5.42	108	79 - 124	
Chloromethane	5.00	4.54	91	50 - 139	
cis-1,2-Dichloroethene	5.00	5.03	101	78 - 123	
cis-1,3-Dichloropropene	5.00	5.27	105	75 - 124	
Dibromomethane	5.00	5.11	102	79 - 123	
Dichlorodifluoromethane	5.00	4.76	95	32 - 152	
Ethylbenzene	5.00	5.00	100	79 - 121	
Hexachlorobutadiene	5.00	5.52	110	66 - 134	

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Lab Control Sample - Batch: 280-277119

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-277119/4	Analysis Batch:	280-277119	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_4245.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/12/2015 1853	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/12/2015 1853				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Isopropylbenzene	5.00	5.41	108	72 - 131	
Methyl tert-butyl ether	5.00	5.12	102	71 - 124	
Methylene Chloride	5.00	4.85	97	74 - 124	J
m-Xylene & p-Xylene	5.00	5.10	102	80 - 121	
Naphthalene	5.00	4.40	88	61 - 128	
n-Butylbenzene	5.00	5.41	108	75 - 128	
N-Propylbenzene	5.00	5.32	106	76 - 126	
o-Xylene	5.00	5.20	104	78 - 122	
p-Isopropyltoluene	5.00	5.44	109	77 - 127	
sec-Butylbenzene	5.00	5.33	107	77 - 126	
Styrene	5.00	5.10	102	78 - 123	
tert-Butyl alcohol	50.0	52.1	104	68 - 129	
tert-Butylbenzene	5.00	5.39	108	78 - 124	
Tetrachloroethene	5.00	4.98	100	74 - 129	
Toluene	5.00	5.22	104	80 - 121	
trans-1,2-Dichloroethene	5.00	5.01	100	75 - 124	
trans-1,3-Dichloropropene	5.00	5.74	115	73 - 127	
Trichloroethene	5.00	5.01	100	79 - 123	
Trichlorofluoromethane	5.00	4.54	91	65 - 141	
Vinyl chloride	5.00	4.80	96	58 - 137	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	81 - 118
4-Bromofluorobenzene (Surr)	101	85 - 114
Dibromofluoromethane (Surr)	95	80 - 119
Toluene-d8 (Surr)	99	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Method Blank - Batch: 280-277378

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-277378/18	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7585.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1424	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1424				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
1,1,1,2-Tetrachloroethane	0.80	U	0.17	1.0
1,1,1-Trichloroethane	0.40	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.80	U	0.20	1.0
1,1,2-Trichloroethane	0.80	U	0.32	1.0
1,1-Dichloroethane	0.80	U	0.16	1.0
1,1-Dichloroethene	0.80	U	0.14	1.0
1,1-Dichloropropene	0.40	U	0.15	1.0
1,2,3-Trichlorobenzene	0.80	U	0.18	1.0
1,2,3-Trichloropropane	0.80	U	0.77	3.0
1,2,4-Trichlorobenzene	0.80	U	0.32	1.0
1,2,4-Trimethylbenzene	0.40	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	1.6	U	0.81	5.0
1,2-Dibromoethane	0.40	U	0.18	1.0
1,2-Dichlorobenzene	0.40	U	0.13	1.0
1,2-Dichloroethane	0.40	U	0.13	1.0
1,2-Dichloropropane	0.40	U	0.13	1.0
1,3,5-Trimethylbenzene	0.40	U	0.14	1.0
1,3-Dichlorobenzene	0.40	U	0.16	1.0
1,3-Dichloropropane	0.80	U	0.15	1.0
1,4-Dichlorobenzene	0.40	U	0.16	1.0
2,2-Dichloropropane	0.40	U	0.20	1.0
2-Butanone (MEK)	4.0	U	1.8	6.0
2-Chlorotoluene	0.40	U	0.17	1.0
2-Hexanone	4.0	U	1.4	5.0
4-Chlorotoluene	0.80	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	3.2	U	1.0	5.0
Acetone	6.4	U	1.9	10
Benzene	0.40	U	0.16	1.0
Bromobenzene	0.40	U	0.17	1.0
Bromochloromethane	0.20	U	0.10	1.0
Bromodichloromethane	0.40	U	0.17	1.0
Bromoform	0.40	U	0.19	1.0
Bromomethane	0.80	U	0.21	2.0
Carbon disulfide	1.6	U	0.45	2.0
Carbon tetrachloride	0.40	U	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.40	U	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.40	U	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.40	U	0.15	1.0
cis-1,3-Dichloropropene	0.40	U	0.16	1.0
Dibromomethane	0.40	U	0.17	1.0
Dichlorodifluoromethane	0.80	U	0.31	2.0
Ethylbenzene	0.40	U	0.16	1.0

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Method Blank - Batch: 280-277378

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-277378/18	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7585.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1424	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1424				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Hexachlorobutadiene	0.80	U	0.36	1.0
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	0.80	U	0.25	5.0
Methylene Chloride	1.42	J	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	81 - 118
4-Bromofluorobenzene (Surr)	109	85 - 114
Dibromofluoromethane (Surr)	105	80 - 119
Toluene-d8 (Surr)	108	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Lab Control Sample - Batch: 280-277378

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-277378/17	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7579.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1144	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1144				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	5.00	5.54	111	78 - 124	
1,1,1-Trichloroethane	5.00	4.84	97	74 - 131	
1,1,2,2-Tetrachloroethane	5.00	4.90	98	71 - 121	
1,1,2-Trichloroethane	5.00	5.15	103	80 - 119	
1,1-Dichloroethane	5.00	4.92	98	77 - 125	
1,1-Dichloroethene	5.00	4.98	100	71 - 131	
1,1-Dichloropropene	5.00	5.36	107	79 - 125	
1,2,3-Trichlorobenzene	5.00	6.09	122	69 - 129	
1,2,3-Trichloropropane	5.00	5.10	102	73 - 122	
1,2,4-Trichlorobenzene	5.00	6.09	122	69 - 130	
1,2,4-Trimethylbenzene	5.00	5.02	100	76 - 124	
1,2-Dibromo-3-Chloropropane	5.00	5.46	109	62 - 128	
1,2-Dibromoethane	5.00	5.33	107	77 - 121	
1,2-Dichlorobenzene	5.00	5.73	115	80 - 119	
1,2-Dichloroethane	5.00	4.72	94	73 - 128	
1,2-Dichloropropane	5.00	4.91	98	78 - 122	
1,3,5-Trimethylbenzene	5.00	5.11	102	75 - 124	
1,3-Dichlorobenzene	5.00	5.49	110	80 - 119	
1,3-Dichloropropane	5.00	5.15	103	80 - 119	
1,4-Dichlorobenzene	5.00	5.48	110	79 - 118	
2,2-Dichloropropane	5.00	5.68	114	60 - 139	
2-Butanone (MEK)	20.0	17.7	89	56 - 143	
2-Chlorotoluene	5.00	5.28	106	79 - 122	M
2-Hexanone	20.0	17.9	90	57 - 139	
4-Chlorotoluene	5.00	5.57	111	78 - 122	
4-Methyl-2-pentanone (MIBK)	20.0	19.1	95	67 - 130	
Acetone	20.0	20.0	100	39 - 160	
Benzene	5.00	4.96	99	79 - 120	
Bromobenzene	5.00	5.35	107	80 - 120	
Bromochloromethane	5.00	5.16	103	78 - 123	
Bromodichloromethane	5.00	4.73	95	79 - 125	
Bromoform	5.00	5.43	109	66 - 130	
Bromomethane	5.00	5.15	103	53 - 141	
Carbon disulfide	5.00	5.09	102	64 - 133	
Carbon tetrachloride	5.00	5.04	101	72 - 136	
Chlorobenzene	5.00	5.42	108	82 - 118	
Chlorodibromomethane	5.00	5.44	109	74 - 126	
Chloroethane	5.00	4.76	95	60 - 138	
Chloroform	5.00	4.98	100	79 - 124	
Chloromethane	5.00	5.03	101	50 - 139	
cis-1,2-Dichloroethene	5.00	4.93	99	78 - 123	
cis-1,3-Dichloropropene	5.00	5.41	108	75 - 124	
Dibromomethane	5.00	4.97	99	79 - 123	
Dichlorodifluoromethane	5.00	5.55	111	32 - 152	
Ethylbenzene	5.00	5.35	107	79 - 121	
Hexachlorobutadiene	5.00	6.21	124	66 - 134	

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Lab Control Sample - Batch: 280-277378

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-277378/17	Analysis Batch:	280-277378	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7579.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/14/2015 1144	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/14/2015 1144				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Isopropylbenzene	5.00	5.12	102	72 - 131	
Methyl tert-butyl ether	5.00	4.71	94	71 - 124	J
Methylene Chloride	5.00	5.29	106	74 - 124	
m-Xylene & p-Xylene	5.00	5.39	108	80 - 121	
Naphthalene	5.00	6.04	121	61 - 128	
n-Butylbenzene	5.00	5.22	104	75 - 128	
N-Propylbenzene	5.00	5.31	106	76 - 126	
o-Xylene	5.00	5.62	112	78 - 122	
p-Isopropyltoluene	5.00	5.22	104	77 - 127	
sec-Butylbenzene	5.00	5.37	107	77 - 126	
Styrene	5.00	5.46	109	78 - 123	
tert-Butyl alcohol	50.0	36.2	72	68 - 129	J
tert-Butylbenzene	5.00	5.20	104	78 - 124	
Tetrachloroethene	5.00	5.76	115	74 - 129	
Toluene	5.00	5.14	103	80 - 121	
trans-1,2-Dichloroethene	5.00	5.12	102	75 - 124	
trans-1,3-Dichloropropene	5.00	5.49	110	73 - 127	
Trichloroethene	5.00	5.10	102	79 - 123	
Trichlorofluoromethane	5.00	4.75	95	65 - 141	
Vinyl chloride	5.00	4.89	98	58 - 137	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89	81 - 118
4-Bromofluorobenzene (Surr)	104	85 - 114
Dibromofluoromethane (Surr)	101	80 - 119
Toluene-d8 (Surr)	111	89 - 112

DATA REPORTING QUALIFIERS

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	M	Manual integrated compound.
	U	Undetected at the Limit of Detection.

Client: GSI Environmental, Inc

Job Number: 280-68855-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-277119					
LCS 280-277119/4	Lab Control Sample	T	Water	8260B	
MB 280-277119/6	Method Blank	T	Water	8260B	
280-68855-1TB	54403-TB12-0515	T	Water	8260B	
280-68855-2EB	54402-EB12-0515	T	Water	8260B	
Analysis Batch:280-277378					
LCS 280-277378/17	Lab Control Sample	T	Water	8260B	
MB 280-277378/18	Method Blank	T	Water	8260B	
280-68855-3	54400-MW44D-0515	T	Water	8260B	
280-68855-5EB	54402-EB13-0515	T	Water	8260B	

Report Basis
T = Total

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Laboratory Chronicle

Lab ID: 280-68855-1 **Client ID: 54403-TB12-0515**

Sample Date/Time: 05/04/2015 00:00 Received Date/Time: 05/07/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68855-B-1		280-277119		05/13/2015 04:30	1	TAL DEN	ADD
A:8260B	280-68855-B-1		280-277119		05/13/2015 04:30	1	TAL DEN	ADD

Lab ID: 280-68855-2 **Client ID: 54402-EB12-0515**

Sample Date/Time: 05/04/2015 18:40 Received Date/Time: 05/07/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68855-C-2		280-277119		05/12/2015 19:54	1	TAL DEN	ADD
A:8260B	280-68855-C-2		280-277119		05/12/2015 19:54	1	TAL DEN	ADD

Lab ID: 280-68855-3 **Client ID: 54400-MW44D-0515**

Sample Date/Time: 05/05/2015 12:15 Received Date/Time: 05/07/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68855-B-3		280-277378		05/14/2015 12:33	1	TAL DEN	MRM
A:8260B	280-68855-B-3		280-277378		05/14/2015 12:33	1	TAL DEN	MRM

Lab ID: 280-68855-5 **Client ID: 54402-EB13-0515**

Sample Date/Time: 05/05/2015 18:30 Received Date/Time: 05/07/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68855-B-5		280-277378		05/14/2015 14:01	1	TAL DEN	MRM
A:8260B	280-68855-B-5		280-277378		05/14/2015 14:01	1	TAL DEN	MRM

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 280-277119/6		280-277119		05/12/2015 19:13	1	TAL DEN	ADD
A:8260B	MB 280-277119/6		280-277119		05/12/2015 19:13	1	TAL DEN	ADD
P:5030B	MB 280-277378/18		280-277378		05/14/2015 14:24	1	TAL DEN	MRM
A:8260B	MB 280-277378/18		280-277378		05/14/2015 14:24	1	TAL DEN	MRM

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Laboratory Chronicle

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 280-277119/4		280-277119		05/12/2015 18:53	1	TAL DEN	ADD
A:8260B	LCS 280-277119/4		280-277119		05/12/2015 18:53	1	TAL DEN	ADD
P:5030B	LCS 280-277378/17		280-277378		05/14/2015 11:44	1	TAL DEN	MRM
A:8260B	LCS 280-277378/17		280-277378		05/14/2015 11:44	1	TAL DEN	MRM

Lab References:
TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MV-2cleve+AVA_00009	05/31/15	03/02/15	P&T Methanol, Lot 85233	20 mL	MV-567643_00008	400 uL	2-Chloroethyl vinyl ether	40 ug/mL
					MV-568720_00006	405 uL	Acrolein	399.938 ug/mL
					MV-569724_00001	320 uL	Vinyl acetate	80 ug/mL
.MV-567643_00008	02/29/16	RESTEK, Lot A093368			(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
.MV-568720_00006	05/31/15	RESTEK, Lot A0108734			(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569724_00001	07/31/15	RESTEK, Lot A0108225			(Purchased Reagent)		Vinyl acetate	5000 ug/mL
MV-567649-D_00001	02/28/18	RESTEK, Lot A093504			(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
MV-ARCH SS A_00042	09/30/15	03/30/15	P&T Methanol, Lot 85233	50 mL	MV-567650_00020	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00020	08/31/19	Restek, Lot A0105143			(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
MV-ARCH SS A_00043	10/09/15	04/09/15	P&T Methanol, Lot 85233	50 mL	MV-567650_00020	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00020	08/31/19	Restek, Lot A0105143			(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
MV-Gas/Ket A_00032	10/03/15	04/03/15	P&T Methanol, Lot 85233	10 mL	MV-567642_00018	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-567645_00019	200 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Dichlorofluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
					MV-567648_00029	800 uL	Cyclohexanone	1600 ug/mL
.MV-567642_00018	02/29/16	RESTEK, Lot A093365			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567645_00019	09/30/16	RESTEK, Lot A0105755			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.MV-567648_00029	12/31/17	RESTEK, Lot A0108012			(Purchased Reagent)		Cyclohexanone	20000 ug/mL
MV-Gas/Ket B_00017	07/07/15	01/07/15	P&T Methanol, Lot 62345	10 mL	MV-567642.sec_00015	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-567645.sec_00017	200 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MV-567642.sec_00015	02/28/17	RESTEK, Lot A0101295			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567645.sec_00017	11/30/15	RESTEK, Lot A099261			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MV-Gas/Ket B_00019	10/29/15	04/29/15	P&T Methanol, Lot 85233	10 mL	MV-567642.sec_00016	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-567645.sec_00017	200 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MV-567642.sec_00016	02/28/17	RESTEK, Lot A0101295			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567645.sec_00017	11/30/15	RESTEK, Lot A099261			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MV-Main A_00022	07/16/15	01/16/15	P&T Methanol, Lot 62345	25 mL	MV-567641_00014	500 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

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	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	800 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							3-Chloro-1-propene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							Acrylonitrile	400 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chlorodibromomethane	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Cyclohexane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethyl ether	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexane	40 ug/mL
							Iodomethane	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Isopropylbenzene	40 ug/mL
							m-Xylene & p-Xylene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylcyclohexane	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							p-Isopropyltoluene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butyl alcohol	400 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Tetrahydrofuran	80 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							trans-1,4-Dichloro-2-butene	40 ug/mL
							Trichloroethene	40 ug/mL
					MV-568034_00010	1000 uL	1-Chlorohexane	40 ug/mL
							2-Pentanone	160 ug/mL
							sec-Butyl Alcohol	1200 ug/mL
.MV-567641_00014	02/29/16		RESTEK, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							p-Isopropyltoluene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butyl alcohol	20000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.MV-568034_00010	01/31/16	RESTEK, Lot A0104827			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butyl Alcohol	30000 ug/mL
MV-Main B_00009	05/28/15	11/28/14	P&T Methanol, Lot 62345	20 mL	MV-567641.sec_00010	400 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chlorodibromomethane	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Isopropylbenzene	40 ug/mL
							m-Xylene & p-Xylene	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Isopropyltoluene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butyl alcohol	400 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
.MV-567641.sec_00010	02/29/16		RESTEK, Lot A093733		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							p-Isopropyltoluene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butyl alcohol	20000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
MV-Supp A_00011	06/30/15	02/03/15	P&T Methanol, Lot 85233	10 mL	MV-568036_00007	400 uL	cis-1,4-Dichloro-2-butene	40 ug/mL
					mv-569725_00001	160 uL	1,2,3-Trimethylbenzene	40 ug/mL
							2-Chloro-1,3-butadiene	40 ug/mL
							2-Nitropropane	80 ug/mL
							Ethyl acetate	80 ug/mL
							Isopropyl alcohol	400 ug/mL
							Methacrylonitrile	400 ug/mL
							Methyl methacrylate	80 ug/mL
							n-Butanol	1000 ug/mL
					mv-569728_00001	200 uL	Acetonitrile	500 ug/mL
							Ethanol	2000 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
.MV-568036_00007	12/31/15		RESTEK, Lot A0104018		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
.mv-569725_00001	07/31/15		Restek, Lot A0108219		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Ethyl acetate	5000 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butanol	62500 ug/mL
.mv-569728_00001	01/31/17		RESTEK, Lot A0108216		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tert-butyl ethyl ether	2500 ug/mL

RESTEK

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

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Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS 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. : 567641.sec – 0001D **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1,000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 60-29-7.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 76-13-1.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
3	1,1-Dichloroethene	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 75-35-4.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
4	tert-Butanol (TBA)	20,000.0 µg/mL	+/- 116.2756	µg/mL	Gravimetric
	CAS # 75-65-0.SEC		+/- 442.5291	µg/mL	Unstressed
	Purity 99%		+/- 444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,000.0 µg/mL	+/- 11.6284	µg/mL	Gravimetric
	CAS # 74-88-4.SEC		+/- 44.2540	µg/mL	Unstressed
	Purity 97%		+/- 44.4344	µg/mL	Stressed
6	Allyl chloride (3-chloropropene)	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 107-05-1.SEC		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
7	Methyl acetate	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 79-20-9.SEC		+/- 221.2646	µg/mL	Unstressed
	Purity 99%		+/- 222.1666	µg/mL	Stressed
8	Carbon disulfide	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-15-0.SEC		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 75-09-2.SEC		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1.SEC			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 110-54-3.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-34-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 594-20-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 156-60-5.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
17	Chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1.SEC			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9.SEC			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-82-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
23	1,1-Dichloropropene	2,010.5	µg/mL	+/-	11.6890	µg/mL	Gravimetric
	CAS # 563-58-6.SEC			+/-	44.4847	µg/mL	Unstressed
	Purity 98%			+/-	44.6661	µg/mL	Stressed
24	Carbon tetrachloride	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 56-23-5.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
25	n-Heptane (C7)	2,000.1	µg/mL	+/-	11.6288	µg/mL	Gravimetric
	CAS # 142-82-5.SEC			+/-	44.2553	µg/mL	Unstressed
	Purity 99%			+/-	44.4357	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 79-01-6.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1.SEC			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	Bromodichloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 75-27-4.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	Dibromochloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 124-48-1.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	Bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 96-18-4.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 110-57-6.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-63-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)	2,000.1	µg/mL	+/-	11.6285	µg/mL	Gravimetric
	CAS # 99-87-6.SEC			+/-	44.2545	µg/mL	Unstressed
	Purity 96%			+/-	44.4349	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	95-50-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity	99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS #	96-12-8.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity	97%			+/-	44.4344	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	120-82-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity	99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene		2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS #	87-68-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity	97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	91-20-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity	99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	87-61-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity	99%			+/-	44.4335	µg/mL	Stressed

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

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

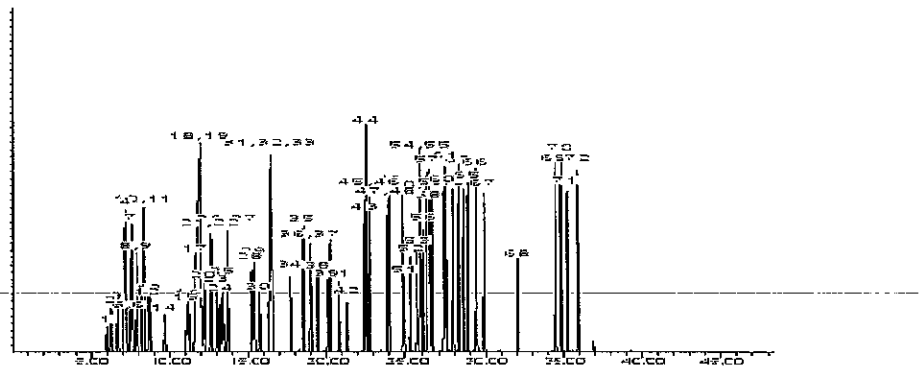
Carrier Gas:
helium-constant pressure 30 psi

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



Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** 1127510105

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

RESTEK

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS 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.

received 6/2/14

Catalog No. : 567641 — 00014 **Lot No.:** A093581

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 60-29-7		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,999.9 µg/mL	+/- 11.6279	µg/mL	Gravimetric
	CAS # 76-13-1		+/- 44.2519	µg/mL	Unstressed
	Purity 97%		+/- 44.4323	µg/mL	Stressed
3	1,1-dichloroethene	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-35-4		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
4	tert-Butanol (TBA)	20,000.0 µg/mL	+/- 116.2756	µg/mL	Gravimetric
	CAS # 75-65-0		+/- 442.5291	µg/mL	Unstressed
	Purity 99%		+/- 444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 74-88-4		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
6	Allyl chloride (3-chloropropene)	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 107-05-1		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
7	Methyl acetate	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 79-20-9		+/- 221.2646	µg/mL	Unstressed
	Purity 99%		+/- 222.1666	µg/mL	Stressed
8	Carbon disulfide	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-15-0		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 75-09-2		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	bromodichloromethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-27-4			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 10061-02-6			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	dibromochloromethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 124-48-1			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-57-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 95-63-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-Cymene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 99-87-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567642.SEC –00015 **Lot No.:** A0101295

Description : 8260 List 1 / Std #2 Ketones

8260/624 Ketones Standard 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

Expiration Date : February 28, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		10,015.2 µg/mL	+/- 58.6412	µg/mL	Gravimetric
	CAS # 67-64-1.SEC	(Lot 0902033)		+/- 533.0320	µg/mL	Unstressed
	Purity 99%			+/- 533.6197	µg/mL	Stressed
2	2-Butanone (MEK)		10,010.0 µg/mL	+/- 58.6108	µg/mL	Gravimetric
	CAS # 78-93-3.SEC	(Lot VEGGI)		+/- 532.7553	µg/mL	Unstressed
	Purity 99%			+/- 533.3427	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		10,012.4 µg/mL	+/- 58.6248	µg/mL	Gravimetric
	CAS # 108-10-1.SEC	(Lot E29T040)		+/- 532.8830	µg/mL	Unstressed
	Purity 99%			+/- 533.4706	µg/mL	Stressed
4	2-Hexanone		10,016.4 µg/mL	+/- 58.6482	µg/mL	Gravimetric
	CAS # 591-78-6.SEC	(Lot ZSVCD-FF)		+/- 533.0959	µg/mL	Unstressed
	Purity 99%			+/- 533.6837	µg/mL	Stressed

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

6x/mL
REC 4/20/15 GM

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Catalog No. : 567642.SEC **Lot No.:** A0101295

Description : 8260 List 1 / Std #2 Ketones

8260/624 Ketones Standard 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

Expiration Date : February 28, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone		10,015.2	µg/mL	+/-	58.6412	µg/mL	Gravimetric
	CAS # 67-64-1.SEC	(Lot 0902033)			+/-	533.0320	µg/mL	Unstressed
	Purity 99%				+/-	533.6197	µg/mL	Stressed
2	2-Butanone (MEK)		10,010.0	µg/mL	+/-	58.6108	µg/mL	Gravimetric
	CAS # 78-93-3.SEC	(Lot VEGGI)			+/-	532.7553	µg/mL	Unstressed
	Purity 99%				+/-	533.3427	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		10,012.4	µg/mL	+/-	58.6248	µg/mL	Gravimetric
	CAS # 108-10-1.SEC	(Lot E29T040)			+/-	532.8830	µg/mL	Unstressed
	Purity 99%				+/-	533.4706	µg/mL	Stressed
4	2-Hexanone		10,016.4	µg/mL	+/-	58.6482	µg/mL	Gravimetric
	CAS # 591-78-6.SEC	(Lot ZSVCD-FF)			+/-	533.0959	µg/mL	Unstressed
	Purity 99%				+/-	533.6837	µg/mL	Stressed

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

6x/mL
REC 1/6/15
Gm

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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. : 567642 **Lot No.:** A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	10,000.0	µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 67-64-1			+/-	798.6896	µg/mL	Unstressed
	Purity 99%			+/-	799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0	µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 78-93-3			+/-	798.6896	µg/mL	Unstressed
	Purity 99%			+/-	799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0	µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 108-10-1			+/-	798.6896	µg/mL	Unstressed
	Purity 99%			+/-	799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0	µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 591-78-6			+/-	798.6896	µg/mL	Unstressed
	Purity 99%			+/-	799.0807	µg/mL	Stressed

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

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2x/mL
REC 10/23/13
Gm

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Catalog No. : 567643 **Lot No.:** A093368

Description : 8260 List 1 / Std #4 2-Chloroethylvinyl Ether

8260 List 1 / Std #4 2-Chloroethylvinyl Ether 2,000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 110-75-8		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	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.

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

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Catalog No. : 567645.sec — 00017 **Lot No.:** A099261

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : November 30, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 18348) **Purity** 99%	2,002.2 µg/mL	+/- 16.7616 +/- 21.2987 +/- 24.7536	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,000.6 µg/mL	+/- 15.8216 +/- 21.2729 +/- 24.7262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,001.9 µg/mL	+/- 14.6785 +/- 21.2759 +/- 24.7329	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 18349) **Purity** 99%	2,002.8 µg/mL	+/- 16.7307 +/- 21.3051 +/- 24.7611	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	1,999.6 µg/mL	+/- 16.2313 +/- 21.2671 +/- 24.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot Q18B-13) **Purity** 99%	2,001.0 µg/mL	+/- 14.6721 +/- 21.2666 +/- 24.7221	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,004.4 µg/mL	+/- 15.1665 +/- 21.3071 +/- 24.7678	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4.SEC (Lot Q139-99) **Purity** 99%	2,001.8 µg/mL	+/- 16.2157 +/- 21.2894 +/- 24.7442	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

2x/mL REC 1/6/15

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

Catalog No. : 567645 **Lot No.:** A0105755

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : September 30, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12)		1,996.9 µg/mL	+/- 16.4920	µg/mL	Gravimetric
	CAS # 75-71-8	(Lot Q16A-86)		+/- 25.3820	µg/mL	Unstressed
	Purity 99%			+/- 28.4359	µg/mL	Stressed
2	Chloromethane (methyl chloride)		2,003.6 µg/mL	+/- 13.5945	µg/mL	Gravimetric
	CAS # 74-87-3	(Lot SHBC8470V)		+/- 23.6556	µg/mL	Unstressed
	Purity 99%			+/- 26.9268	µg/mL	Stressed
3	Vinyl chloride		2,001.1 µg/mL	+/- 27.3546	µg/mL	Gravimetric
	CAS # 75-01-4	(Lot 17542)		+/- 33.4976	µg/mL	Unstressed
	Purity 99%			+/- 35.8765	µg/mL	Stressed
4	1,3-Butadiene		1,999.9 µg/mL	+/- 23.4547	µg/mL	Gravimetric
	CAS # 106-99-0	(Lot SHBD5808V)		+/- 30.3891	µg/mL	Unstressed
	Purity 99%			+/- 32.9901	µg/mL	Stressed
5	Bromomethane (methyl bromide)		1,998.7 µg/mL	+/- 30.0266	µg/mL	Gravimetric
	CAS # 74-83-9	(Lot 101604)		+/- 35.7004	µg/mL	Unstressed
	Purity 99%			+/- 37.9363	µg/mL	Stressed
6	Chloroethane (ethyl chloride)		2,000.1 µg/mL	+/- 18.0935	µg/mL	Gravimetric
	CAS # 75-00-3	(Lot SHBD1717V)		+/- 26.4730	µg/mL	Unstressed
	Purity 99%			+/- 29.4228	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)		1,999.1 µg/mL	+/- 17.9677	µg/mL	Gravimetric
	CAS # 75-43-4	(Lot Q9B-58)		+/- 26.3801	µg/mL	Unstressed
	Purity 99%			+/- 29.3364	µg/mL	Stressed
8	Trichlorofluoromethane (CFC-11)		2,001.1 µg/mL	+/- 24.2299	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBD5121V)		+/- 30.9989	µg/mL	Unstressed
	Purity 99%			+/- 33.5557	µg/mL	Stressed

3x/mL REC 2/24/15
Gm

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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. : 567648 **Lot No.:** A0108012

Description : 8260 List 2 / Std #3 Cyclohexanone

8260 List 2 / Std #3 Cyclohexanone 20,000 ug/ml, Water, 1 ml/ampul

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

Expiration Date : December 31, 2017 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Cyclohexanone		20,022.0 µg/mL	+/- 117.2332 µg/mL	Gravimetric
	CAS # 108-94-1	(Lot MKBP7869V)		+/- 1,065.6170 µg/mL	Unstressed
	Purity 99%			+/- 1,066.7919 µg/mL	Stressed

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

5 x 15mL
REC 12/29/14

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Catalog No. : 567650 **Lot No.:** A0105143

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 : August 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane		2,512.4	µg/mL	+/-	14.6073	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 022013)			+/-	28.3309	µg/mL	Unstressed
	Purity 99%				+/-	32.6007	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,506.0	µg/mL	+/-	14.5701	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot 14C-191)			+/-	28.2587	µg/mL	Unstressed
	Purity 99%				+/-	32.5176	µg/mL	Stressed
3	Toluene-d8		2,499.8	µg/mL	+/-	14.5341	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot 14C-176)			+/-	28.1888	µg/mL	Unstressed
	Purity 99%				+/-	32.4372	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,500.4	µg/mL	+/-	14.5375	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)			+/-	28.1956	µg/mL	Unstressed
	Purity 99%				+/-	32.4450	µg/mL	Stressed

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

8x/mL
REC 8/1/14

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Catalog No. : 568034 **Lot No.:** A0104827

Description : Denver Main Add Ons Standard

Denver Main Add Ons Standard 1,000-30,000 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

Expiration Date : January 31, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1-Chlorohexane	1,000.0 µg/mL	+/- 10.0737 µg/mL	Gravimetric
	CAS # 544-10-5 (Lot 05107LK)		+/- 53.8499 µg/mL	Unstressed
	Purity 99%		+/- 53.9079 µg/mL	Stressed
2	2-Butanol (sec-butyl alcohol)	30,020.0 µg/mL	+/- 277.8107 µg/mL	Gravimetric
	CAS # 78-92-2 (Lot 50296KKV)		+/- 1,612.1523 µg/mL	Unstressed
	Purity 99%		+/- 1,613.8982 µg/mL	Stressed
3	2-Pentanone	4,004.0 µg/mL	+/- 37.2350 µg/mL	Gravimetric
	CAS # 107-87-9 (Lot 1399841)		+/- 215.0566 µg/mL	Unstressed
	Purity 99%		+/- 215.2894 µg/mL	Stressed

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

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Jul-2014 **Balance:** B251644995

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

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Catalog No. : 568036 — 0007 **Lot No.:** A0104018

Description : Denver Supp Add Ons Standard #2

Denver Supp Add Ons Standard #2 1,000 µg/ml, P&T Methanol, 1 ml/ampul

received 6/18/14

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

Expiration Date : December 31, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	cis-1,4-Dichloro-2-butene **CAS #** 1476-11-5 (Lot SHBD5650V) **Purity** 97%	1,001.0 µg/mL	+/- 10.0842 µg/mL +/- 13.9728 µg/mL +/- 15.3799 µg/mL	Gravimetric Unstressed Stressed
2	Tetrahydrothiophene **CAS #** 110-01-0 (Lot 08905ED) **Purity** 99%	1,000.0 µg/mL	+/- 10.0737 µg/mL +/- 13.9583 µg/mL +/- 15.3639 µg/mL	Gravimetric Unstressed Stressed

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

Kendra Swope - Mix Technician **Date Mixed:** 13-Jun-2014 **Balance:** 1125113331

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

Rec 3/2/15 GM
2x 1mL

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Certificate of Analysis

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Catalog No. : 568720 **Lot No.:** A0108734

Description : 8260 List 1/Std #5 Acrolein High

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

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

Expiration Date : May 31, 2015 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein			19,890.0	µg/mL	+/-	116.4603	µg/mL	Gravimetric
	CAS #	107-02-8	(Lot 150115JLM)			+/-	637.7359	µg/mL	Unstressed
	Purity	99%				+/-	741.2982	µg/mL	Stressed

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

4x1mL
REC 2/23/15 GM

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Catalog No. : 569724 **Lot No.:** A0108225

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

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate **CAS #** 108-05-4 (Lot STBC8935V) **Purity** 99%	5,000.0 µg/mL	+/- 29.3428 µg/mL +/- 266.1189 µg/mL +/- 266.4123 µg/mL		Gravimetric Unstressed Stressed

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

Tech Tips:

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

4x1mL
REC 2/3/15 Cm

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Catalog No. : 569725 **Lot No.:** A0108219

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

8260 List 2/ Std #1 Additions (2015) 2500-62,500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol)	25,013.0 µg/mL	+/- 146.4566 µg/mL	Gravimetric
	CAS # 67-63-0 (Lot SHBC9345V)		+/- 1,331.2495 µg/mL	Unstressed
	Purity 99%		+/- 1,332.7173 µg/mL	Stressed
2	Chloroprene (2-chloro-1,3-butadiene)	2,500.0 µg/mL	+/- 33.4403 µg/mL	Gravimetric
	CAS # 126-99-8 (Lot 140611JLM)		+/- 136.4105 µg/mL	Unstressed
	Purity 99%		+/- 136.5536 µg/mL	Stressed
3	Ethyl acetate	5,001.5 µg/mL	+/- 29.2849 µg/mL	Gravimetric
	CAS # 141-78-6 (Lot SHBF1248V)		+/- 266.1914 µg/mL	Unstressed
	Purity 99%		+/- 266.4849 µg/mL	Stressed
4	Methacrylonitrile	25,011.0 µg/mL	+/- 146.4449 µg/mL	Gravimetric
	CAS # 126-98-7 (Lot 1012014)		+/- 1,331.1430 µg/mL	Unstressed
	Purity 99%		+/- 1,332.6108 µg/mL	Stressed
5	2,2,4-Trimethylpentane (isooctane)	2,505.5 µg/mL	+/- 14.7037 µg/mL	Gravimetric
	CAS # 540-84-1 (Lot SHBB2470V)		+/- 133.3522 µg/mL	Unstressed
	Purity 99%		+/- 133.4992 µg/mL	Stressed
6	1-Butanol	62,530.5 µg/mL	+/- 366.1109 µg/mL	Gravimetric
	CAS # 71-36-3 (Lot SHBF1679V)		+/- 3,328.0152 µg/mL	Unstressed
	Purity 99%		+/- 3,331.6847 µg/mL	Stressed
7	1,4-Difluorobenzene	2,514.0 µg/mL	+/- 14.7536 µg/mL	Gravimetric
	CAS # 540-36-3 (Lot MKBN8571V)		+/- 133.8046 µg/mL	Unstressed
	Purity 99%		+/- 133.9521 µg/mL	Stressed

8	Ethyl acrylate			2,508.0	µg/mL	+/-	14.7183	µg/mL	Gravimetric
	CAS # 140-88-5	(Lot 10129902)				+/-	133.4852	µg/mL	Unstressed
	Purity 99%					+/-	133.6324	µg/mL	Stressed
9	Methyl methacrylate			5,005.5	µg/mL	+/-	29.3083	µg/mL	Gravimetric
	CAS # 80-62-6	(Lot STBD4840V)				+/-	266.4042	µg/mL	Unstressed
	Purity 99%					+/-	266.6980	µg/mL	Stressed
10	2-Nitropropane			5,008.6	µg/mL	+/-	29.3264	µg/mL	Gravimetric
	CAS # 79-46-9	(Lot BCBJ4343V)				+/-	266.5690	µg/mL	Unstressed
	Purity 97%					+/-	266.8629	µg/mL	Stressed
11	Butyl acetate			2,503.5	µg/mL	+/-	14.6919	µg/mL	Gravimetric
	CAS # 123-86-4	(Lot SHBF4442V)				+/-	133.2457	µg/mL	Unstressed
	Purity 99%					+/-	133.3926	µg/mL	Stressed
12	1-Chlorohexane			2,503.4	µg/mL	+/-	14.6914	µg/mL	Gravimetric
	CAS # 544-10-5	(Lot 05107LK)				+/-	133.2409	µg/mL	Unstressed
	Purity 98%					+/-	133.3878	µg/mL	Stressed
13	1,2,3-Trimethylbenzene			2,506.0	µg/mL	+/-	14.7066	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-14)				+/-	133.3785	µg/mL	Unstressed
	Purity 97%					+/-	133.5256	µg/mL	Stressed
14	Benzyl chloride			2,501.0	µg/mL	+/-	14.6773	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBB7346V)				+/-	133.1127	µg/mL	Unstressed
	Purity 99%					+/-	133.2594	µg/mL	Stressed
15	1,3,5-Trichlorobenzene			2,504.5	µg/mL	+/-	14.6978	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)				+/-	133.2989	µg/mL	Unstressed
	Purity 99%					+/-	133.4459	µg/mL	Stressed

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

4x/mL
REC 2/3/15 Gme

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Catalog No. : 569728 **Lot No.:** A0108216

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 : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethanol		100,006.7 µg/mL	+/- 585.5308 µg/mL	Gravimetric
	CAS # 64-17-5	(Lot PG0219)		+/- 3,484.8988 µg/mL	Unstressed
	Purity 99%			+/- 3,604.3075 µg/mL	Stressed
2	Acetonitrile		25,004.7 µg/mL	+/- 146.4078 µg/mL	Gravimetric
	CAS # 75-05-8	(Lot SHBB3177V)		+/- 871.3305 µg/mL	Unstressed
	Purity 99%			+/- 901.1862 µg/mL	Stressed
3	Diisopropyl ether (DIPE)		2,501.3 µg/mL	+/- 14.6792 µg/mL	Gravimetric
	CAS # 108-20-3	(Lot SHBB6268V)		+/- 87.1689 µg/mL	Unstressed
	Purity 99%			+/- 90.1553 µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)		2,500.7 µg/mL	+/- 14.6753 µg/mL	Gravimetric
	CAS # 637-92-3	(Lot MKBR1623V)		+/- 87.1456 µg/mL	Unstressed
	Purity 99%			+/- 90.1313 µg/mL	Stressed
5	Propionitrile		25,001.3 µg/mL	+/- 146.3883 µg/mL	Gravimetric
	CAS # 107-12-0	(Lot BCBK0700V)		+/- 871.2144 µg/mL	Unstressed
	Purity 99%			+/- 901.0661 µg/mL	Stressed
6	tert-Amyl alcohol		25,006.0 µg/mL	+/- 146.4156 µg/mL	Gravimetric
	CAS # 75-85-4	(Lot STBB1898V)		+/- 871.3770 µg/mL	Unstressed
	Purity 99%			+/- 901.2343 µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)		2,502.0 µg/mL	+/- 14.6831 µg/mL	Gravimetric
	CAS # 994-05-8	(Lot OS1028/4V)		+/- 87.1921 µg/mL	Unstressed
	Purity 99%			+/- 90.1793 µg/mL	Stressed

Certification Summary

Client: GSI Environmental, Inc
Project/Site: GSI - McConnell AFB (SWMU207)

TestAmerica Job ID: 280-68855-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alaska (UST)	State Program	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas DEQ	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAP	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Illinois	NELAP	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAP	7	E-10166
TestAmerica Denver	Louisiana	NELAP	6	02096
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Minnesota	NELAP	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Jersey	NELAP	2	CO004
TestAmerica Denver	New York	NELAP	2	11964
TestAmerica Denver	North Carolina (WW/SW)	State Program	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAP	10	4025
TestAmerica Denver	Pennsylvania	NELAP	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002001
TestAmerica Denver	Texas	NELAP	6	T104704183-13-8
TestAmerica Denver	USDA	Federal		P330-13-00202
TestAmerica Denver	Utah	NELAP	8	CO00026
TestAmerica Denver	Virginia	NELAP	3	460232
TestAmerica Denver	Washington	State Program	10	C583
TestAmerica Denver	West Virginia DEP	State Program	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430
TestAmerica Denver	Wyoming (UST)	A2LA	8	2907.01

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8260B

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
54403-TB12-0515	280-68855-1	95	96	92	98
54402-EB12-0515	280-68855-2	93	93	99	103
54400-MW44D-0515	280-68855-3	103	82	111	113
54402-EB13-0515	280-68855-5	102	85	103	108
	MB 280-277119/6	104	107	109	114
	MB 280-277378/18	105	86	108	109
	LCS 280-277119/4	95	96	99	101
	LCS 280-277378/17	101	89	111	104

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-119
DCA = 1,2-Dichloroethane-d4 (Surr)	81-118
TOL = Toluene-d8 (Surr)	89-112
BFB = 4-Bromofluorobenzene (Surr)	85-114

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Matrix: Water Level: Low Lab File ID: G2_4245.D

Lab ID: LCS 280-277119/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.38	108	78-124	
1,1,1-Trichloroethane	5.00	5.02	100	74-131	
1,1,2,2-Tetrachloroethane	5.00	5.22	104	71-121	
1,1,2-Trichloroethane	5.00	5.15	103	80-119	
1,1-Dichloroethane	5.00	5.02	100	77-125	
1,1-Dichloroethene	5.00	4.72	94	71-131	
1,1-Dichloropropene	5.00	5.26	105	79-125	
1,2,3-Trichlorobenzene	5.00	5.02	100	69-129	
1,2,3-Trichloropropane	5.00	5.38	108	73-122	
1,2,4-Trichlorobenzene	5.00	5.14	103	69-130	
1,2,4-Trimethylbenzene	5.00	5.39	108	76-124	
1,2-Dibromo-3-Chloropropane	5.00	4.89 J	98	62-128	
1,2-Dibromoethane	5.00	5.15	103	77-121	
1,2-Dichlorobenzene	5.00	5.31	106	80-119	
1,2-Dichloroethane	5.00	5.65	113	73-128	
1,2-Dichloropropane	5.00	5.01	100	78-122	
1,3,5-Trimethylbenzene	5.00	5.47	109	75-124	
1,3-Dichlorobenzene	5.00	5.33	107	80-119	
1,3-Dichloropropane	5.00	5.25	105	80-119	
1,4-Dichlorobenzene	5.00	5.65	113	79-118	
2,2-Dichloropropane	5.00	5.09	102	60-139	
2-Butanone (MEK)	20.0	17.8	89	56-143	
2-Chlorotoluene	5.00	5.37	107	79-122	
2-Hexanone	20.0	17.3	86	57-139	
4-Chlorotoluene	5.00	5.36	107	78-122	
4-Methyl-2-pentanone (MIBK)	20.0	17.7	88	67-130	
Acetone	20.0	18.5	93	39-160	
Benzene	5.00	5.29	106	79-120	
Bromobenzene	5.00	5.28	106	80-120	
Bromochloromethane	5.00	5.20	104	78-123	
Bromodichloromethane	5.00	5.12	102	79-125	
Bromoform	5.00	4.90	98	66-130	
Bromomethane	5.00	4.63	93	53-141	
Carbon disulfide	5.00	4.91	98	64-133	
Carbon tetrachloride	5.00	5.24	105	72-136	
Chlorobenzene	5.00	5.44	109	82-118	
Chlorodibromomethane	5.00	5.20	104	74-126	
Chloroethane	5.00	4.61	92	60-138	
Chloroform	5.00	5.42	108	79-124	
Chloromethane	5.00	4.54	91	50-139	
cis-1,2-Dichloroethene	5.00	5.03	101	78-123	
cis-1,3-Dichloropropene	5.00	5.27	105	75-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Matrix: Water Level: Low Lab File ID: G2_4245.D

Lab ID: LCS 280-277119/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromomethane	5.00	5.11	102	79-123	
Dichlorodifluoromethane	5.00	4.76	95	32-152	
Ethylbenzene	5.00	5.00	100	79-121	
Hexachlorobutadiene	5.00	5.52	110	66-134	
Isopropylbenzene	5.00	5.41	108	72-131	
Methyl tert-butyl ether	5.00	5.12	102	71-124	
Methylene Chloride	5.00	4.85 J	97	74-124	
m-Xylene & p-Xylene	5.00	5.10	102	80-121	
Naphthalene	5.00	4.40	88	61-128	
n-Butylbenzene	5.00	5.41	108	75-128	
N-Propylbenzene	5.00	5.32	106	76-126	
o-Xylene	5.00	5.20	104	78-122	
p-Isopropyltoluene	5.00	5.44	109	77-127	
sec-Butylbenzene	5.00	5.33	107	77-126	
Styrene	5.00	5.10	102	78-123	
tert-Butyl alcohol	50.0	52.1	104	68-129	
tert-Butylbenzene	5.00	5.39	108	78-124	
Tetrachloroethene	5.00	4.98	100	74-129	
Toluene	5.00	5.22	104	80-121	
trans-1,2-Dichloroethene	5.00	5.01	100	75-124	
trans-1,3-Dichloropropene	5.00	5.74	115	73-127	
Trichloroethene	5.00	5.01	100	79-123	
Trichlorofluoromethane	5.00	4.54	91	65-141	
Vinyl chloride	5.00	4.80	96	58-137	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z7579.D

Lab ID: LCS 280-277378/17 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.54	111	78-124	
1,1,1-Trichloroethane	5.00	4.84	97	74-131	
1,1,2,2-Tetrachloroethane	5.00	4.90	98	71-121	
1,1,2-Trichloroethane	5.00	5.15	103	80-119	
1,1-Dichloroethane	5.00	4.92	98	77-125	
1,1-Dichloroethene	5.00	4.98	100	71-131	
1,1-Dichloropropene	5.00	5.36	107	79-125	
1,2,3-Trichlorobenzene	5.00	6.09	122	69-129	
1,2,3-Trichloropropane	5.00	5.10	102	73-122	
1,2,4-Trichlorobenzene	5.00	6.09	122	69-130	
1,2,4-Trimethylbenzene	5.00	5.02	100	76-124	
1,2-Dibromo-3-Chloropropane	5.00	5.46	109	62-128	
1,2-Dibromoethane	5.00	5.33	107	77-121	
1,2-Dichlorobenzene	5.00	5.73	115	80-119	
1,2-Dichloroethane	5.00	4.72	94	73-128	
1,2-Dichloropropane	5.00	4.91	98	78-122	
1,3,5-Trimethylbenzene	5.00	5.11	102	75-124	
1,3-Dichlorobenzene	5.00	5.49	110	80-119	
1,3-Dichloropropane	5.00	5.15	103	80-119	
1,4-Dichlorobenzene	5.00	5.48	110	79-118	
2,2-Dichloropropane	5.00	5.68	114	60-139	
2-Butanone (MEK)	20.0	17.7	89	56-143	
2-Chlorotoluene	5.00	5.28	106	79-122	M
2-Hexanone	20.0	17.9	90	57-139	
4-Chlorotoluene	5.00	5.57	111	78-122	
4-Methyl-2-pentanone (MIBK)	20.0	19.1	95	67-130	
Acetone	20.0	20.0	100	39-160	
Benzene	5.00	4.96	99	79-120	
Bromobenzene	5.00	5.35	107	80-120	
Bromochloromethane	5.00	5.16	103	78-123	
Bromodichloromethane	5.00	4.73	95	79-125	
Bromoform	5.00	5.43	109	66-130	
Bromomethane	5.00	5.15	103	53-141	
Carbon disulfide	5.00	5.09	102	64-133	
Carbon tetrachloride	5.00	5.04	101	72-136	
Chlorobenzene	5.00	5.42	108	82-118	
Chlorodibromomethane	5.00	5.44	109	74-126	
Chloroethane	5.00	4.76	95	60-138	
Chloroform	5.00	4.98	100	79-124	
Chloromethane	5.00	5.03	101	50-139	
cis-1,2-Dichloroethene	5.00	4.93	99	78-123	
cis-1,3-Dichloropropene	5.00	5.41	108	75-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z7579.D

Lab ID: LCS 280-277378/17 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromomethane	5.00	4.97	99	79-123	
Dichlorodifluoromethane	5.00	5.55	111	32-152	
Ethylbenzene	5.00	5.35	107	79-121	
Hexachlorobutadiene	5.00	6.21	124	66-134	
Isopropylbenzene	5.00	5.12	102	72-131	
Methyl tert-butyl ether	5.00	4.71 J	94	71-124	
Methylene Chloride	5.00	5.29	106	74-124	
m-Xylene & p-Xylene	5.00	5.39	108	80-121	
Naphthalene	5.00	6.04	121	61-128	
n-Butylbenzene	5.00	5.22	104	75-128	
N-Propylbenzene	5.00	5.31	106	76-126	
o-Xylene	5.00	5.62	112	78-122	
p-Isopropyltoluene	5.00	5.22	104	77-127	
sec-Butylbenzene	5.00	5.37	107	77-126	
Styrene	5.00	5.46	109	78-123	
tert-Butyl alcohol	50.0	36.2 J	72	68-129	
tert-Butylbenzene	5.00	5.20	104	78-124	
Tetrachloroethene	5.00	5.76	115	74-129	
Toluene	5.00	5.14	103	80-121	
trans-1,2-Dichloroethene	5.00	5.12	102	75-124	
trans-1,3-Dichloropropene	5.00	5.49	110	73-127	
Trichloroethene	5.00	5.10	102	79-123	
Trichlorofluoromethane	5.00	4.75	95	65-141	
Vinyl chloride	5.00	4.89	98	58-137	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab File ID: G2_4246.D Lab Sample ID: MB 280-277119/6

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

Instrument ID: VMS_G2 Date Analyzed: 05/12/2015 19:13

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-277119/4	G2_4245.D	05/12/2015 18:53
54402-EB12-0515	280-68855-2	G2_4248.D	05/12/2015 19:54
54403-TB12-0515	280-68855-1	G2_4275.D	05/13/2015 04:30

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab File ID: Z7585.D Lab Sample ID: MB 280-277378/18

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

Instrument ID: VMS_Z Date Analyzed: 05/14/2015 14:24

GC Column: DB-624 (75.53) ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-277378/17	Z7579.D	05/14/2015 11:44
54400-MW44D-0515	280-68855-3	Z7581.D	05/14/2015 12:33
54402-EB13-0515	280-68855-5	Z7584.D	05/14/2015 14:01

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab File ID: G2_3684.D BFB Injection Date: 04/28/2015

Instrument ID: VMS_G2 BFB Injection Time: 13:12

Analysis Batch No.: 274898

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.4	
75	30.0 - 60.0 % of mass 95	47.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	81.6	
175	5.0 - 9.0 % of mass 174	7.3	(8.9)1
176	95.0 - 101.0 % of mass 174	78.8	(96.5)1
177	5.0 - 9.0 % of mass 176	4.9	(6.2)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-274898/17	G2_3693.D	04/28/2015	16:19
	IC 280-274898/18	G2_3694.D	04/28/2015	16:38
	IC 280-274898/19	G2_3695.D	04/28/2015	16:58
	ICIS 280-274898/20	G2_3696.D	04/28/2015	17:17
	IC 280-274898/21	G2_3697.D	04/28/2015	17:36
	IC 280-274898/22	G2_3698.D	04/28/2015	17:55
	ICV 280-274898/23	G2_3699.D	04/28/2015	18:14

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab File ID: G2_4148.D BFB Injection Date: 05/11/2015

Instrument ID: VMS_G2 BFB Injection Time: 05:48

Analysis Batch No.: 276788

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.7	
75	30.0 - 60.0 % of mass 95	49.2	
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	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	86.4	
175	5.0 - 9.0 % of mass 174	7.0	(8.1)1
176	95.0 - 101.0 % of mass 174	84.5	(97.8)1
177	5.0 - 9.0 % of mass 176	5.4	(6.4)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-276788/9	G2_4152.D	05/11/2015	07:45
	IC 280-276788/10	G2_4153.D	05/11/2015	08:04
	IC 280-276788/11	G2_4154.D	05/11/2015	08:23
	IC 280-276788/12	G2_4155.D	05/11/2015	08:42
	IC 280-276788/13	G2_4156.D	05/11/2015	09:01
	IC 280-276788/14	G2_4157.D	05/11/2015	09:20
	IC 280-276788/15	G2_4158.D	05/11/2015	09:39
	ICV 280-276788/16	G2_4161.D	05/11/2015	10:51

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab File ID: G2_4242.D BFB Injection Date: 05/12/2015

Instrument ID: VMS_G2 BFB Injection Time: 17:47

Analysis Batch No.: 277119

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.3	
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	83.8	
175	5.0 - 9.0 % of mass 174	5.8	(7.0)1
176	95.0 - 101.0 % of mass 174	80.7	(96.4)1
177	5.0 - 9.0 % of mass 176	6.3	(7.8)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
	CCV 280-277119/2	G2_4243.D	05/12/2015	18:12
	CCV 280-277119/3	G2_4244.D	05/12/2015	18:32
	LCS 280-277119/4	G2_4245.D	05/12/2015	18:53
	MB 280-277119/6	G2_4246.D	05/12/2015	19:13
54402-EB12-0515	280-68855-2	G2_4248.D	05/12/2015	19:54
54403-TB12-0515	280-68855-1	G2_4275.D	05/13/2015	04:30
	CCVC 280-277119/40	G2_4276.D	05/13/2015	04:49

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab File ID: Z6760.D BFB Injection Date: 04/27/2015

Instrument ID: VMS_Z BFB Injection Time: 06:31

Analysis Batch No.: 274661

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.3	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	65.6	
175	5.0 - 9.0 % of mass 174	5.0	(7.6)1
176	95.0 - 101.0 % of mass 174	65.3	(99.5)1
177	5.0 - 9.0 % of mass 176	4.6	(7.0)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-274661/18	Z6773.D	04/27/2015	11:28
	IC 280-274661/19	Z6774.D	04/27/2015	11:51
	IC 280-274661/20	Z6775.D	04/27/2015	12:13
	ICIS 280-274661/21	Z6776.D	04/27/2015	12:36
	IC 280-274661/22	Z6777.D	04/27/2015	12:59
	IC 280-274661/23	Z6778.D	04/27/2015	13:21
	ICV 280-274661/24	Z6780.D	04/27/2015	14:12

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab File ID: Z7568.D BFB Injection Date: 05/14/2015

Instrument ID: VMS_Z BFB Injection Time: 07:49

Analysis Batch No.: 277378

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	44.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	74.2	
175	5.0 - 9.0 % of mass 174	5.5	(7.5)1
176	95.0 - 101.0 % of mass 174	73.3	(98.8)1
177	5.0 - 9.0 % of mass 176	5.0	(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
	CCV 280-277378/3	Z7569.D	05/14/2015	07:56
	IC 280-277378/9	Z7570.D	05/14/2015	08:19
	IC 280-277378/10	Z7571.D	05/14/2015	08:42
	IC 280-277378/11	Z7572.D	05/14/2015	09:05
	IC 280-277378/12	Z7573.D	05/14/2015	09:28
	IC 280-277378/13	Z7574.D	05/14/2015	09:50
	IC 280-277378/14	Z7575.D	05/14/2015	10:13
	IC 280-277378/15	Z7576.D	05/14/2015	10:35
	ICV 280-277378/16	Z7578.D	05/14/2015	11:21
	LCS 280-277378/17	Z7579.D	05/14/2015	11:44
54400-MW44D-0515	280-68855-3	Z7581.D	05/14/2015	12:33
54402-EB13-0515	280-68855-5	Z7584.D	05/14/2015	14:01
	MB 280-277378/18	Z7585.D	05/14/2015	14:24
	CCVC 280-277378/22	Z7586.D	05/14/2015	14:47

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Sample No.: ICIS 280-274898/20 Date Analyzed: 04/28/2015 17:17

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_3696.D Heated Purge: (Y/N) N

Calibration ID: 22148

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		209686	5.57	1780246	7.53	372603	9.79
UPPER LIMIT		419372	6.07	3560492	8.03	745206	10.29
LOWER LIMIT		104843	5.07	890123	7.03	186302	9.29
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-274898/23		184517	5.57	1646174	7.53	344955	9.79
ICV 280-276788/16		220959	5.57	2074335	7.53	474189	9.79
CCV 280-277119/2		156342	5.57	1459672	7.53	357998	9.80
CCV 280-277119/3		145061	5.57	1402947	7.53	325088	9.80
LCS 280-277119/4		148312	5.57	1536816	7.53	362175	9.79
MB 280-277119/6		139097	5.57	1385984	7.53	317958	9.79
280-68855-2	54402-EB12-0515	107610	5.57	1448537	7.53	326233	9.79
280-68855-1	54403-TB12-0515	109873	5.57	1294410	7.53	304814	9.80
CCVC 280-277119/40		112720	5.57	1289347	7.53	305917	9.79

TBA = TBA-d9 (IS)
FB = Fluorobenzene
CBZ = Chlorobenzene-d5

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

Column used to flag values outside QC limits

FORM VIII 8260B

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Sample No.: ICIS 280-274898/20 Date Analyzed: 04/28/2015 17:17

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_3696.D Heated Purge: (Y/N) N

Calibration ID: 22148

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		483842	11.61				
UPPER LIMIT		967684	12.11				
LOWER LIMIT		241921	11.11				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-274898/23		442019	11.61				
ICV 280-276788/16		641380	11.61				
CCV 280-277119/2		550051	11.61				
CCV 280-277119/3		429767	11.61				
LCS 280-277119/4		521939	11.61				
MB 280-277119/6		435011	11.61				
280-68855-2	54402-EB12-0515	417742	11.61				
280-68855-1	54403-TB12-0515	401380	11.61				
CCVC 280-277119/40		471272	11.61				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260B

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Sample No.: ICIS 280-274661/21 Date Analyzed: 04/27/2015 12:36

Instrument ID: VMS_Z GC Column: DB-624 (75.53) ID: 0.53(mm)

Lab File ID (Standard): Z6776.D Heated Purge: (Y/N) N

Calibration ID: 22133

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		129478	3.49	718308	6.38	168188	11.01
UPPER LIMIT		258956	3.99	1436616	6.88	336376	11.51
LOWER LIMIT		64739	2.99	359154	5.88	84094	10.51
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-274661/24		125414	3.47	744177	6.38	174677	11.01
ICV 280-277378/16		120219	3.49	729435	6.38	172126	11.02
LCS 280-277378/17		119882	3.49	728556	6.38	171086	11.01
280-68855-3	54400-MW44D-0515	100361	3.47	707784	6.37	171713	11.02
280-68855-5	54402-EB13-0515	132256	3.49	714147	6.39	177776	11.02

TBA = TBA-d9 (IS)
FB = Fluorobenzene
CBZ = Chlorobenzene-d5

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

Column used to flag values outside QC limits

FORM VIII 8260B

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Sample No.: ICIS 280-274661/21 Date Analyzed: 04/27/2015 12:36

Instrument ID: VMS_Z GC Column: DB-624 (75.53) ID: 0.53(mm)

Lab File ID (Standard): Z6776.D Heated Purge: (Y/N) N

Calibration ID: 22133

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		301653	15.11				
UPPER LIMIT		603306	15.61				
LOWER LIMIT		150827	14.61				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-274661/24		309431	15.11				
ICV 280-277378/16		307598	15.11				
LCS 280-277378/17		311801	15.12				
280-68855-3	54400-MW44D-0515	278355	15.13				
280-68855-5	54402-EB13-0515	294012	15.13				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54403-TB12-0515 | Lab Sample ID: 280-68855-1
Matrix: Water | Lab File ID: G2_4275.D
Analysis Method: 8260B | Date Collected: 05/04/2015 00:00
Sample wt/vol: 20(mL) | Date Analyzed: 05/13/2015 04:30
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54403-TB12-0515 | Lab Sample ID: 280-68855-1
Matrix: Water | Lab File ID: G2_4275.D
Analysis Method: 8260B | Date Collected: 05/04/2015 00:00
Sample wt/vol: 20(mL) | Date Analyzed: 05/13/2015 04:30
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.80	U	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1

SDG No.:

Client Sample ID: 54403-TB12-0515 | Lab Sample ID: 280-68855-1

Matrix: Water | Lab File ID: G2_4275.D

Analysis Method: 8260B | Date Collected: 05/04/2015 00:00

Sample wt/vol: 20(mL) | Date Analyzed: 05/13/2015 04:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

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

Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	98		85-114
1868-53-7	Dibromofluoromethane (Surr)	95		80-119
2037-26-5	Toluene-d8 (Surr)	92		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4275.D
Lims ID: 280-68855-B-1 Lab Sample ID: 280-68855-1
Client ID: 54403-TB12-0515
Sample Type: Client
Inject. Date: 13-May-2015 04:30:30 ALS Bottle#: 42 Worklist Smp#: 39
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68855-b-1 PH<2
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-May-2015 16:10:36 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 13-May-2015 16:09:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	109873	250.0	
* 2 Fluorobenzene	96	7.526	7.526	0.000	98	1294410	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.800	0.000	87	304814	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	95	401380	12.5	
* 5 1,4-Dioxane-d8	96		0.000				ND	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	93	264367	9.48	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.269	0.000	96	234601	9.56	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	94	1168175	9.20	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	91	352009	9.80	
13 Dichlorodifluoromethane	85		3.895				ND	
14 Chloromethane	50		4.091				ND	
16 Vinyl chloride	62		4.230				ND	
19 Bromomethane	94		4.593				ND	
20 Chloroethane	64		4.663				ND	
22 Trichlorofluoromethane	101		4.887				ND	
29 Acetone	43		5.292				ND	
32 1,1-Dichloroethene	96		5.334				ND	
37 Carbon disulfide	76		5.613				ND	
38 2-Methyl-2-propanol	59		5.641				ND	
39 Methylene Chloride	84		5.669				ND	
41 Methyl tert-butyl ether	73		5.864				ND	
42 trans-1,2-Dichloroethene	96		5.892				ND	
46 1,1-Dichloroethane	63		6.218				ND	
50 2-Butanone (MEK)	43		6.583				ND	
53 cis-1,2-Dichloroethene	96		6.647				ND	
54 2,2-Dichloropropane	77		6.683				ND	
56 Chlorobromomethane	128		6.840				ND	
57 Chloroform	83		6.847				ND	
60 1,1,1-Trichloroethane	97		7.076				ND	
62 1,1-Dichloropropene	75		7.176				ND	
63 Carbon tetrachloride	117		7.219				ND	
64 1,2-Dichloroethane	62		7.326				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
66 Benzene	78		7.355				ND	
69 Trichloroethene	95		7.820				ND	
72 1,2-Dichloropropane	63		7.999				ND	
75 Dibromomethane	93		8.099				ND	
76 Dichlorobromomethane	83		8.170				ND	
79 cis-1,3-Dichloropropene	75		8.492				ND	
80 4-Methyl-2-pentanone (MIBK	43		8.549				ND	
81 Toluene	91		8.778				ND	
83 trans-1,3-Dichloropropene	75		8.871				ND	
84 1,1,2-Trichloroethane	97		9.028				ND	
85 2-Hexanone	43		9.143				ND	
86 1,3-Dichloropropane	76		9.164				ND	
87 Tetrachloroethene	164		9.200				ND	
88 Chlorodibromomethane	129		9.357				ND	
90 Ethylene Dibromide	107		9.479				ND	
92 Chlorobenzene	112		9.822				ND	
93 1,1,1,2-Tetrachloroethane	131		9.858				ND	
94 Ethylbenzene	106		9.865				ND	
95 m-Xylene & p-Xylene	106		9.936				ND	
97 o-Xylene	106		10.251				ND	
96 Styrene	104		10.251				ND	
98 Bromoform	173		10.444				ND	
99 Isopropylbenzene	105		10.515				ND	
102 1,1,2,2-Tetrachloroethane	83		10.701				ND	
104 1,2,3-Trichloropropane	110		10.773				ND	
105 Bromobenzene	156		10.823				ND	
106 N-Propylbenzene	120		10.830				ND	
107 1,3,5-Trimethylbenzene	105		10.937				ND	
108 2-Chlorotoluene	126		10.952				ND	
109 4-Chlorotoluene	126		11.023				ND	
110 tert-Butylbenzene	119		11.230				ND	
111 1,2,4-Trimethylbenzene	105		11.259				ND	
112 sec-Butylbenzene	134		11.409				ND	
113 4-Isopropyltoluene	119		11.502				ND	
114 1,3-Dichlorobenzene	146		11.567				ND	
116 1,4-Dichlorobenzene	146		11.631				ND	
117 n-Butylbenzene	91		11.860				ND	
118 1,2-Dichlorobenzene	146		11.988				ND	
119 1,2-Dibromo-3-Chloropropan	157		12.711				ND	
121 1,2,4-Trichlorobenzene	180		13.647				ND	
122 Hexachlorobutadiene	225		13.812				ND	
123 Naphthalene	128		14.005				ND	
124 1,2,3-Trichlorobenzene	180		14.319				ND	
S 149 1,2-Dichloroethene, Total	96		2.000				ND	
S 150 Trihalomethanes, Total	1		0.000				ND	
S 151 Xylenes, Total (URS)	1		0.000				ND	
S 152 Total BTEX	1		0.000				ND	
S 153 1,3-Dichloropropene, Total	1		0.000				ND	
S 154 1,2-Dichloroethene, Total	1		0.000				ND	
S 155 Xylenes, Total	106		0.000				ND	

Reagents:

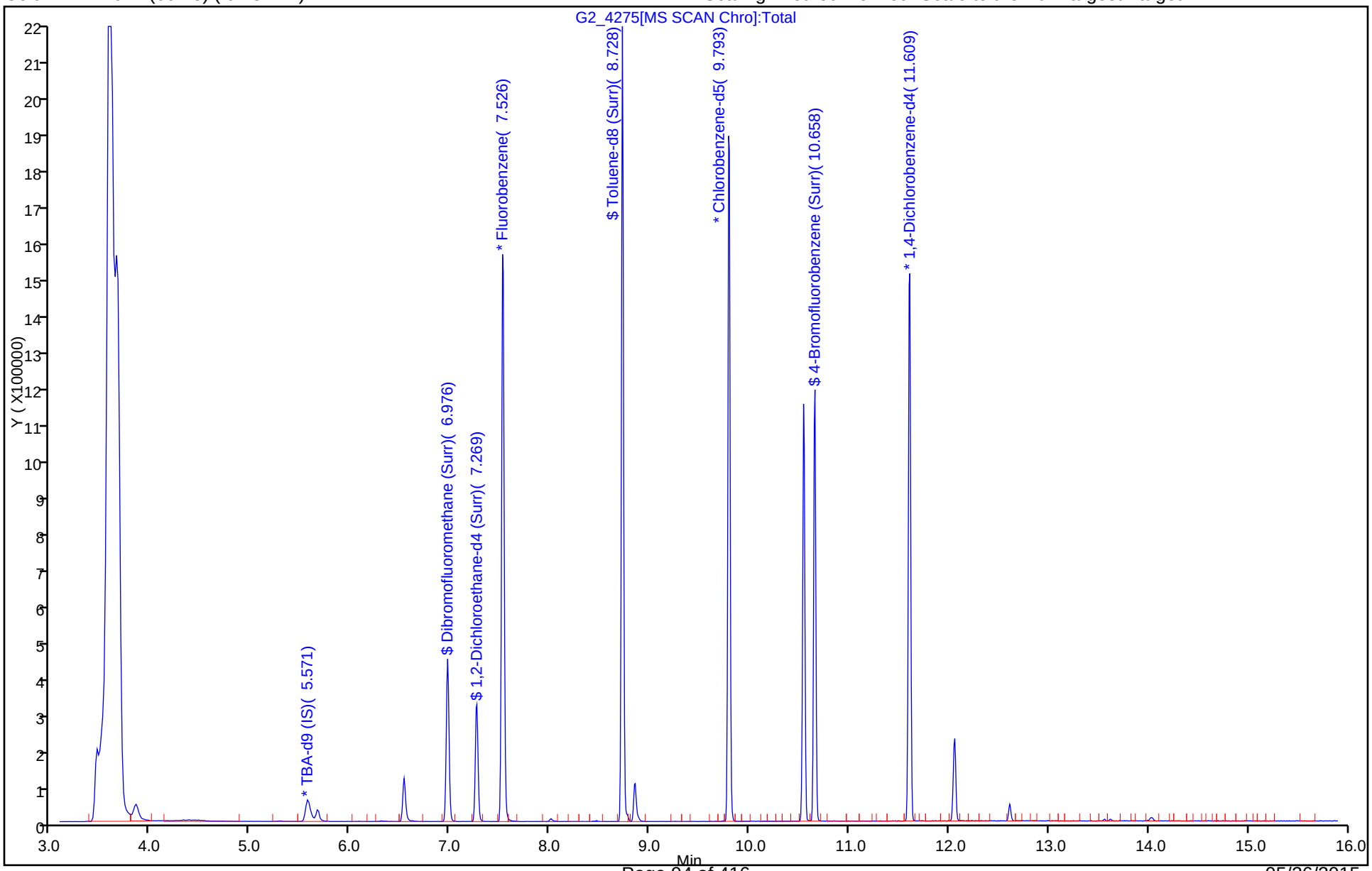
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 13-May-2015 16:10:36 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4275.D				
Injection Date:	13-May-2015 04:30:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-68855-B-1	Lab Sample ID:	280-68855-1	Worklist Smp#:	39
Client ID:	54403-TB12-0515				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54402-EB12-0515 | Lab Sample ID: 280-68855-2
Matrix: Water | Lab File ID: G2_4248.D
Analysis Method: 8260B | Date Collected: 05/04/2015 18:40
Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 19:54
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	9.4	J	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54402-EB12-0515 | Lab Sample ID: 280-68855-2
Matrix: Water | Lab File ID: G2_4248.D
Analysis Method: 8260B | Date Collected: 05/04/2015 18:40
Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 19:54
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.80	U	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1

SDG No.:

Client Sample ID: 54402-EB12-0515 | Lab Sample ID: 280-68855-2

Matrix: Water | Lab File ID: G2_4248.D

Analysis Method: 8260B | Date Collected: 05/04/2015 18:40

Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 19:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

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

Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		81-118
460-00-4	4-Bromofluorobenzene (Surr)	103		85-114
1868-53-7	Dibromofluoromethane (Surr)	93		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4248.D
Lims ID: 280-68855-C-2 Lab Sample ID: 280-68855-2
Client ID: 54402-EB12-0515
Sample Type: Client
Inject. Date: 12-May-2015 19:54:30 ALS Bottle#: 15 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68855-c-2 PH<2
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-May-2015 16:10:11 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 12-May-2015 20:20:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	107610	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	1448537	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.801	-0.008	86	326233	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	96	417742	12.5	
* 5 1,4-Dioxane-d8	96		0.000				ND	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	93	290433	9.31	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.262	0.007	96	254528	9.27	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	94	1341732	9.87	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	92	384807	10.3	
13 Dichlorodifluoromethane	85		3.895				ND	
14 Chloromethane	50		4.091				ND	
16 Vinyl chloride	62		4.230				ND	
19 Bromomethane	94		4.593				ND	
20 Chloroethane	64		4.663				ND	
22 Trichlorofluoromethane	101		4.887				ND	
29 Acetone	43	5.292	5.292	0.000	98	31985	9.38	
32 1,1-Dichloroethene	96		5.334				ND	
37 Carbon disulfide	76		5.613				ND	
38 2-Methyl-2-propanol	59		5.641				ND	
39 Methylene Chloride	84		5.669				ND	
41 Methyl tert-butyl ether	73		5.864				ND	
42 trans-1,2-Dichloroethene	96		5.892				ND	
46 1,1-Dichloroethane	63		6.218				ND	
50 2-Butanone (MEK)	43		6.583				ND	
53 cis-1,2-Dichloroethene	96		6.647				ND	
54 2,2-Dichloropropane	77		6.683				ND	
56 Chlorobromomethane	128		6.840				ND	
57 Chloroform	83		6.847				ND	
60 1,1,1-Trichloroethane	97		7.076				ND	
62 1,1-Dichloropropene	75		7.176				ND	
63 Carbon tetrachloride	117		7.219				ND	
64 1,2-Dichloroethane	62		7.326				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
66 Benzene	78		7.355				ND	
69 Trichloroethene	95		7.820				ND	
72 1,2-Dichloropropane	63		7.999				ND	
75 Dibromomethane	93		8.099				ND	
76 Dichlorobromomethane	83		8.170				ND	
79 cis-1,3-Dichloropropene	75		8.492				ND	
80 4-Methyl-2-pentanone (MIBK	43		8.549				ND	
81 Toluene	91		8.778				ND	
83 trans-1,3-Dichloropropene	75		8.871				ND	
84 1,1,2-Trichloroethane	97		9.028				ND	
85 2-Hexanone	43		9.143				ND	
86 1,3-Dichloropropane	76		9.164				ND	
87 Tetrachloroethene	164		9.200				ND	
88 Chlorodibromomethane	129		9.357				ND	
90 Ethylene Dibromide	107		9.479				ND	
92 Chlorobenzene	112		9.822				ND	
93 1,1,1,2-Tetrachloroethane	131		9.858				ND	
94 Ethylbenzene	106		9.865				ND	
95 m-Xylene & p-Xylene	106		9.936				ND	
97 o-Xylene	106	10.251	10.251	0.000	97	7815	0.1186	
96 Styrene	104		10.251				ND	
98 Bromoform	173		10.444				ND	
99 Isopropylbenzene	105		10.515				ND	
102 1,1,2,2-Tetrachloroethane	83		10.701				ND	
104 1,2,3-Trichloropropane	110		10.773				ND	
105 Bromobenzene	156		10.823				ND	
106 N-Propylbenzene	120		10.830				ND	
107 1,3,5-Trimethylbenzene	105		10.937				ND	
108 2-Chlorotoluene	126		10.952				ND	
109 4-Chlorotoluene	126		11.023				ND	
110 tert-Butylbenzene	119		11.230				ND	
111 1,2,4-Trimethylbenzene	105		11.259				ND	
112 sec-Butylbenzene	134		11.409				ND	
113 4-Isopropyltoluene	119		11.502				ND	
114 1,3-Dichlorobenzene	146		11.567				ND	
116 1,4-Dichlorobenzene	146		11.631				ND	
117 n-Butylbenzene	91		11.860				ND	
118 1,2-Dichlorobenzene	146		11.988				ND	
119 1,2-Dibromo-3-Chloropropan	157		12.711				ND	
121 1,2,4-Trichlorobenzene	180		13.647				ND	
122 Hexachlorobutadiene	225		13.812				ND	
123 Naphthalene	128		14.005				ND	
124 1,2,3-Trichlorobenzene	180		14.319				ND	

Reagents:

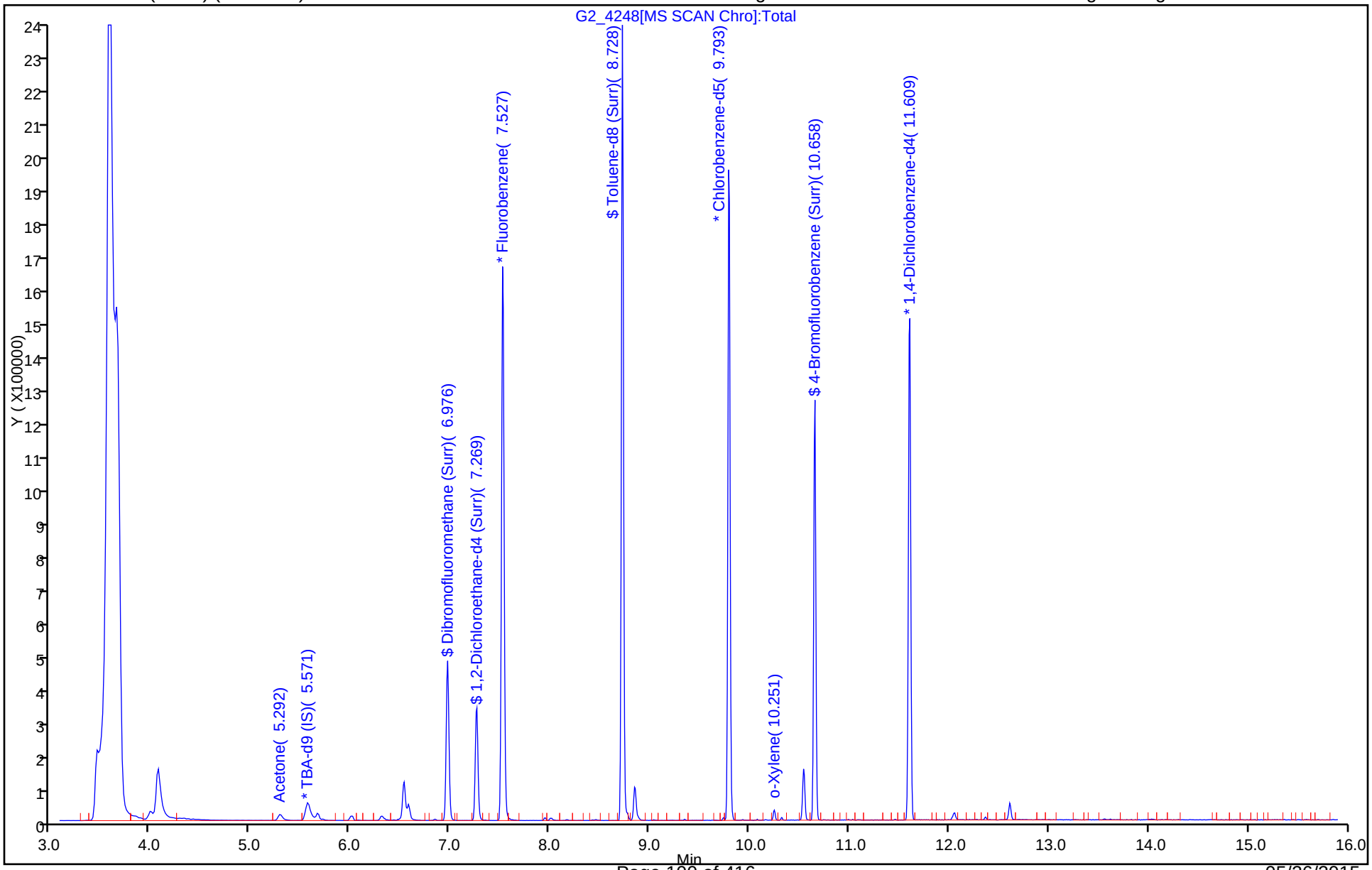
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added: 0.80	Units: uL	Run Reagent

Report Date: 13-May-2015 16:10:16 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4248.D				
Injection Date:	12-May-2015 19:54:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-68855-C-2	Lab Sample ID:	280-68855-2	Worklist Smp#:	11
Client ID:	54402-EB12-0515				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

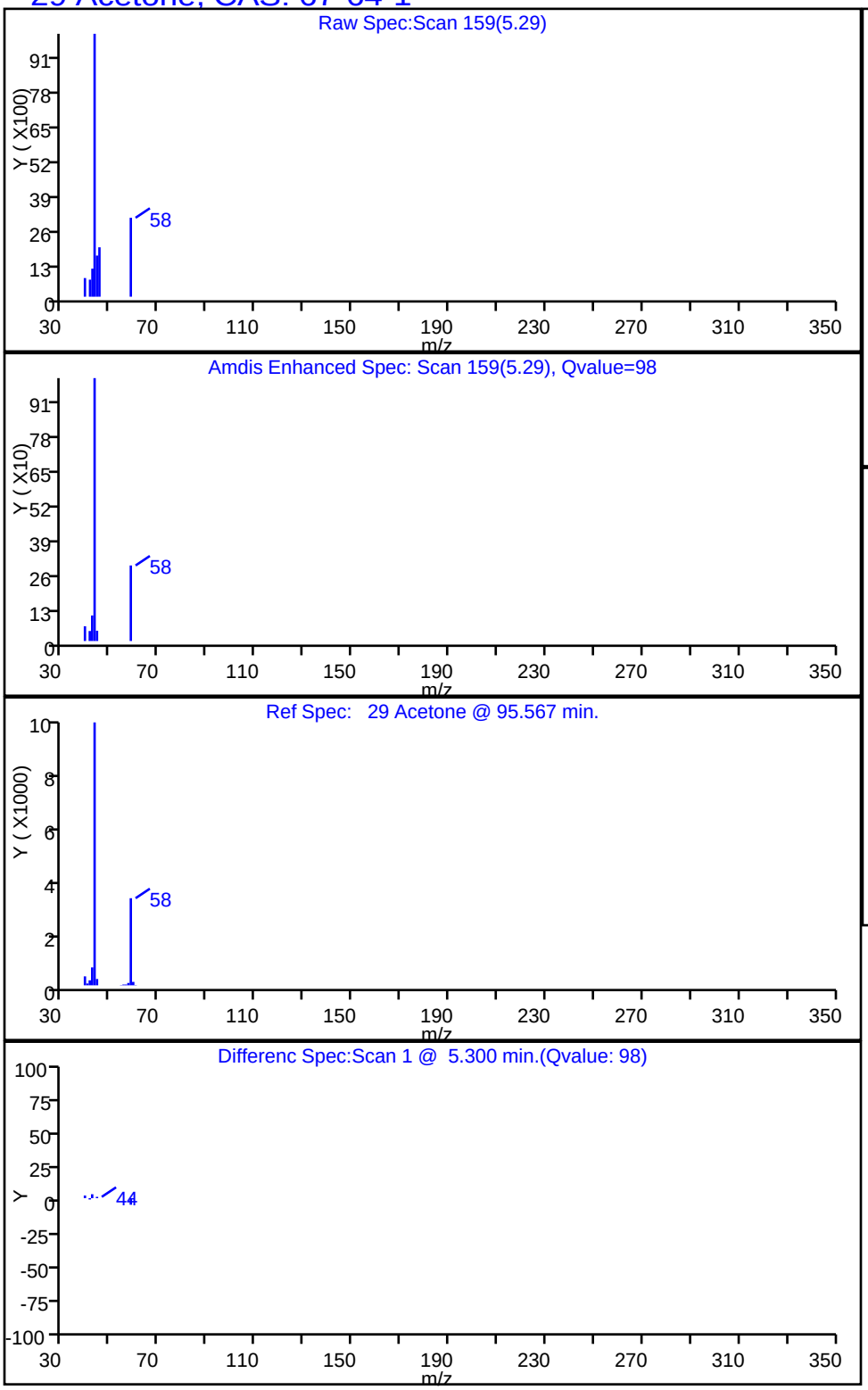


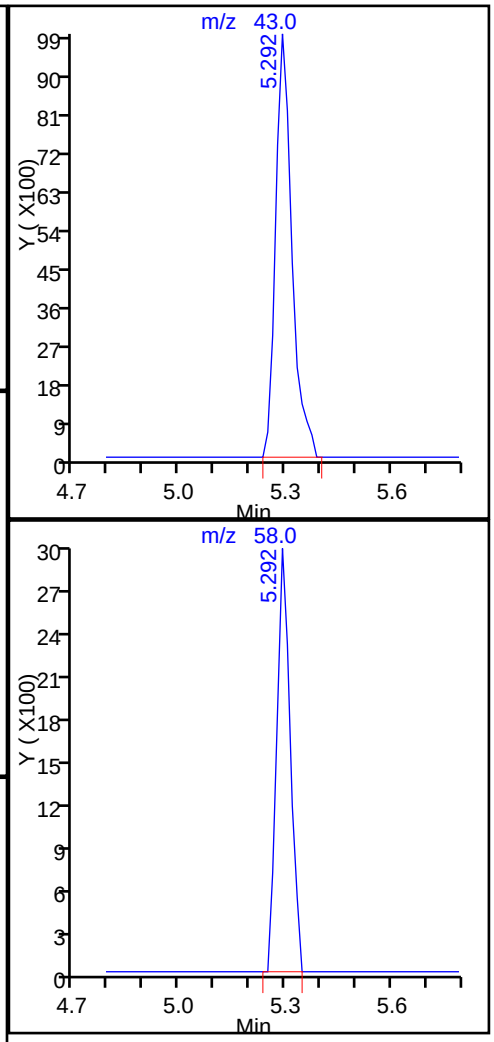
Report Date: 13-May-2015 16:10:16 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4248.D				
Injection Date:	12-May-2015 19:54:30	Instrument ID:	VMS_G2		
Lims ID:	280-68855-C-2	Lab Sample ID:	280-68855-2		
Client ID:	54402-EB12-0515				
Operator ID:	DUKESA	ALS Bottle#:	15	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

29 Acetone, CAS: 67-64-1





FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54400-MW44D-0515 | Lab Sample ID: 280-68855-3
Matrix: Water | Lab File ID: Z7581.D
Analysis Method: 8260B | Date Collected: 05/05/2015 12:15
Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 12:33
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.49	J	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.36	J	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54400-MW44D-0515 | Lab Sample ID: 280-68855-3
Matrix: Water | Lab File ID: Z7581.D
Analysis Method: 8260B | Date Collected: 05/05/2015 12:15
Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 12:33
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	1.4	J	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.75	J	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54400-MW44D-0515
Lab Sample ID: 280-68855-3
Matrix: Water
Lab File ID: Z7581.D
Analysis Method: 8260B
Date Collected: 05/05/2015 12:15
Sample wt/vol: 20(mL)
Date Analyzed: 05/14/2015 12:33
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 277378
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		81-118
460-00-4	4-Bromofluorobenzene (Surr)	113		85-114
1868-53-7	Dibromofluoromethane (Surr)	103		80-119
2037-26-5	Toluene-d8 (Surr)	111		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7581.D				
Lims ID:	280-68855-B-3	Lab Sample ID:	280-68855-3		
Client ID:	54400-MW44D-0515				
Sample Type:	Client				
Inject. Date:	14-May-2015 12:33:30	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-68855-B-3 ph<2				
Operator ID:	moanm	Instrument ID:	VMS_Z		
Method:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	15-May-2015 01:16:33	Calib Date:	14-May-2015 10:35:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK022				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.468	3.488	-0.020	78	100361	250.0	
* 2 Fluorobenzene	96	6.373	6.377	-0.004	98	707784	12.5	
* 3 1,4-Dioxane-d8	96	7.365	7.292	0.073	1	4727	0	
* 4 Chlorobenzene-d5	119	11.019	11.023	-0.004	82	171713	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.126	15.129	-0.003	94	278355	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.451	5.472	-0.021	66	351765	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.886	5.907	-0.021	67	122159	8.43	
$ 10 Toluene-d8 (Surr)	98	8.688	8.709	-0.020	92	650691	11.3	
$ 11 4-Bromofluorobenzene (Surr	95	13.055	13.059	-0.004	89	341559	11.6	
27 Dichlorodifluoromethane	85		1.905				ND	
30 Chloromethane	50		1.992				ND	
32 Vinyl chloride	62		2.114				ND	
35 Bromomethane	94		2.340				ND	
36 Chloroethane	64		2.392				ND	
38 Trichlorofluoromethane	101		2.601				ND	
45 1,1-Dichloroethene	96		3.036				ND	
48 Acetone	43		3.053				ND	
50 Carbon disulfide	76	3.241	3.280	-0.039	95	18710	0.2944	
54 Methylene Chloride	84	3.433	3.471	-0.038	75	22485	1.41	
55 2-Methyl-2-propanol	59		3.575				ND	
57 trans-1,2-Dichloroethene	96		3.767				ND	
56 Methyl tert-butyl ether	73		3.784				ND	
62 1,1-Dichloroethane	63		4.202				ND	
67 2-Butanone (MEK)	43		4.880				ND	
65 cis-1,2-Dichloroethene	96		4.880				ND	
66 2,2-Dichloropropane	77		4.898				ND	
71 Chlorobromomethane	128		5.176				ND	
74 Chloroform	83		5.263				ND	
75 1,1,1-Trichloroethane	97		5.542				ND	
78 1,1-Dichloropropene	75		5.750				ND	
77 Carbon tetrachloride	117		5.785				ND	
82 1,2-Dichloroethane	62		6.011				ND	
81 Benzene	78		6.011				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 Trichloroethene	95		6.916				ND	
90 1,2-Dichloropropane	63		7.195				ND	
92 Dibromomethane	93		7.369				ND	
94 Dichlorobromomethane	83		7.595				ND	
97 cis-1,3-Dichloropropene	75		8.273				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.517				ND	
99 Toluene	91		8.813				ND	
100 trans-1,3-Dichloropropene	75		9.126				ND	
102 1,1,2-Trichloroethane	97		9.422				ND	
104 1,3-Dichloropropane	76		9.683				ND	
103 Tetrachloroethene	164		9.700				ND	
105 2-Hexanone	43		9.840				ND	
107 Chlorodibromomethane	129		10.048				ND	
109 Ethylene Dibromide	107		10.240				ND	
111 Chlorobenzene	112		11.075				ND	
113 1,1,1,2-Tetrachloroethane	131		11.214				ND	
112 Ethylbenzene	106		11.284				ND	
114 m-Xylene & p-Xylene	106		11.493				ND	
115 o-Xylene	106		12.154				ND	
116 Styrene	104		12.171				ND	
117 Bromoform	173		12.467				ND	
118 Isopropylbenzene	105		12.815				ND	
121 Bromobenzene	156		13.302				ND	
122 1,1,2,2-Tetrachloroethane	83		13.320				ND	
124 1,2,3-Trichloropropane	110		13.372				ND	
123 N-Propylbenzene	120		13.546				ND	
126 2-Chlorotoluene	126		13.668				ND	
128 4-Chlorotoluene	126		13.859				ND	
127 1,3,5-Trimethylbenzene	105		13.877				ND	
129 tert-Butylbenzene	119		14.451				ND	
130 1,2,4-Trimethylbenzene	105		14.538				ND	
131 sec-Butylbenzene	134		14.851				ND	
132 1,3-Dichlorobenzene	146		15.008				ND	
133 4-Isopropyltoluene	119		15.129				ND	
134 1,4-Dichlorobenzene	146		15.164				ND	
138 1,2-Dichlorobenzene	146		15.808				ND	
137 n-Butylbenzene	91		15.843				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.939				ND	
141 1,2,4-Trichlorobenzene	180	17.875	17.879	-0.004	18	7217	0.3624	
142 Hexachlorobutadiene	225	18.067	18.070	-0.003	6	4575	0.2367	
143 Naphthalene	128	18.084	18.105	-0.021	7	14325	0.7503	
144 1,2,3-Trichlorobenzene	180	18.345	18.348	-0.003	17	7441	0.4893	

Reagents:

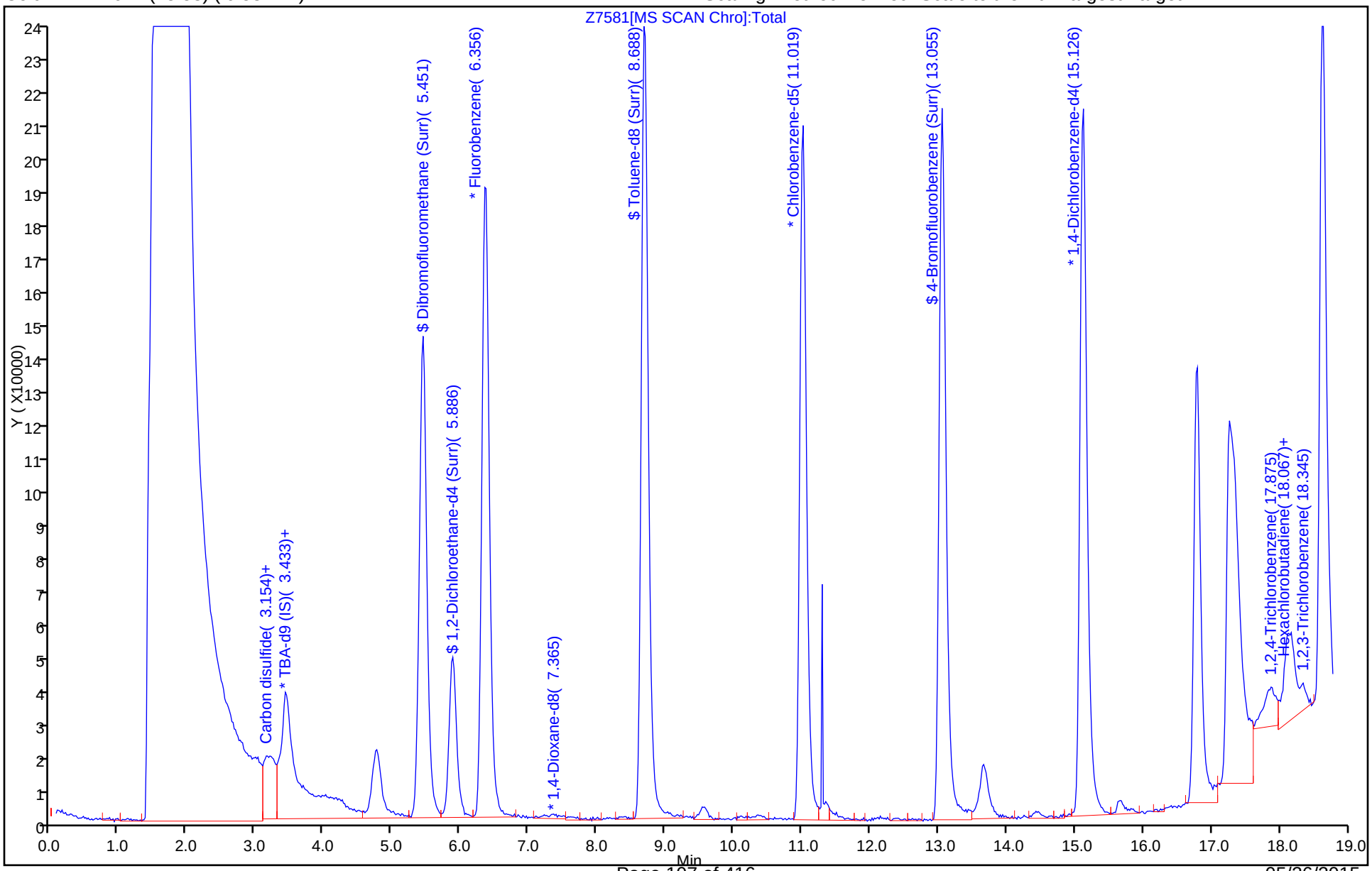
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.82	Units: uL	Run Reagent

Report Date: 15-May-2015 11:14:51 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7581.D				
Injection Date:	14-May-2015 12:33:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	280-68855-B-3	Lab Sample ID:	280-68855-3	Worklist Smp#:	19
Client ID:	54400-MW44D-0515				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

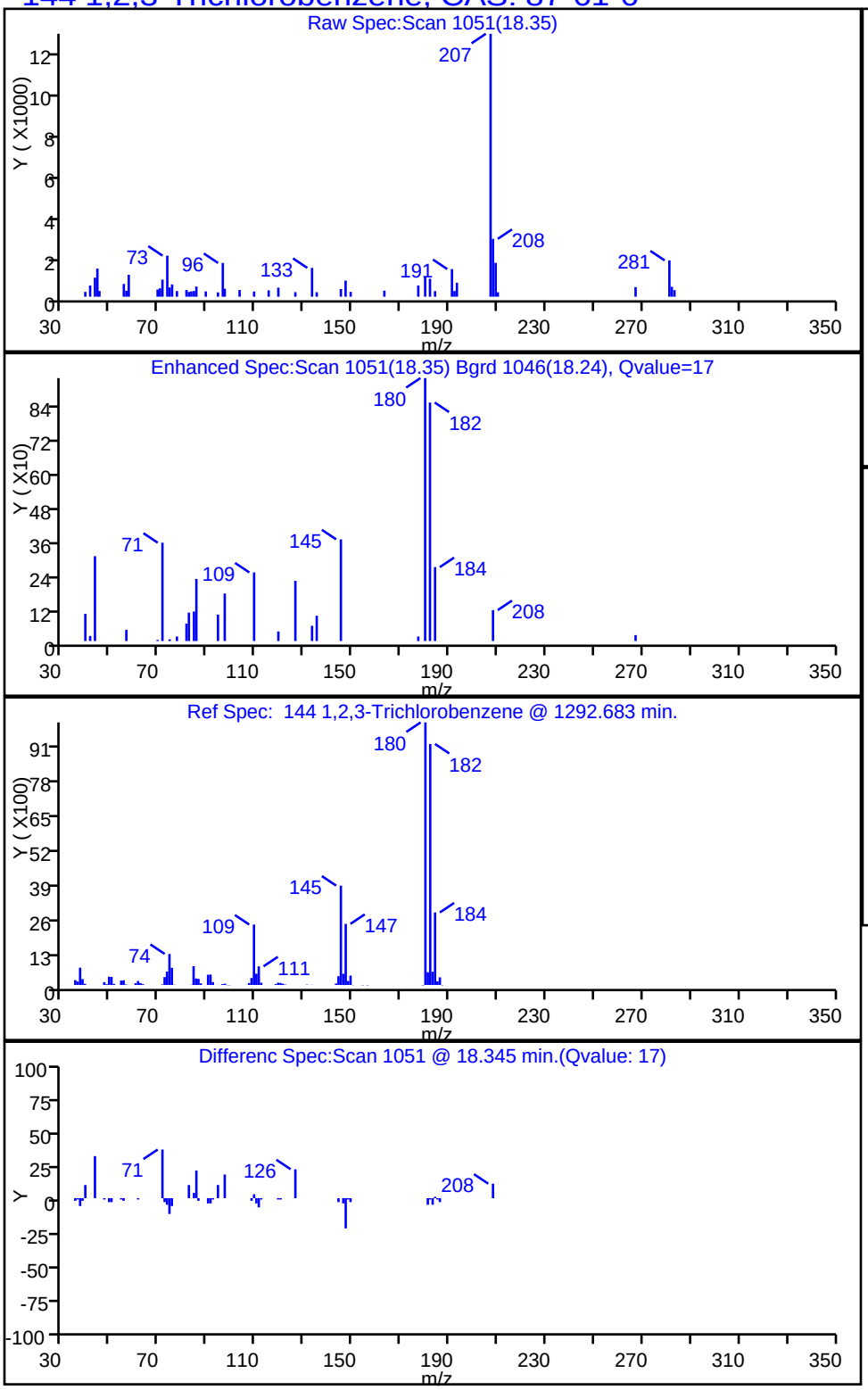


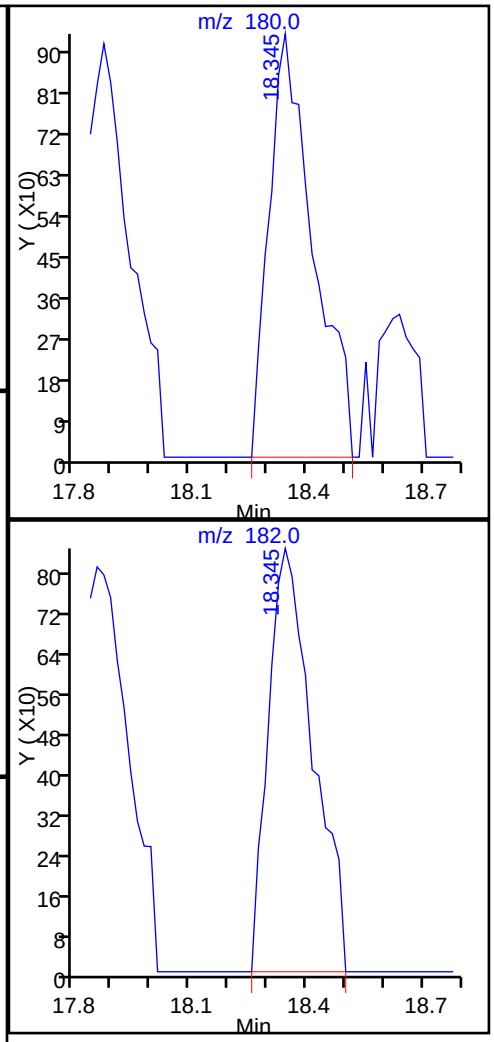
Report Date: 15-May-2015 11:14:51 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7581.D				
Injection Date:	14-May-2015 12:33:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-3	Lab Sample ID:	280-68855-3		
Client ID:	54400-MW44D-0515				
Operator ID:	moanm	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

144 1,2,3-Trichlorobenzene, CAS: 87-61-6



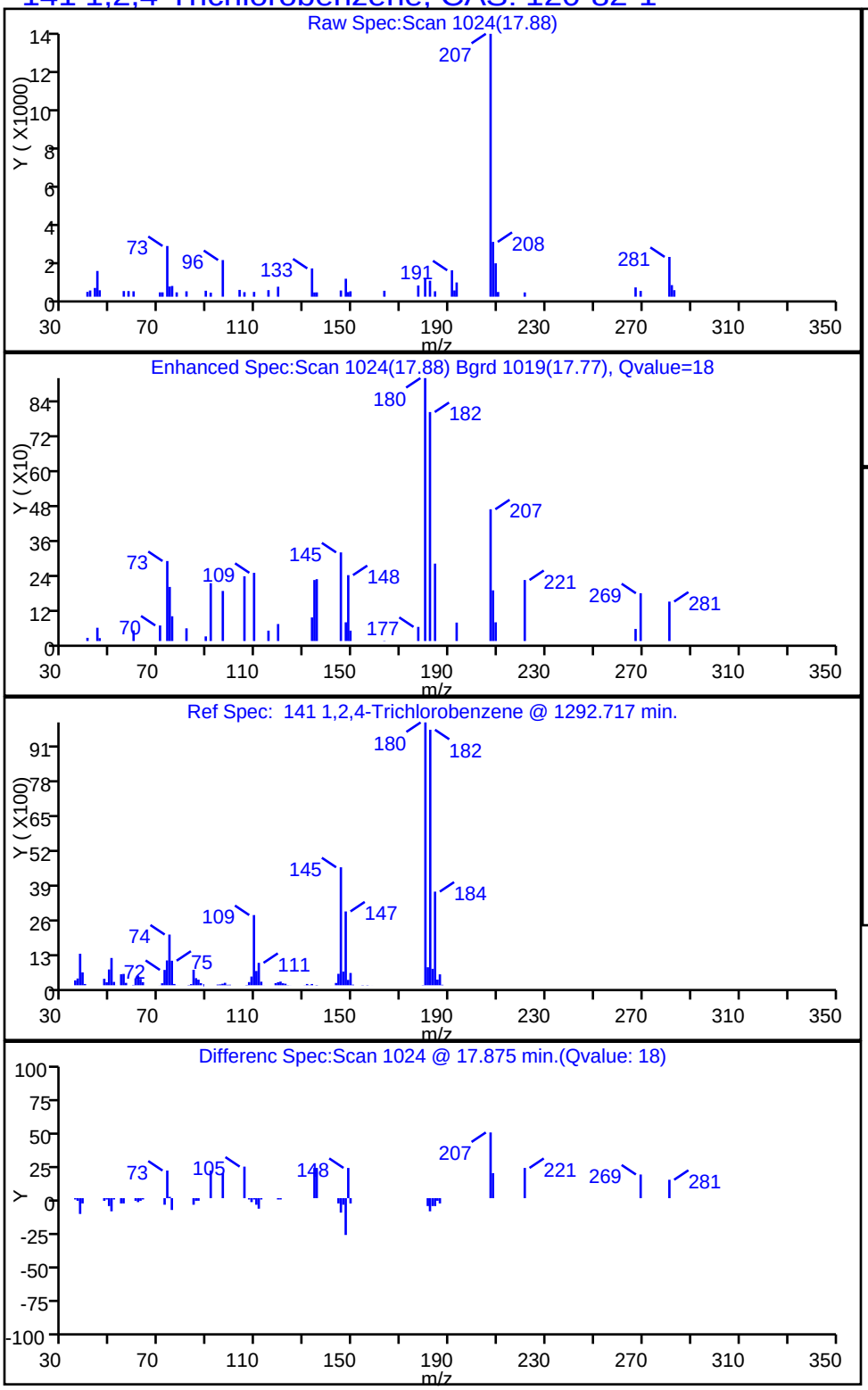


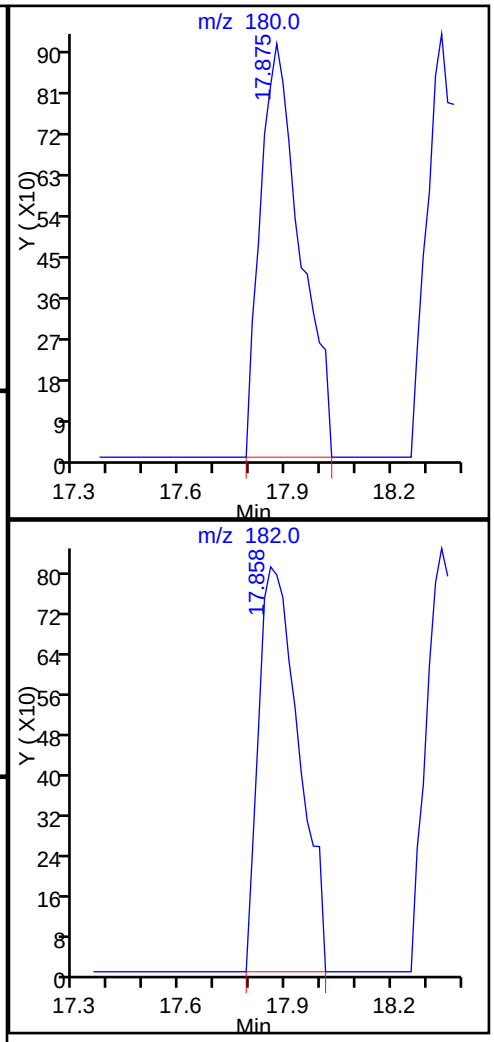
Report Date: 15-May-2015 11:14:51 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7581.D				
Injection Date:	14-May-2015 12:33:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-3	Lab Sample ID:	280-68855-3		
Client ID:	54400-MW44D-0515				
Operator ID:	moanm	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

141 1,2,4-Trichlorobenzene, CAS: 120-82-1



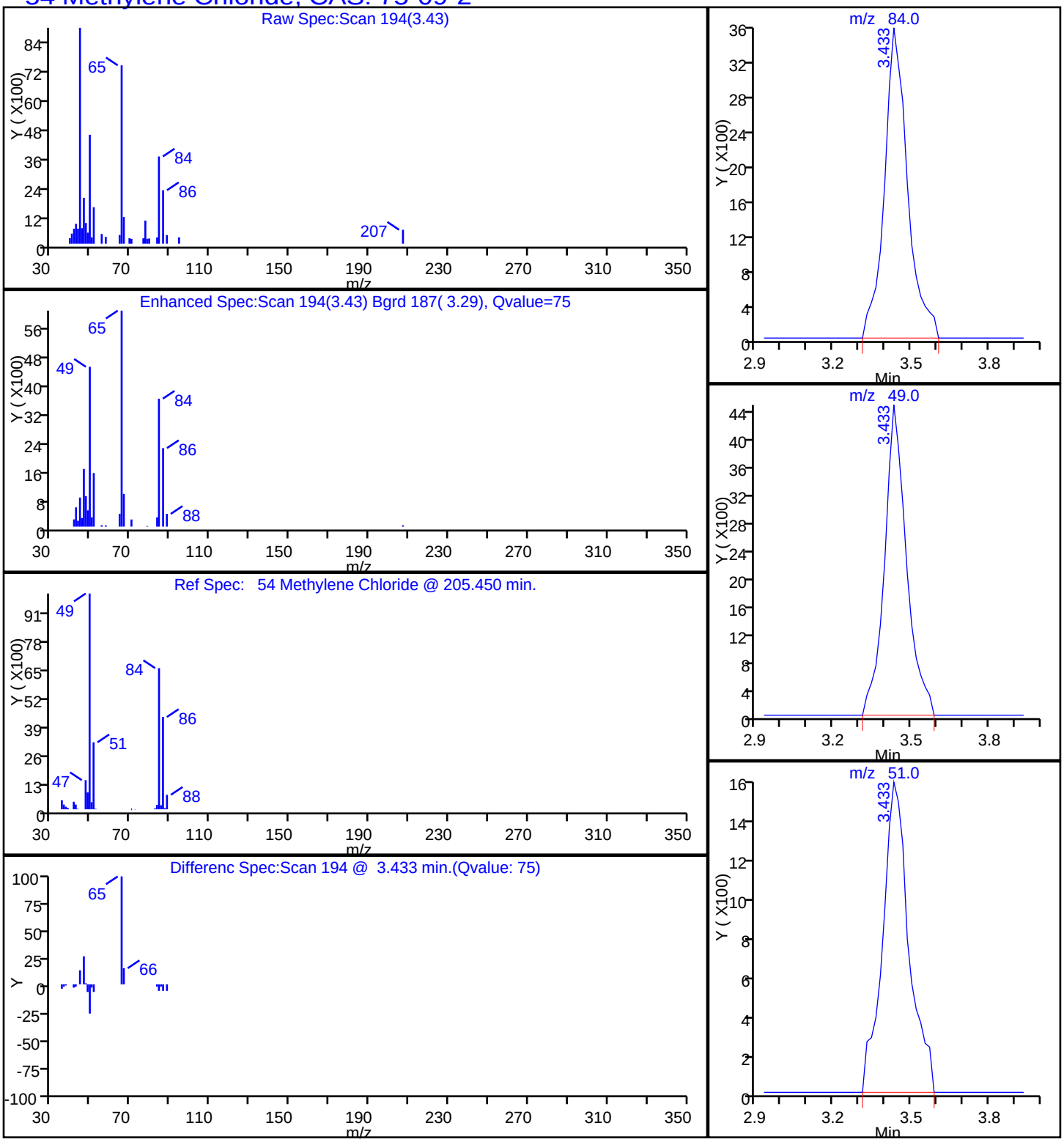


Report Date: 15-May-2015 11:14:51 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7581.D				
Injection Date:	14-May-2015 12:33:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-3	Lab Sample ID:	280-68855-3		
Client ID:	54400-MW44D-0515				
Operator ID:	moanm	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

54 Methylene Chloride, CAS: 75-09-2

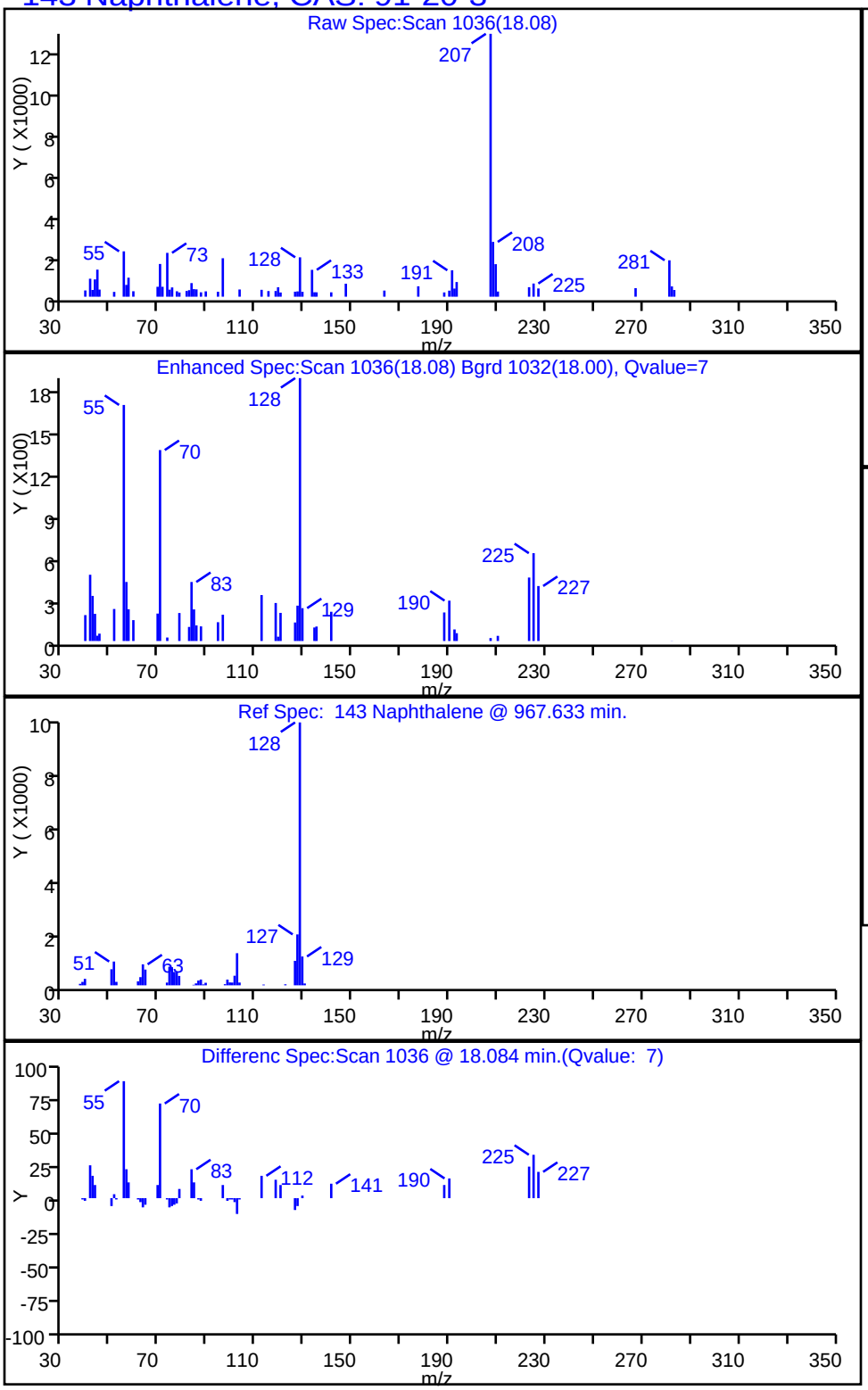


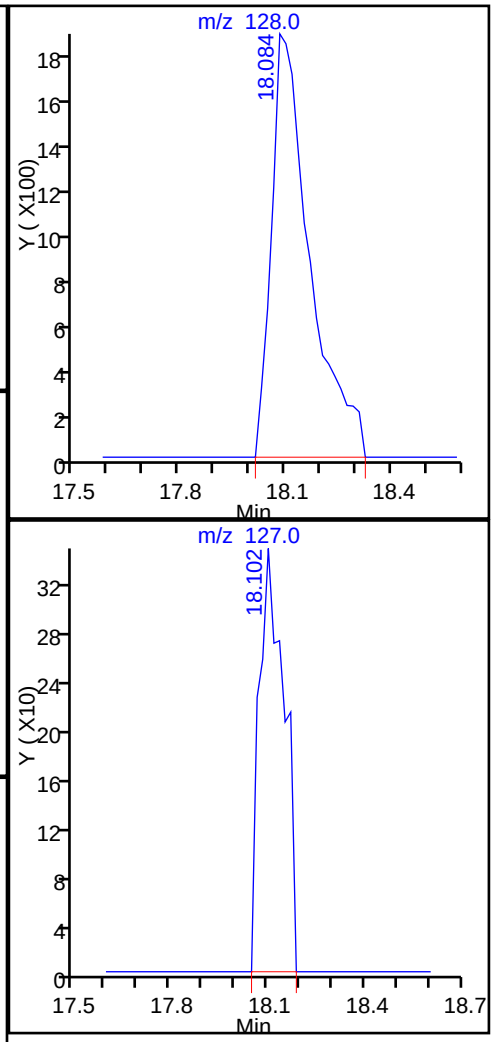
Report Date: 15-May-2015 11:14:51 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7581.D				
Injection Date:	14-May-2015 12:33:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-3	Lab Sample ID:	280-68855-3		
Client ID:	54400-MW44D-0515				
Operator ID:	moanm	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

143 Naphthalene, CAS: 91-20-3





FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54402-EB13-0515 | Lab Sample ID: 280-68855-5
Matrix: Water | Lab File ID: Z7584.D
Analysis Method: 8260B | Date Collected: 05/05/2015 18:30
Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 14:01
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.19	J	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	14		6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	10		10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: 54402-EB13-0515 | Lab Sample ID: 280-68855-5
Matrix: Water | Lab File ID: Z7584.D
Analysis Method: 8260B | Date Collected: 05/05/2015 18:30
Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 14:01
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	1.4	J	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1

SDG No.:

Client Sample ID: 54402-EB13-0515 | Lab Sample ID: 280-68855-5

Matrix: Water | Lab File ID: Z7584.D

Analysis Method: 8260B | Date Collected: 05/05/2015 18:30

Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 14:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)

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

Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		81-118
460-00-4	4-Bromofluorobenzene (Surr)	108		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	103		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7584.D
Lims ID: 280-68855-B-5 Lab Sample ID: 280-68855-5
Client ID: 54402-EB13-0515
Sample Type: Client
Inject. Date: 14-May-2015 14:01:30 ALS Bottle#: 16 Worklist Smp#: 21
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68855-B-5 ph<2
Operator ID: moanm Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 15-May-2015 01:16:33 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.485	3.488	-0.003	95	132256	250.0	
* 2 Fluorobenzene	96	6.391	6.377	0.014	99	714147	12.5	
* 3 1,4-Dioxane-d8	96	7.348	7.292	0.056	41	3368	0	
* 4 Chlorobenzene-d5	119	11.020	11.023	-0.003	84	177776	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.126	15.129	-0.003	95	294012	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.469	5.472	-0.003	94	351938	10.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.904	5.907	-0.003	94	127276	8.70	
$ 10 Toluene-d8 (Surr)	98	8.706	8.709	-0.002	92	628726	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.056	13.059	-0.003	92	343957	11.0	
27 Dichlorodifluoromethane	85		1.905				ND	
30 Chloromethane	50		1.992				ND	
32 Vinyl chloride	62		2.114				ND	
35 Bromomethane	94		2.340				ND	
36 Chloroethane	64		2.392				ND	
38 Trichlorofluoromethane	101		2.601				ND	
45 1,1-Dichloroethene	96		3.036				ND	
48 Acetone	43	3.068	3.053	0.015	93	8891	10.3	
50 Carbon disulfide	76		3.280				ND	
54 Methylene Chloride	84	3.468	3.471	-0.003	96	23032	1.43	
55 2-Methyl-2-propanol	59		3.575				ND	
57 trans-1,2-Dichloroethene	96		3.767				ND	
56 Methyl tert-butyl ether	73		3.784				ND	
62 1,1-Dichloroethane	63		4.202				ND	
67 2-Butanone (MEK)	43	4.895	4.880	0.015	99	28679	13.7	
65 cis-1,2-Dichloroethene	96		4.880				ND	
66 2,2-Dichloropropane	77		4.898				ND	
71 Chlorobromomethane	128		5.176				ND	
74 Chloroform	83		5.263				ND	
75 1,1,1-Trichloroethane	97		5.542				ND	
78 1,1-Dichloropropene	75		5.750				ND	
77 Carbon tetrachloride	117		5.785				ND	
82 1,2-Dichloroethane	62		6.011				ND	
81 Benzene	78		6.011				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 Trichloroethene	95		6.916				ND	
90 1,2-Dichloropropane	63		7.195				ND	
92 Dibromomethane	93		7.369				ND	
94 Dichlorobromomethane	83		7.595				ND	
97 cis-1,3-Dichloropropene	75		8.273				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.517				ND	
99 Toluene	91		8.813				ND	
100 trans-1,3-Dichloropropene	75		9.126				ND	
102 1,1,2-Trichloroethane	97		9.422				ND	
104 1,3-Dichloropropane	76		9.683				ND	
103 Tetrachloroethene	164		9.700				ND	
105 2-Hexanone	43		9.840				ND	
107 Chlorodibromomethane	129		10.048				ND	
109 Ethylene Dibromide	107		10.240				ND	
111 Chlorobenzene	112		11.075				ND	
113 1,1,1,2-Tetrachloroethane	131		11.214				ND	
112 Ethylbenzene	106		11.284				ND	
114 m-Xylene & p-Xylene	106		11.493				ND	
115 o-Xylene	106		12.154				ND	
116 Styrene	104		12.171				ND	
117 Bromoform	173		12.467				ND	
118 Isopropylbenzene	105		12.815				ND	
121 Bromobenzene	156		13.302				ND	
122 1,1,2,2-Tetrachloroethane	83		13.320				ND	
124 1,2,3-Trichloropropane	110		13.372				ND	
123 N-Propylbenzene	120		13.546				ND	
126 2-Chlorotoluene	126		13.668				ND	
128 4-Chlorotoluene	126		13.859				ND	
127 1,3,5-Trimethylbenzene	105		13.877				ND	
129 tert-Butylbenzene	119		14.451				ND	
130 1,2,4-Trimethylbenzene	105		14.538				ND	
131 sec-Butylbenzene	134		14.851				ND	
132 1,3-Dichlorobenzene	146		15.008				ND	
133 4-Isopropyltoluene	119		15.129				ND	
134 1,4-Dichlorobenzene	146		15.164				ND	
138 1,2-Dichlorobenzene	146		15.808				ND	
137 n-Butylbenzene	91		15.843				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.939				ND	
141 1,2,4-Trichlorobenzene	180		17.879				ND	
142 Hexachlorobutadiene	225		18.070				ND	
143 Naphthalene	128		18.105				ND	
144 1,2,3-Trichlorobenzene	180	18.363	18.348	0.015	40	3045	0.1896	

Reagents:

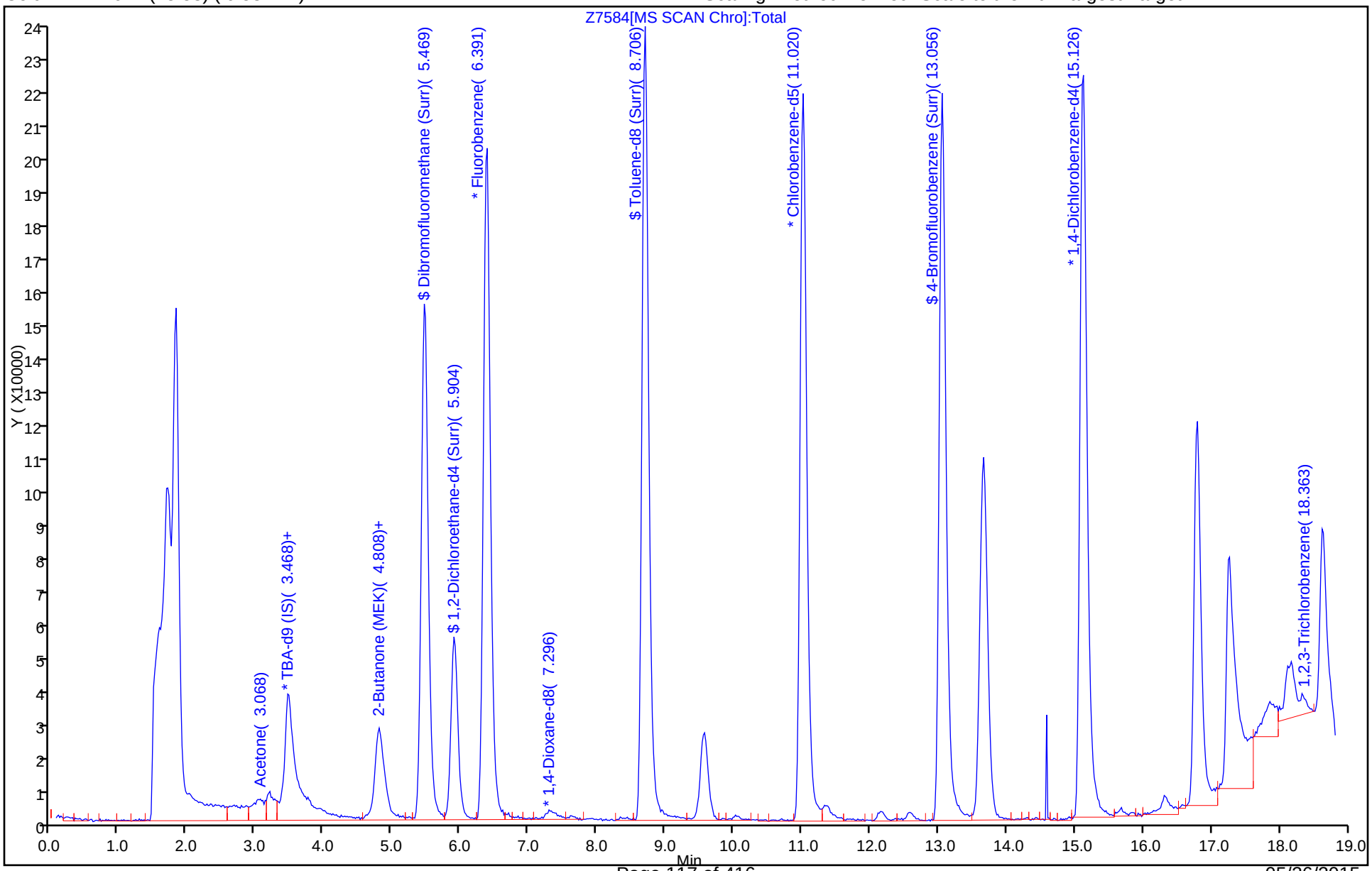
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.82	Units: uL	Run Reagent

Report Date: 15-May-2015 11:15:44 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7584.D				
Injection Date:	14-May-2015 14:01:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	280-68855-B-5	Lab Sample ID:	280-68855-5	Worklist Smp#:	21
Client ID:	54402-EB13-0515				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

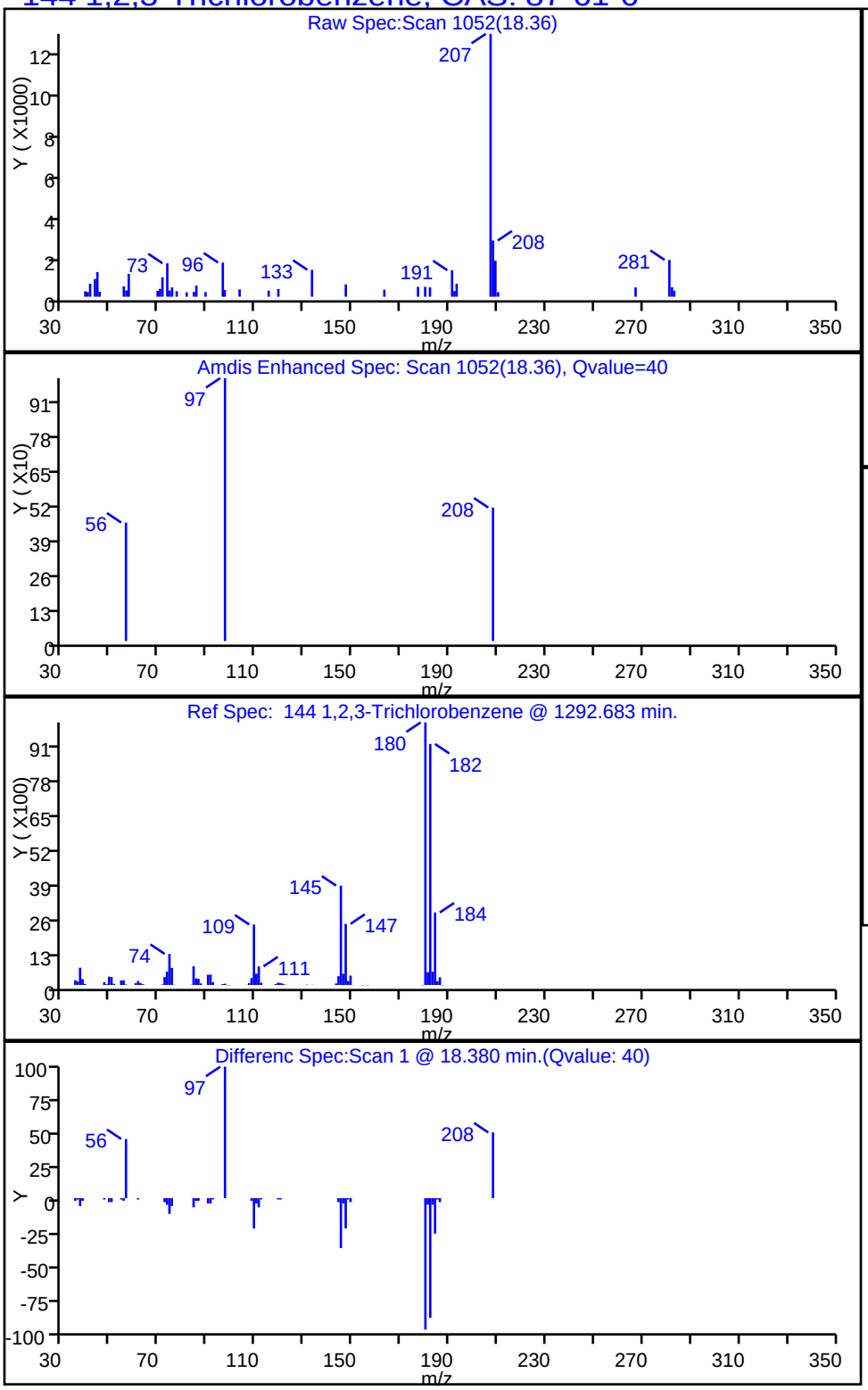


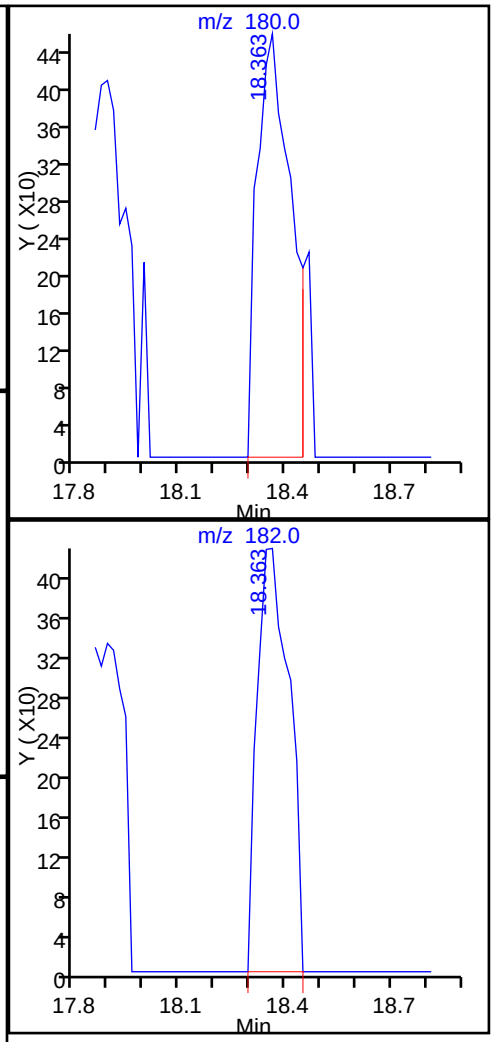
Report Date: 15-May-2015 11:15:45 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7584.D				
Injection Date:	14-May-2015 14:01:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-5	Lab Sample ID:	280-68855-5		
Client ID:	54402-EB13-0515				
Operator ID:	moanm	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

144 1,2,3-Trichlorobenzene, CAS: 87-61-6



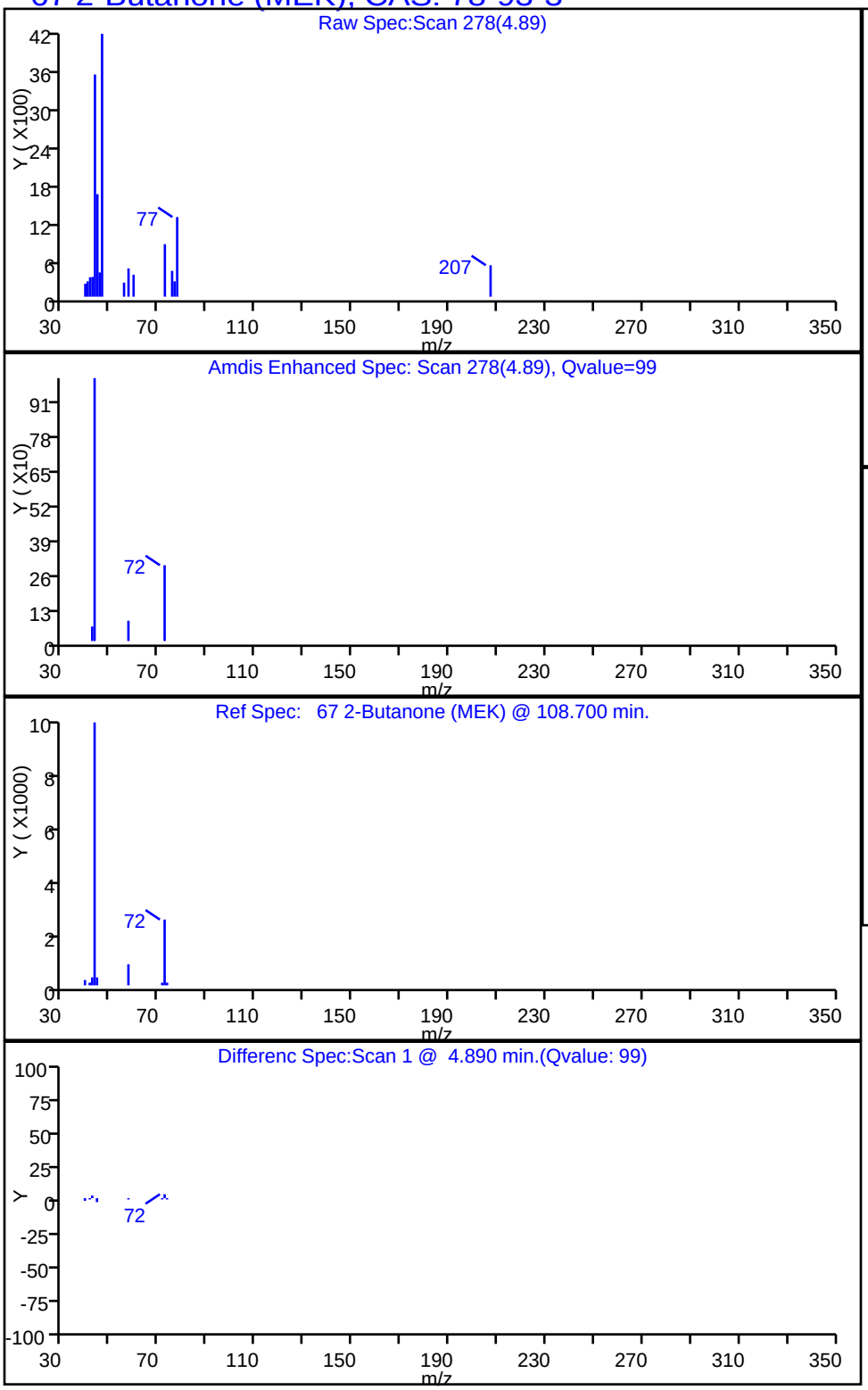


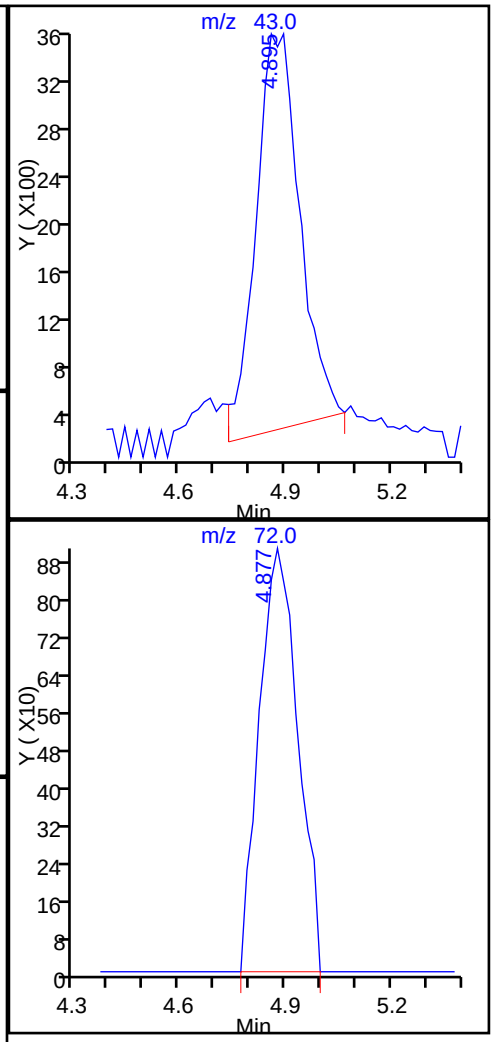
Report Date: 15-May-2015 11:15:45 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7584.D				
Injection Date:	14-May-2015 14:01:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-5	Lab Sample ID:	280-68855-5		
Client ID:	54402-EB13-0515				
Operator ID:	moanm	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

67 2-Butanone (MEK), CAS: 78-93-3



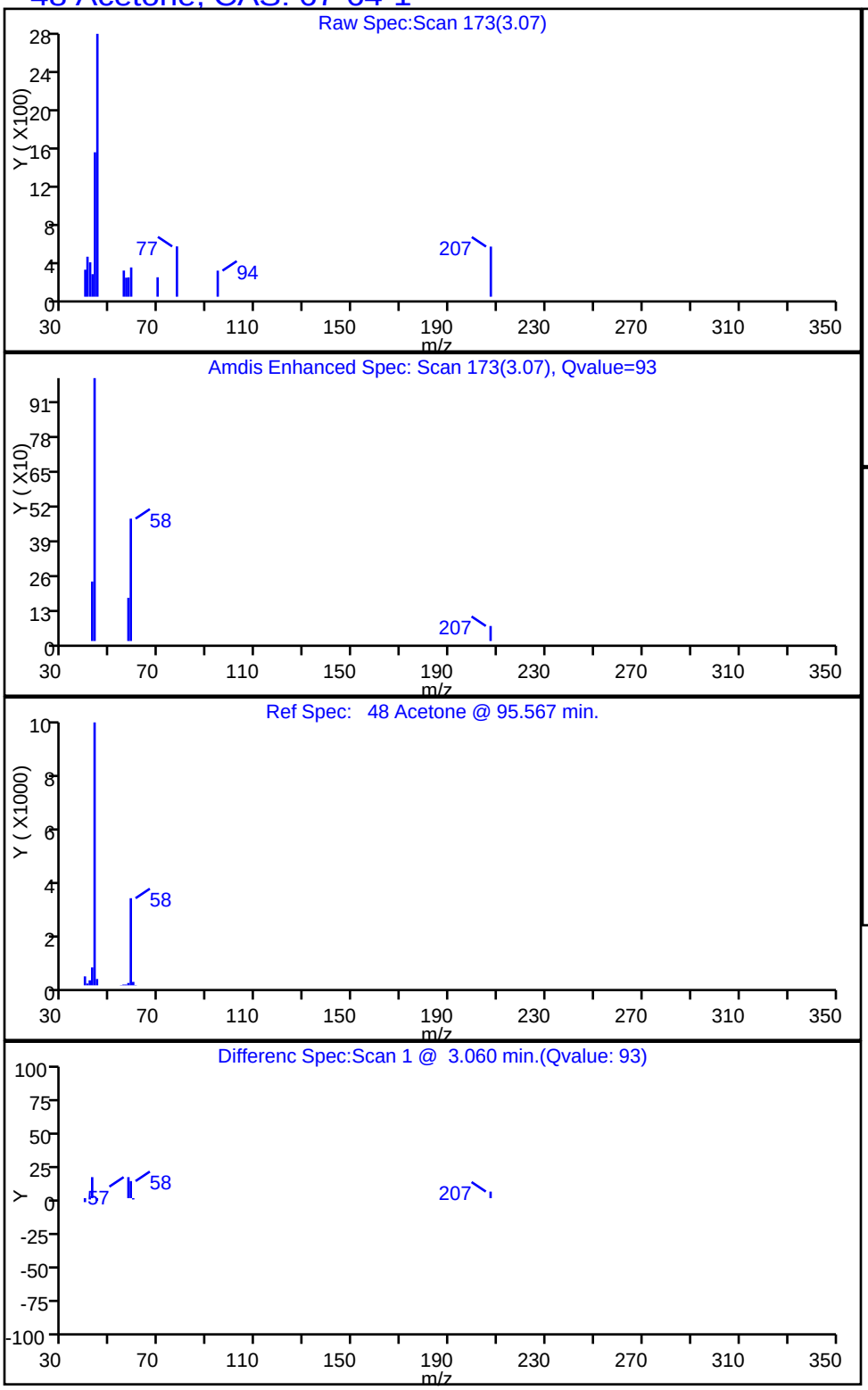


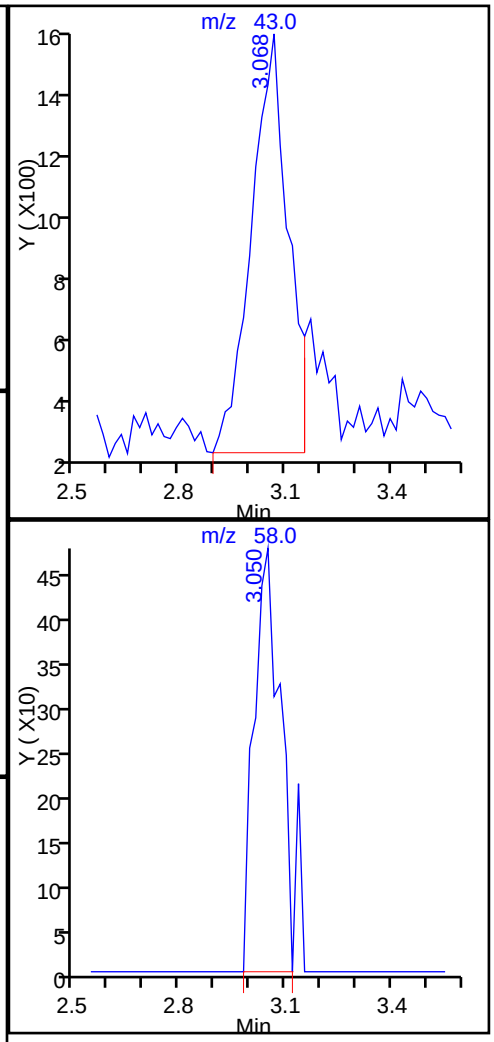
Report Date: 15-May-2015 11:15:44 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7584.D				
Injection Date:	14-May-2015 14:01:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-5	Lab Sample ID:	280-68855-5		
Client ID:	54402-EB13-0515				
Operator ID:	moanm	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

48 Acetone, CAS: 67-64-1



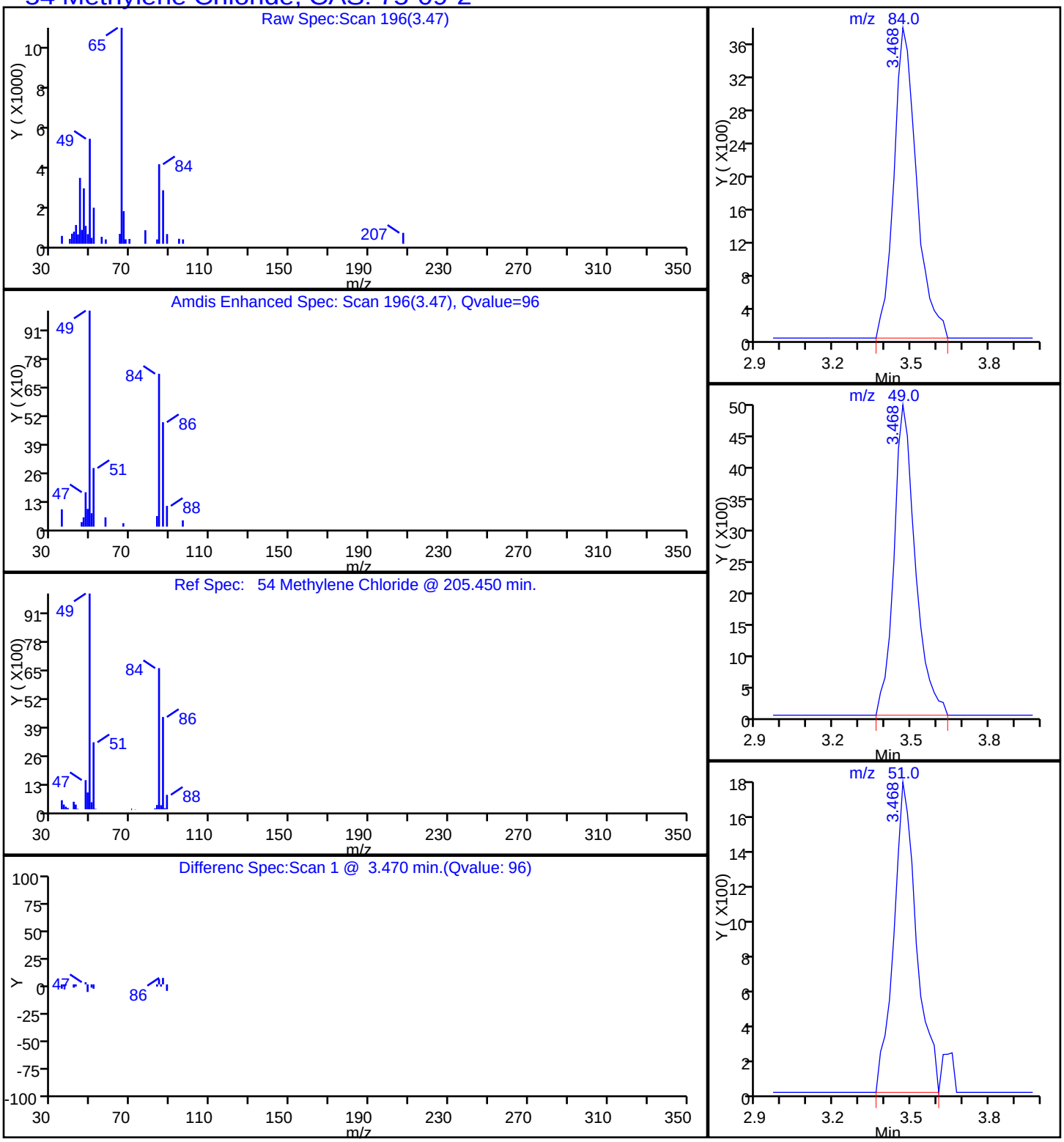


Report Date: 15-May-2015 11:15:44 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7584.D				
Injection Date:	14-May-2015 14:01:30	Instrument ID:	VMS_Z		
Lims ID:	280-68855-B-5	Lab Sample ID:	280-68855-5		
Client ID:	54402-EB13-0515				
Operator ID:	moanm	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

54 Methylene Chloride, CAS: 75-09-2



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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 16:19 Calibration End Date: 04/28/2015 17:55 Calibration ID: 22148

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274898/17	G2_3693.D
Level 2	IC 280-274898/18	G2_3694.D
Level 3	IC 280-274898/19	G2_3695.D
Level 4	ICIS 280-274898/20	G2_3696.D
Level 5	IC 280-274898/21	G2_3697.D
Level 6	IC 280-274898/22	G2_3698.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.0008	0.0009	0.0010	0.0008	0.0009	Ave		0.0009				8.3		15.0			
Isopropyl alcohol	0.0058 0.0043	0.0051	0.0053	0.0047	0.0048	Ave		0.0050				10.3		15.0			
Acetonitrile	0.0088 0.0081	0.0089	0.0095	0.0084	0.0087	Ave		0.0087				5.6		15.0			
Isopropyl ether	0.1830 0.1713	0.1711	0.1862	0.1746	0.1856	Ave		0.1786				4.0		15.0			
2-Chloro-1,3-butadiene	0.4339 0.4134	0.4353	0.4703	0.4198	0.4429	Ave		0.4359				4.6		15.0			
Tert-butyl ethyl ether	0.5193 0.5080	0.5065	0.5584	0.5224	0.5571	Ave		0.5286				4.4		15.0			
Ethyl acetate	0.0697 0.0547	0.0527	0.0620	0.0573	0.0577	Ave		0.0590				10.4		15.0			
Propionitrile	0.0100 0.0094	0.0099	0.0108	0.0099	0.0101	Ave		0.0100				4.6		15.0			
Methacrylonitrile	0.0487 0.0463	0.0497	0.0544	0.0496	0.0508	Ave		0.0499				5.3		15.0			
Tert-amyl methyl ether	0.4030 0.3954	0.4010	0.4445	0.4112	0.4306	Ave		0.4143				4.6		15.0			
n-Butanol	0.0059 0.0026	0.0042	0.0035	0.0029	0.0028	Lin2	0.0815	0.0027							0.9970		0.9900
Methyl methacrylate	0.0259 0.0272	0.0254	0.0295	0.0276	0.0291	Ave		0.0275				6.0		15.0			
2-Nitropropane	0.0182 0.0186	0.0174	0.0193	0.0175	0.0191	Ave		0.0183				4.4		15.0			
cis-1,4-Dichloro-2-butene	0.1147 0.1081	0.1134	0.1129	0.1061	0.1115	Ave		0.1111				3.0		15.0			
1,2,3-Trimethylbenzene	3.3273 3.0219	3.2860	3.3209	3.1576	3.2209	Ave		3.2224				3.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 16:19 Calibration End Date: 04/28/2015 17:55 Calibration ID: 22148

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2182 0.2030	0.2138	0.2272	0.2151	0.2220	Ave		0.2166				3.8		15.0			
1,2-Dichloroethane-d4 (Surr)	0.1762 0.1676	0.1830	0.1939	0.1806	0.1826	Ave		0.1806				4.8		15.0			
Toluene-d8 (Surr)	5.5423 4.5599	5.3261	5.4733	5.1465	5.1077	Ave		5.1926				6.8		15.0			
4-Bromofluorobenzene (Surr)	1.1920 1.0858	1.2257	1.2140	1.1697	1.1715	Ave		1.1765				4.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 16:19 Calibration End Date: 04/28/2015 17:55 Calibration ID: 22148

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274898/17	G2_3693.D
Level 2	IC 280-274898/18	G2_3694.D
Level 3	IC 280-274898/19	G2_3695.D
Level 4	ICIS 280-274898/20	G2_3696.D
Level 5	IC 280-274898/21	G2_3697.D
Level 6	IC 280-274898/22	G2_3698.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethanol	FB	Ave	+++++ 328307	12059	29400	58354	169406	+++++ 3000	100	250	500	1500
Isopropyl alcohol	FB	Ave	7667 367962	14205	32201	67266	187839	10.0 600	20.0	50.0	100	300
Acetonitrile	FB	Ave	14393 856559	30747	72498	149856	423862	12.5 750	25.0	62.5	125	375
Isopropyl ether	FB	Ave	30038 1813168	59297	141514	310828	899583	1.25 75.0	2.50	6.25	12.5	37.5
2-Chloro-1,3-butadiene	FB	Ave	56958 3501586	120668	286025	597831	1717220	1.00 60.0	2.00	5.00	10.0	30.0
Tert-butyl ethyl ether	FB	Ave	85219 5377661	175494	424477	929958	2700397	1.25 75.0	2.50	6.25	12.5	37.5
Ethyl acetate	FB	Ave	18313 926673	29214	75430	163075	447581	2.00 120	4.00	10.0	20.0	60.0
Propionitrile	FB	Ave	16415 996922	34162	82208	176152	490393	12.5 750	25.0	62.5	125	375
Methacrylonitrile	FB	Ave	63873 3924134	137794	330793	706392	1970420	10.0 600	20.0	50.0	100	300
Tert-amyl methyl ether	FB	Ave	66139 4185904	138952	337937	732091	2087324	1.25 75.0	2.50	6.25	12.5	37.5
n-Butanol	FB	Lin2	19438 553365	29353	53356	102685	275695	25.0 1500	50.0	125	250	750
Methyl methacrylate	FB	Ave	6810 461333	14079	35922	78704	225356	2.00 120	4.00	10.0	20.0	60.0
2-Nitropropane	FB	Ave	4780 315480	9632	23496	49791	148060	2.00 120	4.00	10.0	20.0	60.0
cis-1,4-Dichloro-2-butene	DCB	Ave	3966 253530	8180	18494	41078	120367	1.00 60.0	2.00	5.00	10.0	30.0
1,2,3-Trimethylbenzene	DCB	Ave	115092 7088086	237056	543976	1222239	3477372	1.00 60.0	2.00	5.00	10.0	30.0
Dibromofluoromethane (Surr)	FB	Ave	28646 1719497	59271	138149	306392	860738	1.00 60.0	2.00	5.00	10.0	30.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 16:19 Calibration End Date: 04/28/2015 17:55 Calibration ID: 22148

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane-d4 (Surr)	FB	Ave	23130 1419433	50720	117894	257194	707958	1.00 60.0	2.00	5.00	10.0	30.0
Toluene-d8 (Surr)	CBZ	Ave	150289 8103037	306166	692460	1534079	4191699	1.00 60.0	2.00	5.00	10.0	30.0
4-Bromofluorobenzene (Surr)	DCB	Ave	41232 2546937	88422	198864	452755	1264787	1.00 60.0	2.00	5.00	10.0	30.0

Curve Type Legend:

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

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3693.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Apr-2015 16:19:30 ALS Bottle#: 18 Worklist Smp#: 17
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub129

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:53 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: contrerase Date: 28-Apr-2015 18:37:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	178222	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1641017	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	338958	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.609	0.001	95	432377	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	28646	1.00	1.01	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	98	23130	1.00	0.9754	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	150289	1.00	1.07	
$ 9 4-Bromofluorobenzene (Surr	95	10.659	10.659	0.000	90	41232	1.00	1.01	
18 Ethylene oxide	43	4.524	4.524	0.000	100	142204	200.0	216.5	
23 Ethanol	45		4.915				ND	ND	
27 Propene oxide	58	5.152	5.152	0.000	96	105999	50.0	46.5	
30 Isopropyl alcohol	45	5.306	5.306	0.000	95	7667	10.0	11.6	
33 Acetonitrile	41	5.515	5.515	0.000	98	14393	12.5	12.5	
45 Isopropyl ether	87	6.182	6.183	-0.001	93	30038	1.25	1.28	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	92	56958	1.00	1.00	
48 Tert-butyl ethyl ether	59	6.461	6.461	0.000	98	85219	1.25	1.23	
49 Ethyl acetate	43	6.583	6.576	0.007	98	18313	2.00	2.36	
51 Propionitrile	54	6.633	6.633	0.000	94	16415	12.5	12.5	
55 Methacrylonitrile	41	6.762	6.762	0.000	92	63873	10.0	9.75	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	98	66139	1.25	1.22	
68 n-Butanol	56	7.527	7.548	-0.021	25	19438	25.0	25.0	
71 Methyl methacrylate	100	7.956	7.949	0.007	93	6810	2.00	1.89	
77 2-Nitropropane	41	8.306	8.299	0.007	98	4780	2.00	1.98	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	92	6876	1.00	0.8177	
100 cis-1,4-Dichloro-2-butene	53	10.523	10.523	0.000	92	3966	1.00	1.03	
115 1,2,3-Trimethylbenzene	105	11.631	11.638	-0.007	95	115092	1.00	1.03	
120 1,3,5-Trichlorobenzene	180	12.925	12.932	-0.007	97	46045	1.00	1.05	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

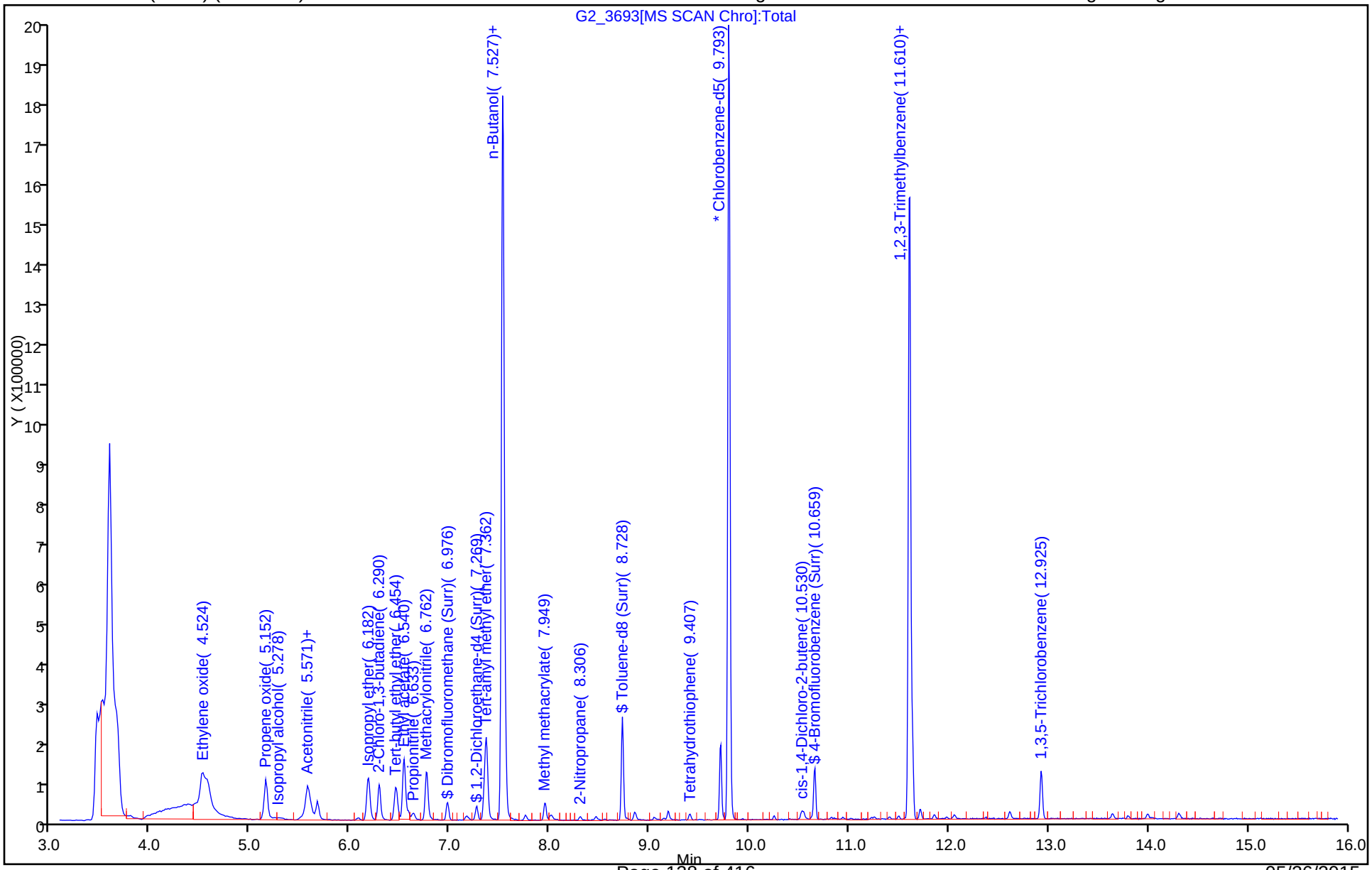
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.08	Units: uL
MV-Supp A_00011	Amount Added:	0.50	Units: uL

Report Date: 28-Apr-2015 23:36:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3693.D				
Injection Date:	28-Apr-2015 16:19:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	17
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3694.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Apr-2015 16:38:30 ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub129

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:54 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: contrerase Date: 28-Apr-2015 18:37:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	197156	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1732571	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	359274	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	96	450879	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	59271	2.00	1.97	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.262	0.007	99	50720	2.00	2.03	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	306166	2.00	2.05	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.659	-0.001	89	88422	2.00	2.08	
18 Ethylene oxide	43	4.510	4.524	-0.014	100	286889	400.0	413.7	
23 Ethanol	45	4.901	4.915	-0.014	53	12059	100.0	101.0	a
27 Propene oxide	58	5.152	5.152	0.000	96	221110	100.0	91.9	
30 Isopropyl alcohol	45	5.306	5.306	0.000	98	14205	20.0	20.4	
33 Acetonitrile	41	5.515	5.515	0.000	99	30747	25.0	25.4	
45 Isopropyl ether	87	6.182	6.183	-0.001	94	59297	2.50	2.39	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	91	120668	2.00	2.00	
48 Tert-butyl ethyl ether	59	6.454	6.461	-0.007	98	175494	2.50	2.40	
49 Ethyl acetate	43	6.583	6.576	0.007	95	29214	4.00	3.57	
51 Propionitrile	54	6.633	6.633	0.000	97	34162	25.0	24.6	
55 Methacrylonitrile	41	6.769	6.762	0.007	93	137794	20.0	19.9	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	138952	2.50	2.42	
68 n-Butanol	56	7.541	7.548	-0.007	25	29353	50.0	48.9	
71 Methyl methacrylate	100	7.956	7.949	0.007	92	14079	4.00	3.70	
77 2-Nitropropane	41	8.306	8.299	0.007	98	9632	4.00	3.79	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	91	15827	2.00	1.78	
100 cis-1,4-Dichloro-2-butene	53	10.523	10.523	0.000	43	8180	2.00	2.04	
115 1,2,3-Trimethylbenzene	105	11.638	11.638	0.000	98	237056	2.00	2.04	
120 1,3,5-Trichlorobenzene	180	12.925	12.932	-0.007	97	91703	2.00	2.01	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

a - User Assigned ID

Reagents:

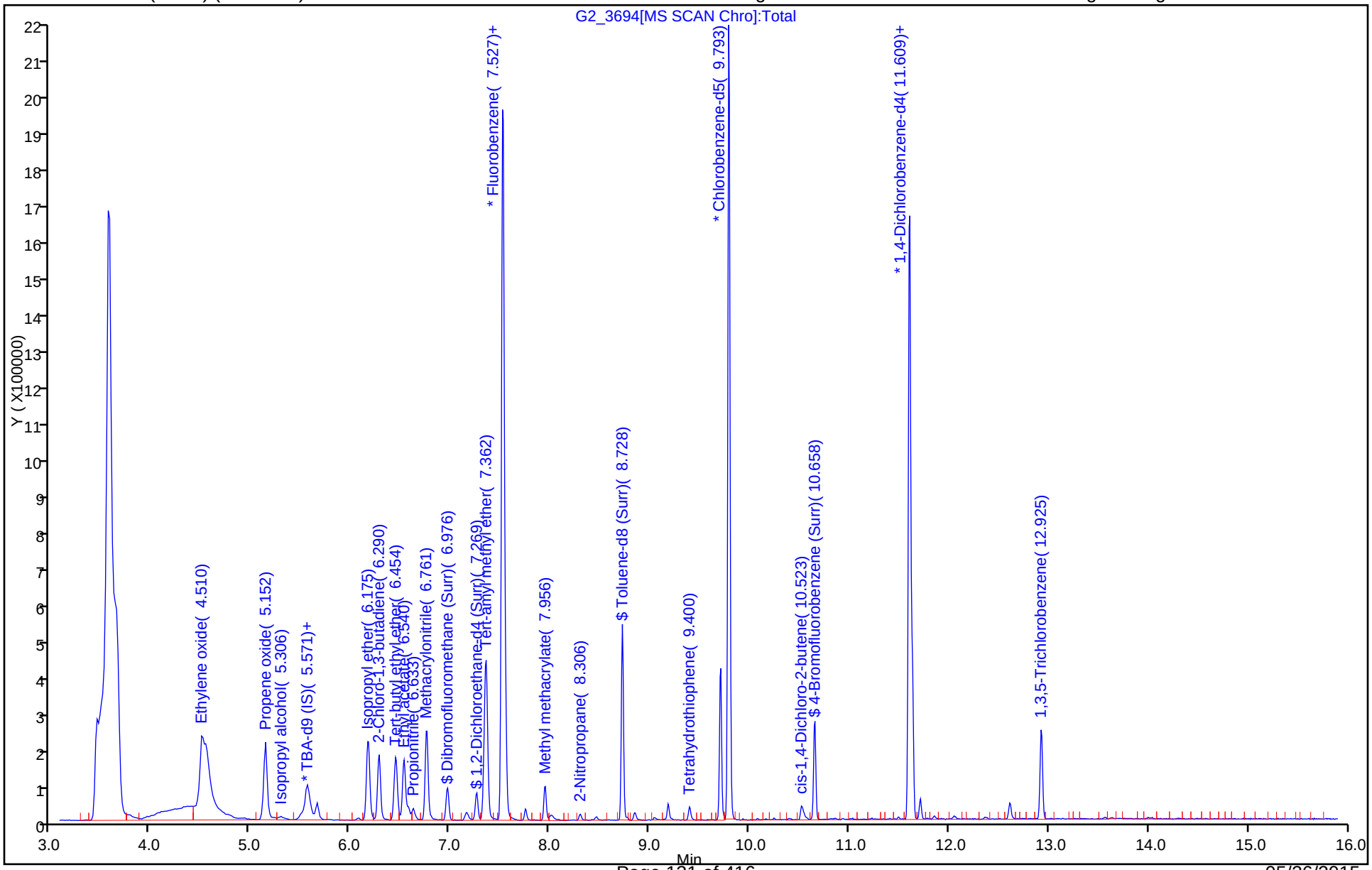
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.16	Units: uL
MV-Supp A_00011	Amount Added:	1.00	Units: uL

Report Date: 28-Apr-2015 23:36:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3694.D				
Injection Date:	28-Apr-2015 16:38:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	18
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



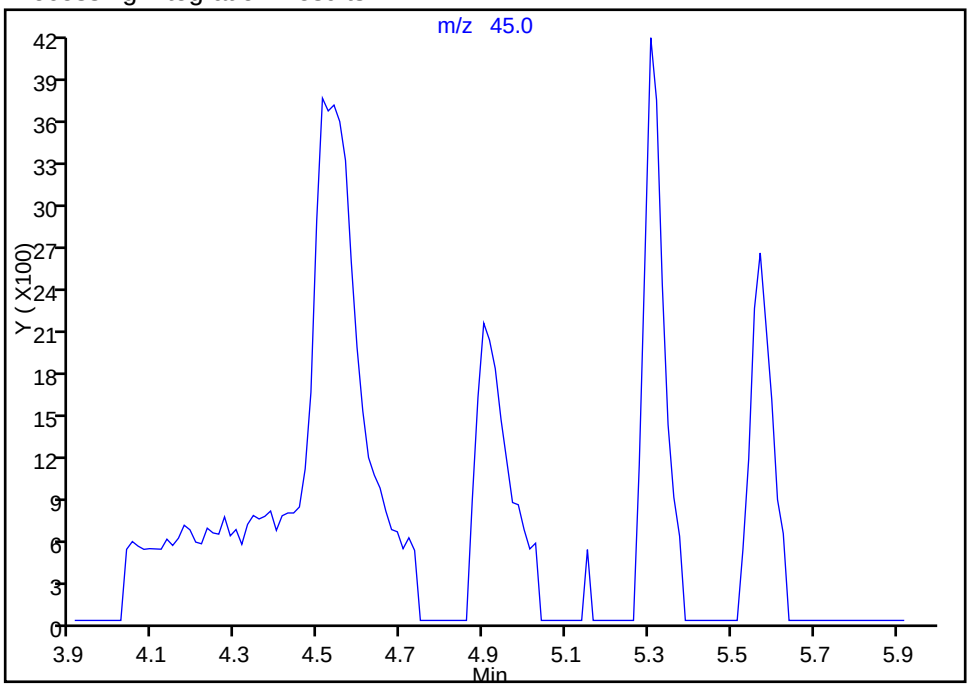
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3694.D				
Injection Date:	28-Apr-2015 16:38:30	Instrument ID:	VMS_G2		
Lims ID:	ic				
Client ID:					
Operator ID:	ilczyszyn	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

23 Ethanol, CAS: 64-17-5

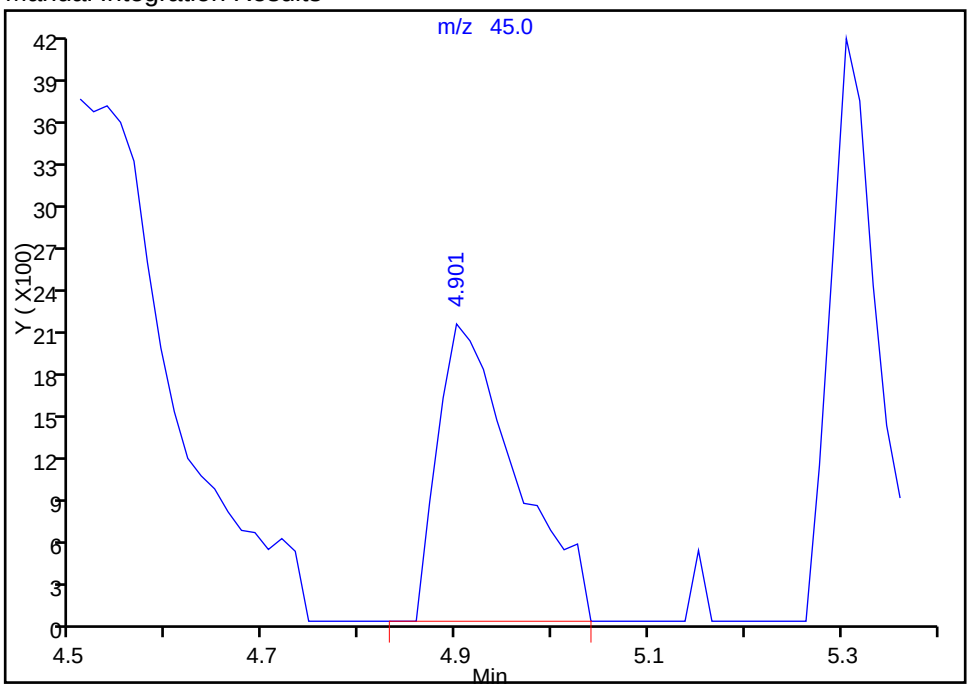
Not Detected
Expected RT: 4.91

Processing Integration Results



Manual Integration Results

RT: 4.90
Area: 12059
Amount: 101.0381
Amount Units: ug/l



Reviewer: contrerase, 28-Apr-2015 18:37:51
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3695.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Apr-2015 16:58:30 ALS Bottle#: 20 Worklist Smp#: 19
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub129

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:55 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: contrerase Date: 28-Apr-2015 18:38:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	178317	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1520365	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	316290	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.602	11.609	-0.007	95	409515	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.969	6.976	-0.007	94	138149	5.00	5.25	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	117894	5.00	5.37	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	692460	5.00	5.27	
$ 9 4-Bromofluorobenzene (Surr	95	10.651	10.659	-0.008	90	198864	5.00	5.16	
18 Ethylene oxide	43	4.524	4.524	0.000	100	688323	1000.0	1131.2	
23 Ethanol	45	4.915	4.915	0.000	93	29400	250.0	280.7	
27 Propene oxide	58	5.152	5.152	0.000	96	590212	250.0	279.6	
30 Isopropyl alcohol	45	5.306	5.306	0.000	97	32201	50.0	52.6	
33 Acetonitrile	41	5.515	5.515	0.000	100	72498	62.5	68.2	
45 Isopropyl ether	87	6.175	6.183	-0.008	94	141514	6.25	6.51	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	92	286025	5.00	5.39	
48 Tert-butyl ethyl ether	59	6.454	6.461	-0.007	98	424477	6.25	6.60	
49 Ethyl acetate	43	6.583	6.576	0.007	99	75430	10.0	10.5	
51 Propionitrile	54	6.633	6.633	0.000	99	82208	62.5	67.5	
55 Methacrylonitrile	41	6.762	6.762	0.000	92	330793	50.0	54.5	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	337937	6.25	6.71	
68 n-Butanol	56	7.548	7.548	0.000	35	53356	125.0	134.1	
71 Methyl methacrylate	100	7.949	7.949	-0.001	93	35922	10.0	10.8	
77 2-Nitropropane	41	8.299	8.299	0.000	97	23496	10.0	10.5	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	93	42184	5.00	5.38	
100 cis-1,4-Dichloro-2-butene	53	10.523	10.523	0.000	36	18494	5.00	5.08	
115 1,2,3-Trimethylbenzene	105	11.631	11.638	-0.007	98	543976	5.00	5.15	
120 1,3,5-Trichlorobenzene	180	12.925	12.932	-0.007	98	214479	5.00	5.17	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

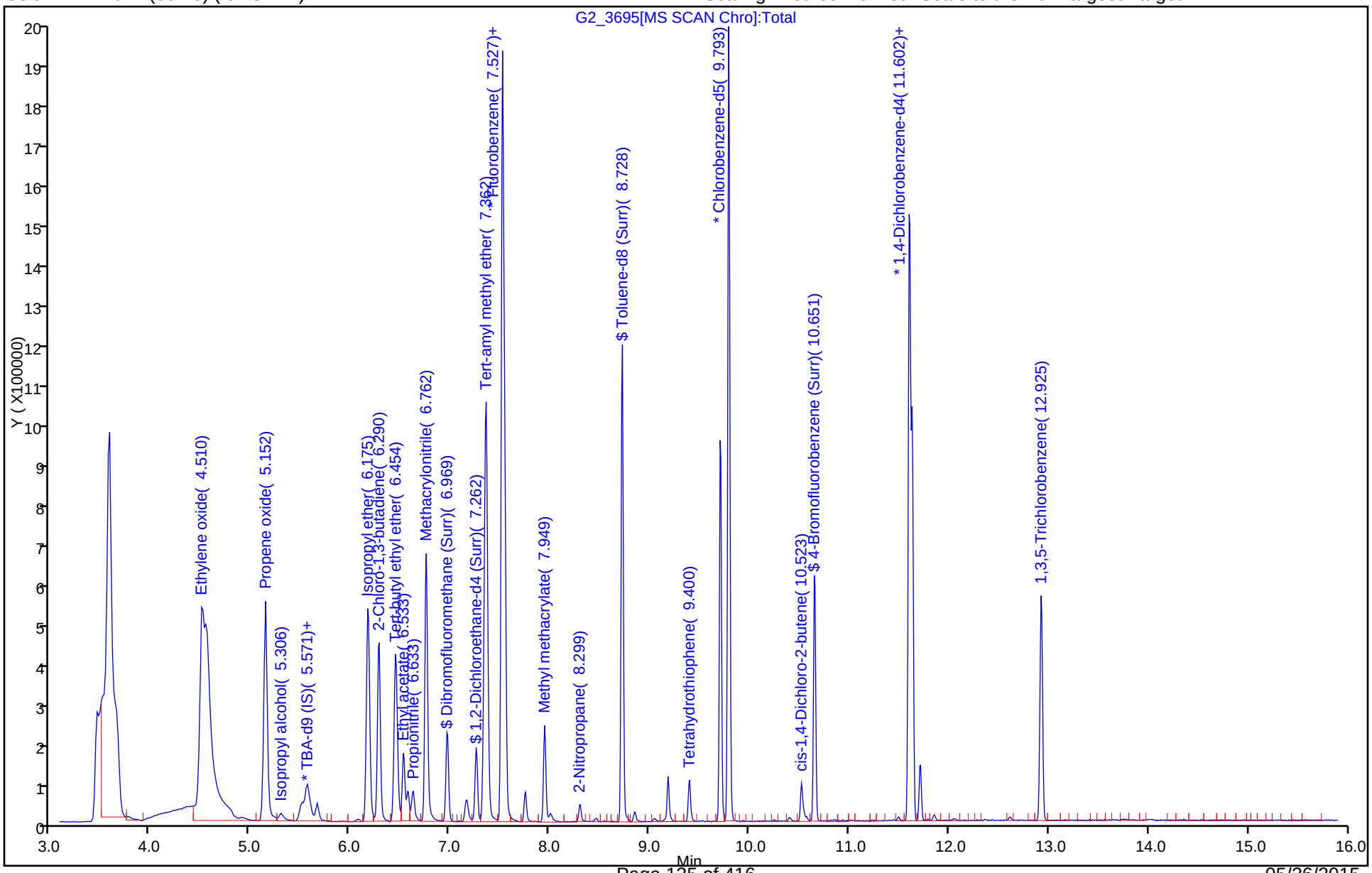
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.40	Units: uL
MV-Supp A_00011	Amount Added:	2.50	Units: uL

Report Date: 28-Apr-2015 23:36:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3695.D				
Injection Date:	28-Apr-2015 16:58:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	19
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3696.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 28-Apr-2015 17:17:30 ALS Bottle#: 21 Worklist Smp#: 20
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icis
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub129

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:56 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: contrerase Date: 28-Apr-2015 18:38:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	209686	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1780246	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	372603	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.610	0.000	94	483842	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	306392	10.0	9.93	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	257194	10.0	10.0	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1534079	10.0	9.91	
$ 9 4-Bromofluorobenzene (Surr	95	10.659	10.659	0.000	91	452755	10.0	9.94	
18 Ethylene oxide	43	4.524	4.524	0.000	100	1395647	2000.0	1958.7	
23 Ethanol	45	4.915	4.915	0.000	100	58354	500.0	475.8	
27 Propene oxide	58	5.152	5.152	0.000	96	1287384	500.0	520.8	
30 Isopropyl alcohol	45	5.306	5.306	0.000	98	67266	100.0	93.9	
33 Acetonitrile	41	5.515	5.515	0.000	100	149856	125.0	120.4	
45 Isopropyl ether	87	6.183	6.183	0.000	94	310828	12.5	12.2	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	91	597831	10.0	9.63	
48 Tert-butyl ethyl ether	59	6.461	6.461	0.000	98	929958	12.5	12.4	
49 Ethyl acetate	43	6.576	6.576	0.000	98	163075	20.0	19.4	
51 Propionitrile	54	6.633	6.633	0.000	99	176152	125.0	123.5	
55 Methacrylonitrile	41	6.762	6.762	0.000	93	706392	100.0	99.4	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	732091	12.5	12.4	
68 n-Butanol	56	7.548	7.548	0.000	72	102685	250.0	240.1	
71 Methyl methacrylate	100	7.949	7.949	0.000	93	78704	20.0	20.1	
77 2-Nitropropane	41	8.299	8.299	0.000	98	49791	20.0	19.1	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	92	96476	10.0	10.4	
100 cis-1,4-Dichloro-2-butene	53	10.523	10.523	0.000	94	41078	10.0	9.55	
115 1,2,3-Trimethylbenzene	105	11.638	11.638	0.000	97	1222239	10.0	9.80	
120 1,3,5-Trichlorobenzene	180	12.932	12.932	0.000	98	474548	10.0	9.68	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

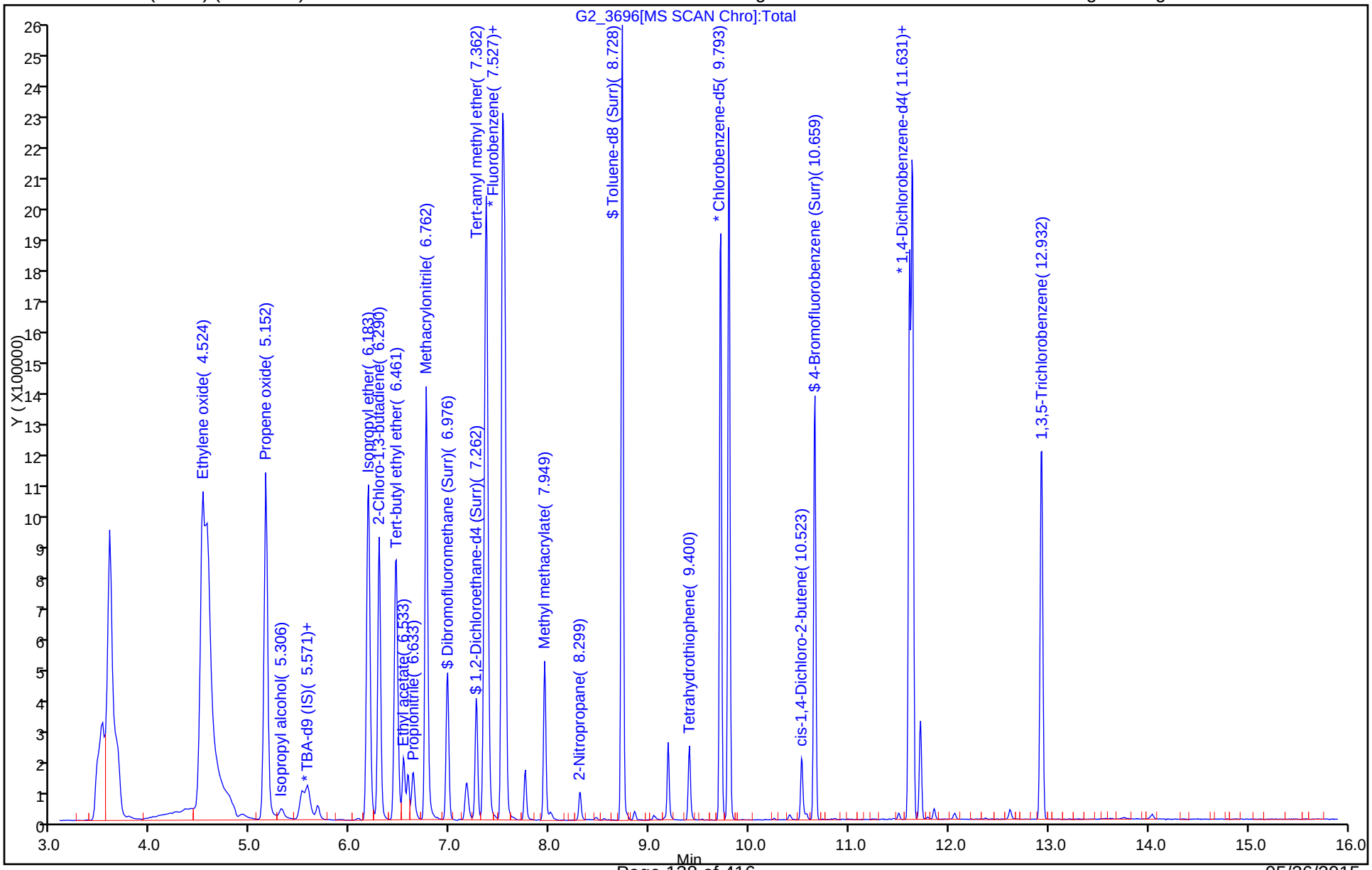
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL
MV-Supp A_00011	Amount Added:	5.00	Units: uL

Report Date: 28-Apr-2015 23:36:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3696.D				
Injection Date:	28-Apr-2015 17:17:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	icis			Worklist Smp#:	20
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3697.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Apr-2015 17:36:30 ALS Bottle#: 22 Worklist Smp#: 21
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub129

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:57 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: contrerase Date: 28-Apr-2015 18:38:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	176107	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1615639	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	341943	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	95	449849	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	860738	30.0	30.8	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	707958	30.0	30.3	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	4191699	30.0	29.5	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.659	-0.001	91	1264787	30.0	29.9	
18 Ethylene oxide	43	4.524	4.524	0.000	100	3692817	6000.0	5710.7	
23 Ethanol	45	4.915	4.915	0.000	99	169406	1500.0	1522.1	
27 Propene oxide	58	5.152	5.152	0.000	96	3542505	1500.0	1579.0	
30 Isopropyl alcohol	45	5.306	5.306	0.000	99	187839	300.0	289.0	
33 Acetonitrile	41	5.515	5.515	0.000	99	423862	375.0	375.3	
45 Isopropyl ether	87	6.182	6.183	-0.001	94	899583	37.5	39.0	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	91	1717220	30.0	30.5	
48 Tert-butyl ethyl ether	59	6.461	6.461	0.000	98	2700397	37.5	39.5	
49 Ethyl acetate	43	6.583	6.576	0.007	99	447581	60.0	58.7	
51 Propionitrile	54	6.633	6.633	0.000	99	490393	375.0	378.7	
55 Methacrylonitrile	41	6.762	6.762	0.000	92	1970420	300.0	305.4	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	98	2087324	37.5	39.0	
68 n-Butanol	56	7.548	7.548	0.000	78	275695	750.0	770.4	
71 Methyl methacrylate	100	7.948	7.949	-0.001	93	225356	60.0	63.5	
77 2-Nitropropane	41	8.299	8.299	0.000	98	148060	60.0	62.4	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	92	281042	30.0	33.1	
100 cis-1,4-Dichloro-2-butene	53	10.523	10.523	0.000	93	120367	30.0	30.1	
115 1,2,3-Trimethylbenzene	105	11.638	11.638	0.000	98	3477372	30.0	30.0	
120 1,3,5-Trichlorobenzene	180	12.932	12.932	0.000	98	1349542	30.0	29.6	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

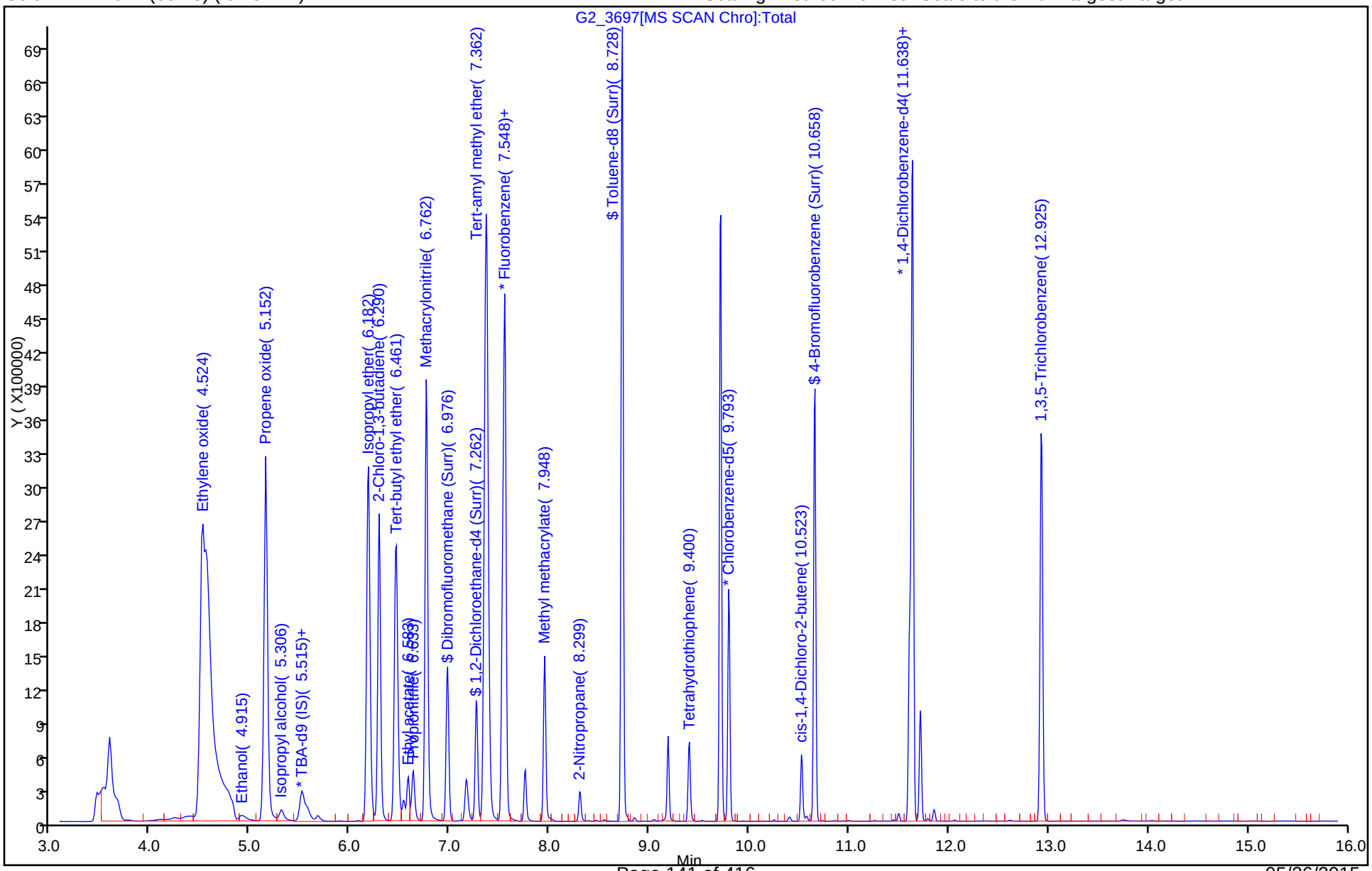
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00043	Amount Added: 2.40	Units: uL
MV-Supp A_00011	Amount Added: 15.00	Units: uL

Report Date: 28-Apr-2015 23:36:57 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3697.D				
Injection Date:	28-Apr-2015 17:36:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	21
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Apr-2015 17:55:30 ALS Bottle#: 23 Worklist Smp#: 22
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub129

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:58 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: contrerase Date: 28-Apr-2015 18:38:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	200660	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1764472	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	370212	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.602	11.610	-0.008	95	488669	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	1719497	60.0	56.3	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	1419433	60.0	55.7	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	8103037	60.0	52.7	
$ 9 4-Bromofluorobenzene (Surr	95	10.651	10.659	-0.008	90	2546937	60.0	55.4	
18 Ethylene oxide	43	4.510	4.524	-0.014	100	6956527	12000	9850.4	
23 Ethanol	45	4.915	4.915	0.000	98	328307	3000.0	2701.0	
27 Propene oxide	58	5.152	5.152	0.000	99	6897277	3000.0	2814.9	
30 Isopropyl alcohol	45	5.306	5.306	0.000	99	367962	600.0	518.4	
33 Acetonitrile	41	5.515	5.515	0.000	99	856559	750.0	694.4	
45 Isopropyl ether	87	6.183	6.183	0.000	93	1813168	75.0	71.9	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	91	3501586	60.0	56.9	
48 Tert-butyl ethyl ether	59	6.461	6.461	0.000	98	5377661	75.0	72.1	
49 Ethyl acetate	43	6.576	6.576	0.000	99	926673	120.0	111.2	
51 Propionitrile	54	6.633	6.633	0.000	99	996922	750.0	705.0	
55 Methacrylonitrile	41	6.762	6.762	0.000	92	3924134	600.0	556.9	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	98	4185904	75.0	71.6	
68 n-Butanol	56	7.548	7.548	0.000	86	553365	1500.0	1441.5	
71 Methyl methacrylate	100	7.949	7.949	0.000	93	461333	120.0	119.0	
77 2-Nitropropane	41	8.299	8.299	0.000	99	315480	120.0	121.8	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	92	590417	60.0	64.3	
100 cis-1,4-Dichloro-2-butene	53	10.523	10.523	0.000	94	253530	60.0	58.4	
115 1,2,3-Trimethylbenzene	105	11.631	11.638	-0.007	98	7088086	60.0	56.3	
120 1,3,5-Trichlorobenzene	180	12.925	12.932	-0.007	98	2848443	60.0	57.5	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

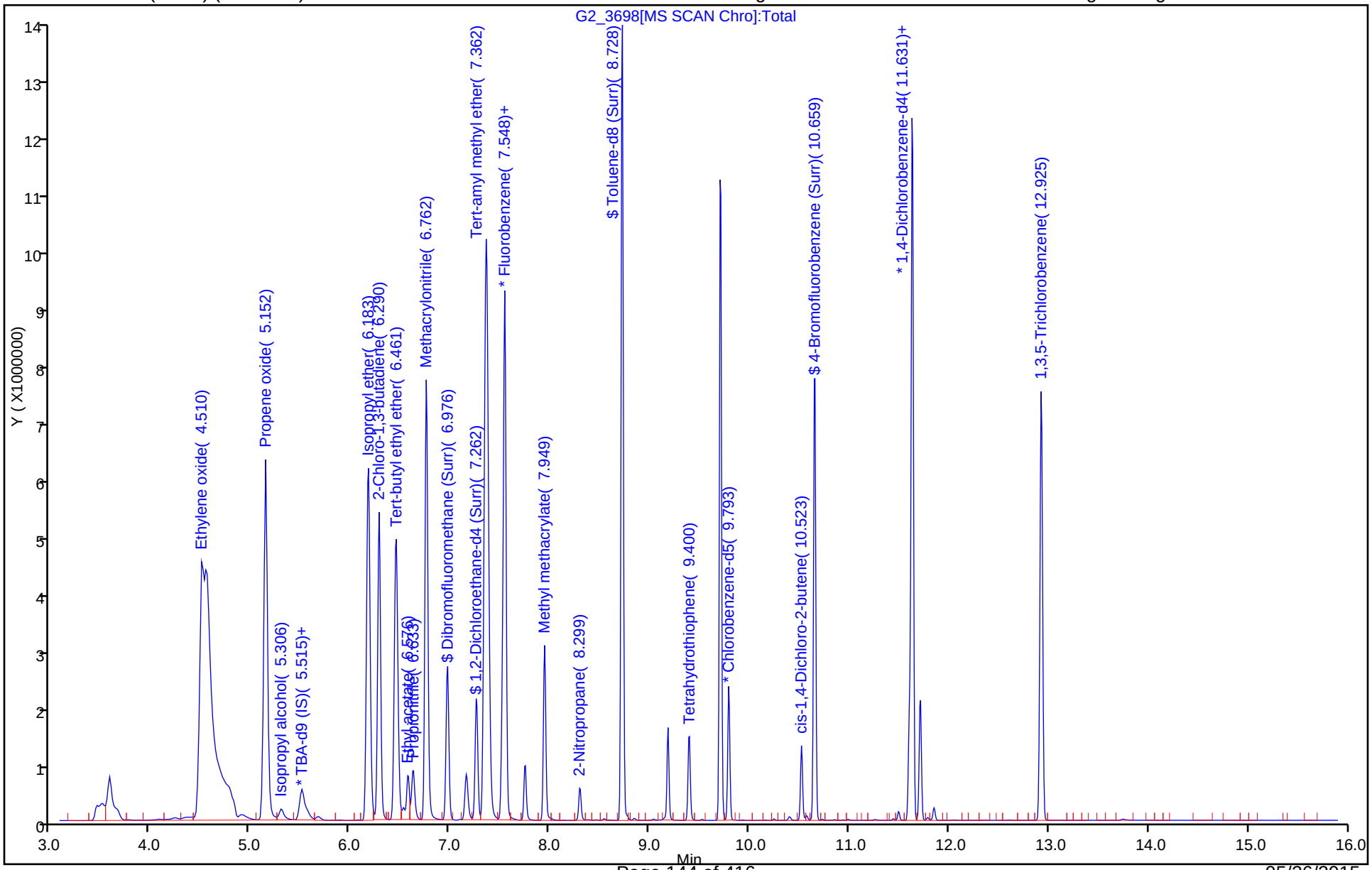
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00043	Amount Added: 4.80	Units: uL
MV-Supp A_00011	Amount Added: 30.00	Units: uL

Report Date: 28-Apr-2015 23:36:58 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D				
Injection Date:	28-Apr-2015 17:55:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	22
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-276788/9	G2_4152.D
Level 2	IC 280-276788/10	G2_4153.D
Level 3	IC 280-276788/11	G2_4154.D
Level 4	IC 280-276788/12	G2_4155.D
Level 5	IC 280-276788/13	G2_4156.D
Level 6	IC 280-276788/14	G2_4157.D
Level 7	IC 280-276788/15	G2_4158.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.3948	0.3925 0.3592	0.4482	0.4370	0.4622	Ave		0.4156				9.5		15.0			
Chloromethane	+++++ 0.3479	0.4215 0.3292	0.3816	0.3790	0.3955	Ave		0.3758			0.1000	8.8		15.0			
Vinyl chloride	0.2521 0.3613	0.4357 0.3356	0.3903	0.3895	0.4137	Ave		0.3683				16.5		30.0			
Bromomethane	+++++ 0.2676	0.3293 0.2489	0.2764	0.2755	0.2980	Ave		0.2826				9.8		15.0			
Chloroethane	+++++ 0.2573	0.3086 0.2430	0.2652	0.2716	0.2892	Ave		0.2725				8.6		15.0			
Dichlorofluoromethane	+++++ 0.6282	0.8132 0.6129	0.6740	0.6819	0.7206	Ave		0.6885				10.5		15.0			
Trichlorofluoromethane	+++++ 0.5190	0.6888 0.4932	0.6043	0.6009	0.6126	Ave		0.5865				12.0		15.0			
Ethyl ether	+++++ 0.1343	0.1390 0.1447	0.1266	0.1264	0.1452	Ave		0.1361				6.2		15.0			
Acrolein	+++++ 0.0111	0.0106 0.0116	0.0098	0.0101	0.0121	Ave		0.0109				8.1		15.0			
Acetone	+++++ 0.0253	0.0365 0.0269	0.0291	0.0280	0.0307	Ave		0.0294				13.4		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.2744	0.3526 0.2749	0.3072	0.3004	0.3224	Ave		0.3053				9.8		15.0			
1,1-Dichloroethene	+++++ 0.3071	0.3546 0.3225	0.3155	0.3179	0.3552	Ave		0.3288				6.3		30.0			
Iodomethane	+++++ 0.4964	0.5752 0.5135	0.4954	0.4980	0.5526	Ave		0.5218				6.5		15.0			
Methyl acetate	+++++ 0.0590	0.0772 0.0622	0.0616	0.0589	0.0663	Ave		0.0642				10.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	+++++ 0.5232	0.6212 0.5305	0.4881	0.5099	0.5855	Ave		0.5431				9.2		15.0			
Carbon disulfide	+++++ 1.2808	1.6002 1.3062	1.4073	1.3881	1.5043	Ave		1.4145				8.5		15.0			
tert-Butyl alcohol	+++++ 0.0076	0.0083 0.0081	0.0068	0.0070	0.0082	Ave		0.0076				8.5		15.0			
Methylene Chloride	+++++ 0.2692	0.6397 0.2760	0.4097	0.3237	0.3235	Lin2	0.3612	0.2623							0.9910		0.9900
Acrylonitrile	+++++ 0.0309	0.0347 0.0326	0.0303	0.0303	0.0342	Ave		0.0322				6.0		15.0			
Methyl tert-butyl ether	+++++ 0.4249	0.4357 0.4430	0.3966	0.4093	0.4627	Ave		0.4287				5.6		15.0			
trans-1,2-Dichloroethene	+++++ 0.3288	0.3979 0.3484	0.3485	0.3485	0.3802	Ave		0.3587				7.1		15.0			
Hexane	+++++ 2.2133	2.5731 2.3782	2.3753	2.3607	2.6134	Ave		2.4190				6.2		15.0			
Vinyl acetate	+++++ 0.2216	0.1900 0.2366	0.1908	0.2014	0.2359	Ave		0.2127				10.1		15.0			
1,1-Dichloroethane	+++++ 0.5561	0.6896 0.5832	0.6082	0.5862	0.6375	Ave		0.6102			0.1000	7.8		15.0			
2-Butanone (MEK)	+++++ 0.0418	0.0598 0.0449	0.0474	0.0459	0.0454	Ave		0.0475				13.2		15.0			
sec-Butyl Alcohol	+++++ 0.0051	0.0035 0.0060	0.0038	0.0035	0.0048	Lin	-0.307	0.0060							0.9950		0.9900
cis-1,2-Dichloroethene	+++++ 0.3084	0.3686 0.3278	0.3148	0.3109	0.3502	Ave		0.3301				7.4		15.0			
2,2-Dichloropropane	+++++ 0.4739	0.5828 0.4856	0.4953	0.4997	0.5443	Ave		0.5136				8.1		15.0			
Bromochloromethane	+++++ 0.1041	0.1305 0.1111	0.1080	0.1060	0.1188	Ave		0.1131				8.8		15.0			
Chloroform	0.3183 0.4819	0.6170 0.4982	0.5241	0.5173	0.5620	Ave		0.5027				18.5		30.0			
Tetrahydrofuran	+++++ 0.0220	0.0218 0.0235	0.0187	0.0201	0.0235	Ave		0.0216				8.7		15.0			
Isobutyl alcohol	+++++ 0.0021	0.0019 0.0024	0.0017	0.0017	0.0022	Ave		0.0020				13.6		15.0			
1,1,1-Trichloroethane	+++++ 0.4784	0.6024 0.4962	0.5248	0.5219	0.5622	Ave		0.5310				8.5		15.0			
Cyclohexane	+++++ 0.6087	0.6656 0.6347	0.6047	0.6391	0.7159	Ave		0.6448				6.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	+++++ 0.4345	0.5374 0.4644	0.4687	0.4830	0.5187	Ave		0.4844				7.8		15.0			
Carbon tetrachloride	0.2381 0.4057	0.4570 0.4319	0.3987	0.4179	0.4679	Lin2	-0.057	0.4443							0.9920		0.9900
1,2-Dichloroethane	0.1507 0.2541	0.3296 0.2597	0.2844	0.2722	0.2938	Lin1	0.0013	0.2626							0.9970		0.9900
Benzene	0.7727 1.2089	1.4962 1.2501	1.2770	1.2680	1.3893	Lin1	-0.024	1.2554							0.9980		0.9900
Trichloroethene	+++++ 0.3193	0.4030 0.3370	0.3374	0.3451	0.3649	Ave		0.3511				8.4		15.0			
2-Pentanone	+++++ 0.0724	0.0673 0.0815	0.0645	0.0692	0.0800	Ave		0.0725				9.6		15.0			
1,2-Dichloropropane	+++++ 0.2700	0.3274 0.2803	0.2750	0.2743	0.3027	Ave		0.2883				7.8		30.0			
Methylcyclohexane	+++++ 0.4880	0.5704 0.5093	0.5142	0.5297	0.5761	Ave		0.5313				6.6		15.0			
1,4-Dioxane	+++++ 0.0009	+++++ 0.0010	0.0007	0.0008	0.0009	Ave		0.0008				13.0		15.0			
Dibromomethane	+++++ 0.0939	0.1151 0.0980	0.0947	0.0952	0.1039	Ave		0.1001				8.2		15.0			
Bromodichloromethane	0.1719 0.3058	0.3388 0.3197	0.2894	0.3023	0.3352	Lin2	-0.042	0.3260							0.9920		0.9900
2-Chloroethyl vinyl ether	+++++ 0.0297	+++++ 0.0372	0.0106	0.0147	0.0201	Lin	-0.139	0.0385							0.9920		0.9900
cis-1,3-Dichloropropene	0.7723 1.5479	1.4546 1.6598	1.3718	1.4085	1.6473	Lin2	-0.240	1.5870							0.9960		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.0848	0.0785 0.0877	0.0705	0.0774	0.0899	Ave		0.0814				9.0		15.0			
Toluene	+++++ 1.3208	1.5634 1.3234	1.3693	1.4094	1.5399	Ave		1.4211				7.5		30.0			
Ethyl methacrylate	+++++ 0.6694	0.4636 0.7307	0.4750	0.5227	0.6538	Lin1	-0.411	0.7126							0.9970		0.9900
trans-1,3-Dichloropropene	+++++ 0.2680	0.2545 0.2825	0.2262	0.2458	0.2863	Ave		0.2606				8.8		15.0			
1,1,2-Trichloroethane	+++++ 0.1378	0.1576 0.1428	0.1423	0.1379	0.1522	Ave		0.1451				5.6		15.0			
2-Hexanone	+++++ 0.2426	0.2110 0.2634	0.1931	0.2109	0.2513	Ave		0.2287				12.1		15.0			
1,3-Dichloropropane	0.6429 1.1184	1.3291 1.1592	1.1480	1.1274	1.2287	Lin1	-0.067	1.1571							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	+++++ 1.2480	1.6704 1.3499	1.3992	1.4019	1.4831	Ave		1.4254				10.0		15.0			
Chlorodibromomethane	0.3110 0.7187	0.6554 0.7845	0.5951	0.6432	0.7406	Lin2	-0.124	0.7275							0.9940		0.9900
1,2-Dibromoethane	+++++ 0.5400	0.5875 0.5782	0.5139	0.5255	0.5720	Ave		0.5529				5.5		15.0			
1-Chlorohexane	+++++ 2.0457	2.0519 2.2692	1.9284	2.1621	2.3753	Ave		2.1388				7.7		15.0			
Chlorobenzene	2.4320 3.4948	4.4717 3.6770	3.7943	3.7129	3.9966	Lin1	-0.014	3.6647			0.3000				0.9980		0.9900
1,1,1,2-Tetrachloroethane	0.5388 1.0503	1.0657 1.1216	0.9322	1.0051	1.1289	Lin2	-0.160	1.0959							0.9940		0.9900
Ethylbenzene	+++++ 2.1380	2.5177 2.3094	2.2066	2.2853	2.4585	Ave		2.3192				6.3		30.0			
m-Xylene & p-Xylene	+++++ 2.6166	2.8657 2.8332	2.6177	2.7466	2.9889	Ave		2.7781				5.3		15.0			
o-Xylene	+++++ 2.3971	2.6088 2.5298	2.3815	2.5048	2.7251	Ave		2.5245				5.1		15.0			
Styrene	+++++ 3.6989	3.2068 3.8870	3.0678	3.5103	3.9927	Ave		3.5606				10.4		15.0			
Bromoform	+++++ 0.3347	0.2614 0.3814	0.2403	0.2703	0.3217	Lin1	-0.207	0.3656			0.1000				0.9940		0.9900
Isopropylbenzene	+++++ 4.3227	4.8764 4.3684	4.5091	4.7559	5.2367	Ave		4.6782				7.5		15.0			
Cyclohexanone	+++++ 0.0114	0.0093 0.0125	0.0085	0.0094	0.0114	Ave		0.0104				14.9		15.0			
1,1,2,2-Tetrachloroethane	0.2162 0.3827	0.4463 0.4099	0.3848	0.3806	0.4272	Lin1	-0.035	0.4042			0.3000				0.9980		0.9900
trans-1,4-Dichloro-2-butene	+++++ 0.0994	0.0943 0.1090	0.0801	0.0870	0.1018	Ave		0.0953				11.0		15.0			
1,2,3-Trichloropropane	+++++ 0.1046	0.1184 0.1118	0.1056	0.1042	0.1200	Ave		0.1108				6.4		15.0			
Bromobenzene	+++++ 0.8706	1.0510 0.9509	0.9181	0.9181	0.9868	Ave		0.9492				6.6		15.0			
N-Propylbenzene	+++++ 1.2473	1.3824 1.4187	1.2866	1.3380	1.4865	Ave		1.3599				6.5		15.0			
1,3,5-Trimethylbenzene	+++++ 3.4855	3.7751 3.7184	3.5605	3.7772	4.1601	Ave		3.7461				6.3		15.0			
2-Chlorotoluene	+++++ 1.0035	1.2279 1.0982	1.0562	1.0952	1.1841	Ave		1.1109				7.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	+++++ 0.9974	1.1140 1.1160	1.0404	1.0631	1.1608	Ave		1.0820				5.5		15.0			
tert-Butylbenzene	+++++ 3.5851	3.9961 3.9165	3.7269	3.9553	4.3147	Ave		3.9158				6.4		15.0			
1,2,4-Trimethylbenzene	+++++ 3.4702	3.8876 3.7412	3.6316	3.7633	4.1011	Ave		3.7658				5.7		15.0			
sec-Butylbenzene	+++++ 1.0034	1.0729 1.1486	1.0293	1.1193	1.1999	Ave		1.0956				6.8		15.0			
p-Isopropyltoluene	+++++ 3.9901	4.3834 4.2619	4.1200	4.4475	4.8750	Ave		4.3463				7.1		15.0			
1,3-Dichlorobenzene	+++++ 1.7812	2.2140 1.9565	1.9463	1.9199	2.0646	Ave		1.9804				7.4		15.0			
1,4-Dichlorobenzene	1.2839 1.6935	2.1145 1.8637	1.8461	1.8457	1.9601	Ave		1.8011				14.5		15.0			
n-Butylbenzene	+++++ 3.5302	3.9306 3.9014	3.6571	4.0462	4.3921	Ave		3.9096				7.8		15.0			
1,2-Dichlorobenzene	+++++ 1.4131	1.7021 1.5341	1.5007	1.4857	1.6211	Ave		1.5428				6.7		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0507	0.0344 0.0592	0.0362	0.0438	0.0517	Lin1	-0.035	0.0567							0.9940		0.9900
1,2,4-Trichlorobenzene	+++++ 0.9240	0.9384 1.0005	0.8507	0.9332	1.0215	Ave		0.9447				6.4		15.0			
Hexachlorobutadiene	0.5593 0.7152	0.9522 0.8347	0.8398	0.8577	0.8947	Lin1	-0.001	0.8087							0.9930		0.9900
Naphthalene	+++++ 1.0172	0.6940 1.1178	0.6581	0.8327	0.9903	Lin1	-0.662	1.0892							0.9970		0.9900
1,2,3-Trichlorobenzene	+++++ 0.6808	0.7193 0.7341	0.6201	0.6973	0.7388	Lin2	-0.020	0.7045							0.9940		0.9900
Dibromofluoromethane (Surr)	+++++ 0.2431	0.3161 0.2580	0.2557	0.2600	0.2826	Ave		0.2692				9.8		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2081	0.2955 0.2160	0.2311	0.2281	0.2428	Ave		0.2369				13.1		15.0			
Toluene-d8 (Surr)	+++++ 4.7948	5.8471 4.9081	4.8860	5.2297	5.5771	Ave		5.2071				8.2		15.0			
4-Bromofluorobenzene (Surr)	+++++ 1.0147	1.2245 1.1299	1.0604	1.0893	1.1902	Ave		1.1182				7.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-276788/9	G2_4152.D
Level 2	IC 280-276788/10	G2_4153.D
Level 3	IC 280-276788/11	G2_4154.D
Level 4	IC 280-276788/12	G2_4155.D
Level 5	IC 280-276788/13	G2_4156.D
Level 6	IC 280-276788/14	G2_4157.D
Level 7	IC 280-276788/15	G2_4158.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	+++++ 1590369	42482 3357093	111018	276345	557417	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chloromethane	FB	Ave	+++++ 1401577	45622 3076702	94529	239697	476957	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	16171 1455499	47154 3136382	96675	246329	498926	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromomethane	FB	Ave	+++++ 1078257	35643 2325662	68460	174208	359362	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chloroethane	FB	Ave	+++++ 1036385	33399 2270562	65703	171768	348764	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	+++++ 2530742	88016 5727730	166968	431267	869123	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	+++++ 2090877	74554 4609072	149690	380009	738830	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl ether	FB	Ave	+++++ 540895	15048 1352227	31373	79963	175139	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Acrolein	FB	Ave	+++++ 445411	11429 1087610	24348	63645	145316	+++++ 300	10.00 600	20.0	50.0	100.0
Acetone	FB	Ave	+++++ 407569	15801 1004183	28856	70881	147969	+++++ 120	4.00 240	8.00	20.0	40.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	+++++ 1105483	38167 2569371	76098	189965	388835	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloroethene	FB	Ave	+++++ 1236994	38383 3013298	78149	201013	428362	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Iodomethane	FB	Ave	+++++ 1999993	62258 4798876	122707	314923	666430	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Methyl acetate	FB	Ave	+++++ 1187649	41805 2904912	76247	186126	399996	+++++ 150	5.00 300	10.0	25.0	50.0
3-Chloro-1-propene	FB	Ave	+++++ 2107857	67234 4957950	120913	322488	706103	+++++ 30.0	1.00 60.0	2.00	5.00	10.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

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
Carbon disulfide	FB	Ave	+++++ 5159794	173191 12206041	348621	877855	1814265	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butyl alcohol	FB	Ave	+++++ 304378	8940 755269	16757	44001	98468	+++++ 300	10.0 600	20.0	50.0	100
Methylene Chloride	FB	Lin2	+++++ 1084341	69234 2579025	101490	204726	390116	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Acrylonitrile	FB	Ave	+++++ 1246365	37543 3050107	75137	191913	412428	+++++ 300	10.0 600	20.0	50.0	100
Methyl tert-butyl ether	FB	Ave	+++++ 1711574	47161 4139653	98236	258815	558092	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 1324658	43061 3255829	86337	220417	458491	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Hexane	CBZ	Ave	+++++ 2115424	63852 5203017	134893	349336	748999	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl acetate	FB	Ave	+++++ 1785861	41134 4421460	94537	254772	569027	+++++ 60.0	2.00 120	4.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	+++++ 2240424	74640 5450391	150668	370747	768901	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	+++++ 673907	25891 1677974	46955	116080	219220	+++++ 120	4.00 240	8.00	20.0	40.0
sec-Butyl Alcohol	FB	Lin	+++++ 615195	11385 1691298	28425	67167	173556	+++++ 900	30.0 1800	60.0	150	300
cis-1,2-Dichloroethene	FB	Ave	+++++ 1242281	39899 3062909	77971	196638	422323	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	+++++ 1909080	63076 4537608	122692	316028	656483	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Bromochloromethane	FB	Ave	+++++ 419328	14124 1037787	26746	67033	143223	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chloroform	FB	Ave	20419 1941296	66778 4655427	129825	327153	677798	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 177145	4726 439695	9275	25476	56631	+++++ 60.0	2.00 120	4.00	10.0	20.0
Isobutyl alcohol	FB	Ave	+++++ 210026	5190 551929	10372	27054	65538	+++++ 750	25.0 1500	50.0	125	250
1,1,1-Trichloroethane	FB	Ave	+++++ 1927458	65198 4637149	129992	330041	678071	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	+++++ 2452347	72036 5930807	149783	404165	863414	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	+++++ 1750263	58169 4339655	116106	305434	625551	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Lin2	15272 1634451	49459 4036019	98763	264284	564296	0.300 30.0	1.00 60.0	2.00	5.00	10.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Lin1	9670 1023576	35669 2426445	70456	172156	354366	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Benzene	FB	Lin1	49567 4870172	161942 11682315	316344	801911	1675591	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	+++++ 1286221	43619 3148822	83587	218253	440081	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
2-Pentanone	FB	Ave	+++++ 1166253	29151 3046168	63864	175063	386133	+++++ 120	4.00 240	8.00	20.0	40.0
1,2-Dichloropropane	FB	Ave	+++++ 1087573	35438 2619441	68116	173446	365064	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Methylcyclohexane	FB	Ave	+++++ 1966036	61737 4759513	127372	335005	694750	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dioxane	FB	Ave	+++++ 72337	+++++ 184914	3500	9791	21256	+++++ 600	+++++ 1200	40.0	100	200
Dibromomethane	FB	Ave	+++++ 378318	12463 915489	23465	60214	125293	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Bromodichloromethane	FB	Lin2	11026 1232017	36666 2987222	71696	191172	404288	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Lin	+++++ 119781	+++++ 347964	2636	9301	24263	+++++ 30.0	+++++ 60.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBZ	Lin2	10906 1479413	36097 3631184	77902	208424	472127	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	+++++ 1365831	33970 3278418	69839	195784	433465	+++++ 120	4.00 240	8.00	20.0	40.0
Toluene	FB	Ave	+++++ 5321090	169217 12367555	339209	891339	1857248	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl methacrylate	CBZ	Lin1	+++++ 639811	11505 1598677	26976	77351	187384	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	FB	Ave	+++++ 1079568	27541 2640382	56025	155475	345339	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloroethane	FB	Ave	+++++ 555183	17062 1334554	35255	87200	183584	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
2-Hexanone	CBZ	Ave	+++++ 927642	20944 2305086	43866	124823	288146	+++++ 120	4.00 240	8.00	20.0	40.0
1,3-Dichloropropane	CBZ	Lin1	9078 1068890	32981 2536035	65192	166828	352140	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrachloroethene	CBZ	Ave	+++++ 1192836	41452 2953187	79458	207446	425063	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chlorodibromomethane	CBZ	Lin2	4391 686917	16264 1716287	33796	95182	212252	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromoethane	CBZ	Ave	+++++ 516091	14579 1265076	29185	77759	163938	+++++ 30.0	1.00 60.0	2.00	5.00	10.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1-Chlorohexane	CBZ	Ave	+++++ 1955247	50919 4964591	109513	319941	680763	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chlorobenzene	CBZ	Lin1	34343 3340247	110966 8044332	215477	549425	1145443	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBZ	Lin2	7609 1003807	26446 2453830	52936	148741	323545	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylbenzene	CBZ	Ave	+++++ 2043419	62477 5052385	125313	338170	704596	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
m-Xylene & p-Xylene	CBZ	Ave	+++++ 2500852	71113 6198348	148656	406438	856633	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
o-Xylene	CBZ	Ave	+++++ 2291056	64737 5534569	135242	370663	781025	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Styrene	CBZ	Ave	+++++ 3535313	79578 8503853	174220	519451	1144325	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Bromoform	CBZ	Lin1	+++++ 319941	6487 834452	13648	39992	92207	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Isopropylbenzene	DCB	Ave	+++++ 6322931	176234 14225929	371201	1060788	2241028	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexanone	CBZ	Ave	+++++ 433944	9210 1095379	19320	55853	130210	+++++ 1200	40.0 2400	80.0	200	400
1,1,2,2-Tetrachloroethane	DCB	Lin1	4002 559773	16128 1334728	31676	84885	182839	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 145351	3409 355062	6592	19396	43586	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCB	Ave	+++++ 153071	4278 364129	8696	23250	51346	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Bromobenzene	DCB	Ave	+++++ 1273383	37982 3096646	75580	204776	422299	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
N-Propylbenzene	DCB	Ave	+++++ 1824492	49960 4620100	105913	298430	636142	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCB	Ave	+++++ 5098261	136433 12109102	293107	842490	1780308	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
2-Chlorotoluene	DCB	Ave	+++++ 1467901	44376 3576359	86952	244285	506738	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
4-Chlorotoluene	DCB	Ave	+++++ 1458872	40262 3634199	85645	237124	496778	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butylbenzene	DCB	Ave	+++++ 5243924	144419 12754338	306804	882225	1846469	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCB	Ave	+++++ 5075965	140497 12183397	298960	839387	1755042	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butylbenzene	DCB	Ave	+++++ 1467719	38775 3740299	84737	249651	513500	+++++ 30.0	1.00 60.0	2.00	5.00	10.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 276788

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2015 07:45 Calibration End Date: 05/11/2015 09:39 Calibration ID: 22265

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
p-Isopropyltoluene	DCB	Ave	+++++ 5836395	158417 13878905	339169	991998	2086240	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCB	Ave	+++++ 2605326	80014 6371441	160224	428232	883551	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCB	Ave	23765 2477158	76418 6069186	151976	411675	838828	0.300 30.0	1.00 60.0	2.00	5.00	10.0
n-Butylbenzene	DCB	Ave	+++++ 5163652	142053 12704907	301063	902492	1879591	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCB	Ave	+++++ 2066916	61516 4995923	123545	331375	693764	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCB	Lin1	+++++ 74169	1244 192912	2983	9759	22112	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trichlorobenzene	DCB	Ave	+++++ 1351573	33914 3258038	70032	208141	437145	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Hexachlorobutadiene	DCB	Lin1	10353 1046177	34412 2718178	69133	191311	382876	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Naphthalene	DCB	Lin1	+++++ 1487923	25082 3640061	54178	185742	423780	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCB	Lin2	+++++ 995763	25994 2390659	51050	155536	316182	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 979506	34211 2410625	63338	164412	340852	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 838420	31984 2018760	57253	144232	292871	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Toluene-d8 (Surr)	CBZ	Ave	+++++ 4582689	145096 10737723	277470	773886	1598387	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
4-Bromofluorobenzene (Surr)	DCB	Ave	+++++ 1484233	44254 3679525	87292	242957	509356	+++++ 30.0	1.00 60.0	2.00	5.00	10.0

Curve Type Legend:

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

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4152.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-May-2015 07:45:30 ALS Bottle#: 13 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 11:29:43 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: ilczyszynd Date: 11-May-2015 09:28:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	274438	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	2672756	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.793	0.007	87	588385	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	96	771268	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111		6.976				ND	ND	
$ 7 1,2-Dichloroethane-d4 (Sur	65		7.269				ND	ND	
$ 8 Toluene-d8 (Surr)	98		8.728				ND	ND	
$ 9 4-Bromofluorobenzene (Surr	95		10.659				ND	ND	
13 Dichlorodifluoromethane	85		3.895				ND	ND	
14 Chloromethane	50		4.105				ND	ND	
16 Vinyl chloride	62	4.230	4.244	-0.014	94	16171	0.3000	0.2053	
138 Butadiene	54		4.258				ND	ND	
19 Bromomethane	94		4.607				ND	ND	
20 Chloroethane	64		4.663				ND	ND	
21 Dichlorofluoromethane	67		4.817				ND	ND	
22 Trichlorofluoromethane	101		4.887				ND	ND	
25 Ethyl ether	59		5.068				ND	ND	
28 Acrolein	56		5.194				ND	ND	
29 Acetone	43		5.292				ND	ND	
31 1,1,2-Trichloro-1,2,2-trif	151		5.334				ND	ND	
32 1,1-Dichloroethene	96		5.334				ND	ND	
34 Iodomethane	142		5.515				ND	ND	
35 Methyl acetate	43		5.529				ND	ND	
36 3-Chloro-1-propene	41		5.585				ND	ND	
37 Carbon disulfide	76		5.613				ND	ND	
38 2-Methyl-2-propanol	59		5.641				ND	ND	
39 Methylene Chloride	84		5.683				ND	ND	
40 Acrylonitrile	53		5.809				ND	ND	
41 Methyl tert-butyl ether	73		5.864				ND	ND	
42 trans-1,2-Dichloroethene	96		5.906				ND	ND	
43 Hexane	57		6.082				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43		6.154				ND	ND	
46 1,1-Dichloroethane	63		6.218				ND	ND	
50 2-Butanone (MEK)	43		6.583				ND	ND	
52 sec-Butyl Alcohol	45		6.633				ND	ND	
53 cis-1,2-Dichloroethene	96		6.647				ND	ND	
54 2,2-Dichloropropane	77		6.683				ND	ND	
56 Chlorobromomethane	128		6.840				ND	ND	
57 Chloroform	83	6.847	6.848	-0.001	91	20419	0.3000	0.1900	
58 Tetrahydrofuran	42		6.876				ND	ND	
59 Isobutyl alcohol	41		7.048				ND	ND	
60 1,1,1-Trichloroethane	97		7.076				ND	ND	
61 Cyclohexane	56		7.162				ND	ND	
62 1,1-Dichloropropene	75		7.176				ND	ND	
63 Carbon tetrachloride	117	7.219	7.219	0.000	96	15272	0.3000	0.2880	
64 1,2-Dichloroethane	62	7.326	7.327	-0.001	51	9670	0.3000	0.1674	
66 Benzene	78	7.355	7.355	0.000	96	49567	0.3000	0.2039	
67 n-Heptane	43		7.448				ND	ND	
69 Trichloroethene	95		7.820				ND	ND	
70 2-Pentanone	43		7.849				ND	ND	
72 1,2-Dichloropropane	63		7.999				ND	ND	
73 Methylcyclohexane	55		8.027				ND	ND	
74 1,4-Dioxane	88		8.056				ND	ND	
75 Dibromomethane	93		8.099				ND	ND	
76 Dichlorobromomethane	83	8.170	8.170	0.000	97	11026	0.3000	0.2876	
78 2-Chloroethyl vinyl ether	63		8.313				ND	ND	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	92	10906	0.3000	0.2975	
80 4-Methyl-2-pentanone (MIBK	43		8.549				ND	ND	
81 Toluene	91		8.778				ND	ND	
82 Ethyl methacrylate	69		8.864				ND	ND	
83 trans-1,3-Dichloropropene	75		8.871				ND	ND	
84 1,1,2-Trichloroethane	97		9.028				ND	ND	
85 2-Hexanone	43		9.143				ND	ND	
86 1,3-Dichloropropane	76	9.157	9.164	-0.007	95	9078	0.3000	0.2244	
87 Tetrachloroethene	164		9.200				ND	ND	
88 Chlorodibromomethane	129	9.350	9.350	0.000	88	4391	0.3000	0.2989	
90 Ethylene Dibromide	107		9.479				ND	ND	
91 1-Chlorohexane	91		9.715				ND	ND	
92 Chlorobenzene	112	9.822	9.822	0.000	95	34343	0.3000	0.2029	
93 1,1,1,2-Tetrachloroethane	131	9.858	9.851	0.007	69	7609	0.3000	0.2934	
94 Ethylbenzene	106		9.858				ND	ND	
95 m-Xylene & p-Xylene	106		9.936				ND	ND	
96 Styrene	104		10.251				ND	ND	
97 o-Xylene	106		10.251				ND	ND	
98 Bromoform	173		10.444				ND	ND	
99 Isopropylbenzene	105		10.508				ND	ND	
101 Cyclohexanone	55		10.623				ND	ND	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	87	4002	0.3000	0.2472	
103 trans-1,4-Dichloro-2-buten	53		10.737				ND	ND	
104 1,2,3-Trichloropropane	110		10.773				ND	ND	
105 Bromobenzene	156		10.823				ND	ND	
106 N-Propylbenzene	120		10.830				ND	ND	
107 1,3,5-Trimethylbenzene	105		10.937				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126		10.945				ND	ND	
109 4-Chlorotoluene	126		11.023				ND	ND	
110 tert-Butylbenzene	119		11.231				ND	ND	
111 1,2,4-Trimethylbenzene	105		11.259				ND	ND	
112 sec-Butylbenzene	134		11.409				ND	ND	
113 4-Isopropyltoluene	119		11.502				ND	ND	
114 1,3-Dichlorobenzene	146		11.567				ND	ND	
116 1,4-Dichlorobenzene	146	11.638	11.631	0.007	94	23765	0.3000	0.2139	
117 n-Butylbenzene	91		11.860				ND	ND	
118 1,2-Dichlorobenzene	146		11.981				ND	ND	
119 1,2-Dibromo-3-Chloropropan	157		12.704				ND	ND	
121 1,2,4-Trichlorobenzene	180		13.640				ND	ND	
122 Hexachlorobutadiene	225	13.804	13.798	0.006	93	10353	0.3000	0.2092	
123 Naphthalene	128		13.998				ND	ND	
124 1,2,3-Trichlorobenzene	180		14.312				ND	ND	
S 149 1,2-Dichloroethene, Total	96				0		0.6000	0	
S 150 Trihalomethanes, Total	1				0		1.20	0.7765	
S 151 Xylenes, Total (URS)	1				0		0.6000	0	
S 152 Total BTEX	1				0			0.2039	
S 153 1,3-Dichloropropene, Total	1				0		0.6000	0.2975	
S 154 1,2-Dichloroethene, Total	1				0		0.6000	0	
S 155 Xylenes, Total	106				0		0.6000	0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

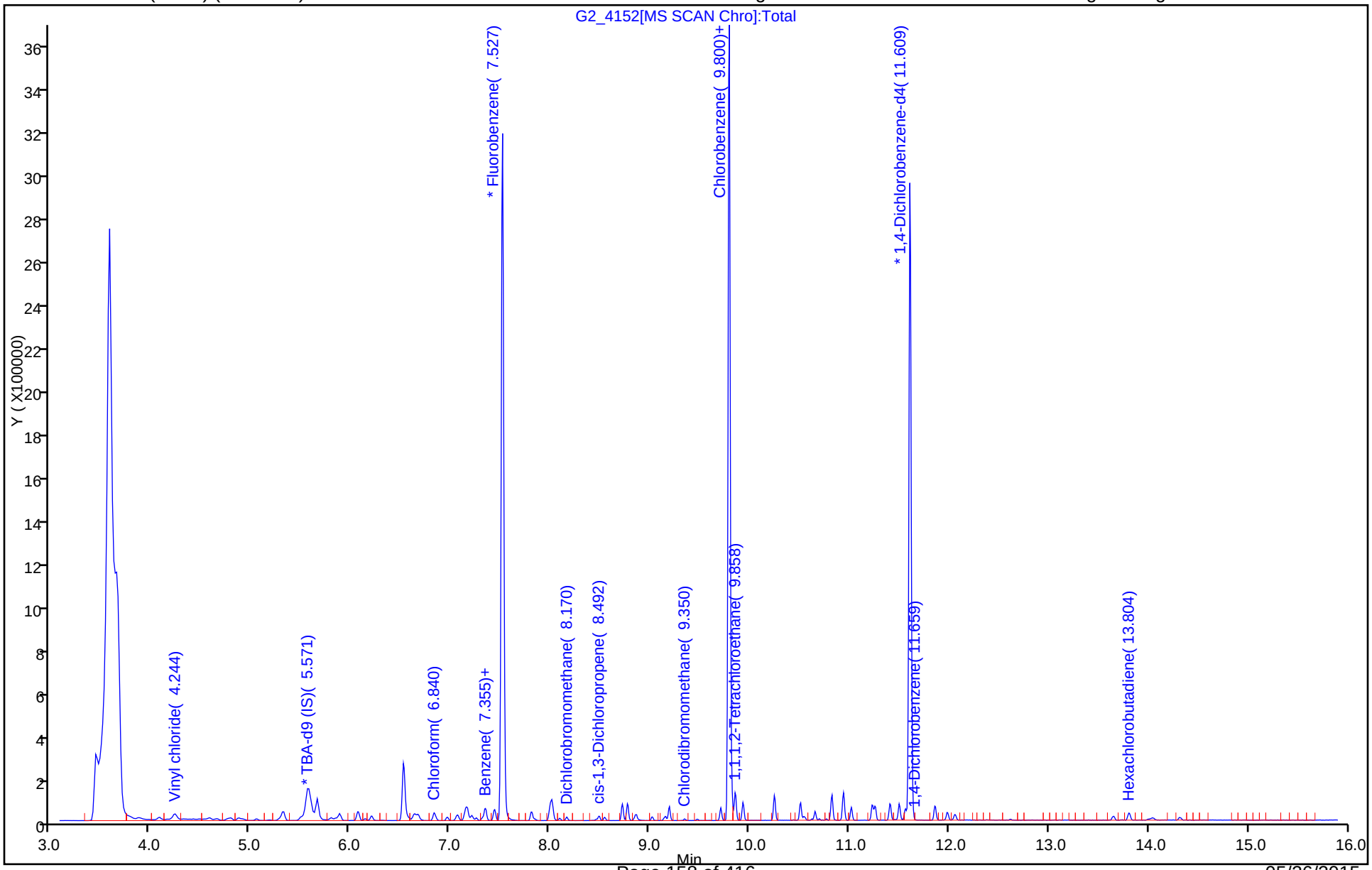
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.02	Units: uL
MV-Main A_00022	Amount Added:	0.15	Units: uL
MV-Gas/Ket A_00032	Amount Added:	0.15	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.15	Units: uL

Report Date: 11-May-2015 11:29:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4152.D				
Injection Date:	11-May-2015 07:45:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4153.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-May-2015 08:04:30 ALS Bottle#: 14 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 11:29:46 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: ilczyszynd Date: 11-May-2015 10:06:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	123672	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1352921	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	87	310188	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.610	0.000	95	451753	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	92	34211	1.00	1.17	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.269	0.000	96	31984	1.00	1.25	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	145096	1.00	1.12	
$ 9 4-Bromofluorobenzene (Surr	95	10.659	10.659	0.000	92	44254	1.00	1.10	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	42482	1.00	0.9443	
14 Chloromethane	50	4.091	4.105	-0.014	98	45622	1.00	1.12	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	47154	1.00	1.18	
138 Butadiene	54	4.258	4.258	0.000	0	38237	NC	NC	
19 Bromomethane	94	4.594	4.607	-0.013	92	35643	1.00	1.17	
20 Chloroethane	64	4.663	4.663	0.000	99	33399	1.00	1.13	
21 Dichlorofluoromethane	67	4.803	4.817	-0.014	97	88016	1.00	1.18	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	97	74554	1.00	1.17	
25 Ethyl ether	59	5.068	5.068	0.000	89	15048	1.00	1.02	
28 Acrolein	56	5.194	5.194	0.000	96	11429	10.0	9.72	
29 Acetone	43	5.292	5.292	0.000	99	15801	4.00	4.96	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.334	-0.014	92	38167	1.00	1.15	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	97	38383	1.00	1.08	
34 Iodomethane	142	5.501	5.515	-0.014	99	62258	1.00	1.10	
35 Methyl acetate	43	5.529	5.529	0.000	96	41805	5.00	6.02	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	80	67234	1.00	1.14	
37 Carbon disulfide	76	5.613	5.613	0.000	99	173191	1.00	1.13	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	28	8940	10.0	10.8	
39 Methylene Chloride	84	5.669	5.683	-0.014	92	69234	1.00	1.06	
40 Acrylonitrile	53	5.809	5.809	0.000	97	37543	10.0	10.8	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	98	47161	1.00	1.02	
42 trans-1,2-Dichloroethene	96	5.906	5.906	0.000	97	43061	1.00	1.11	
43 Hexane	57	6.082	6.082	0.000	94	63852	1.00	1.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	41134	2.00	1.79	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	97	74640	1.00	1.13	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	25891	4.00	5.03	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	38	11385	30.0	68.2	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	79	39899	1.00	1.12	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	90	63076	1.00	1.13	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	14124	1.00	1.15	
57 Chloroform	83	6.848	6.848	0.000	94	66778	1.00	1.23	
58 Tetrahydrofuran	42	6.883	6.876	0.007	88	4726	2.00	2.02	
59 Isobutyl alcohol	41	7.041	7.048	-0.007	86	5190	25.0	24.1	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	98	65198	1.00	1.13	
61 Cyclohexane	56	7.162	7.162	0.000	92	72036	1.00	1.03	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	58169	1.00	1.11	
63 Carbon tetrachloride	117	7.219	7.219	0.000	96	49459	1.00	1.16	
64 1,2-Dichloroethane	62	7.327	7.327	0.000	98	35669	1.00	1.25	
66 Benzene	78	7.355	7.355	0.000	96	161942	1.00	1.21	
67 n-Heptane	43	7.448	7.448	0.000	89	64259	1.00	1.02	
69 Trichloroethene	95	7.820	7.820	0.000	97	43619	1.00	1.15	
70 2-Pentanone	43	7.849	7.849	0.000	98	29151	4.00	3.72	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	91	35438	1.00	1.14	
73 Methylcyclohexane	55	8.027	8.027	0.000	93	61737	1.00	1.07	
74 1,4-Dioxane	88		8.056				ND	ND	
75 Dibromomethane	93	8.099	8.099	0.000	93	12463	1.00	1.15	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	36666	1.00	1.17	
78 2-Chloroethyl vinyl ether	63		8.313				ND	ND	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	93	36097	1.00	1.07	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	33970	4.00	3.85	
81 Toluene	91	8.778	8.778	0.000	98	169217	1.00	1.10	
82 Ethyl methacrylate	69	8.864	8.864	0.000	60	11505	1.00	1.23	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	27541	1.00	0.9766	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	93	17062	1.00	1.09	
85 2-Hexanone	43	9.143	9.143	0.000	94	20944	4.00	3.69	
86 1,3-Dichloropropane	76	9.157	9.164	-0.007	96	32981	1.00	1.21	
87 Tetrachloroethene	164	9.200	9.200	0.000	97	41452	1.00	1.17	
88 Chlorodibromomethane	129	9.350	9.350	0.000	88	16264	1.00	1.07	
90 Ethylene Dibromide	107	9.479	9.479	0.000	95	14579	1.00	1.06	
91 1-Chlorohexane	91	9.715	9.715	0.000	96	50919	1.00	0.9594	
92 Chlorobenzene	112	9.822	9.822	0.000	96	110966	1.00	1.22	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.851	0.000	88	26446	1.00	1.12	
94 Ethylbenzene	106	9.858	9.858	0.000	98	62477	1.00	1.09	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	99	71113	1.00	1.03	
96 Styrene	104	10.251	10.251	0.000	81	79578	1.00	0.9006	
97 o-Xylene	106	10.251	10.251	0.000	90	64737	1.00	1.03	
98 Bromoform	173	10.437	10.444	-0.007	96	6487	1.00	1.28	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	176234	1.00	1.04	
101 Cyclohexanone	55	10.623	10.623	0.000	89	9210	40.0	35.7	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	95	16128	1.00	1.19	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.737	-0.007	67	3409	1.00	0.99	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	85	4278	1.00	1.07	
105 Bromobenzene	156	10.823	10.823	0.000	97	37982	1.00	1.11	
106 N-Propylbenzene	120	10.823	10.830	-0.007	99	49960	1.00	1.02	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	136433	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.945	10.945	0.000	96	44376	1.00	1.11	
109 4-Chlorotoluene	126	11.023	11.023	0.000	98	40262	1.00	1.03	
110 tert-Butylbenzene	119	11.231	11.231	0.000	93	144419	1.00	1.02	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	95	140497	1.00	1.03	
112 sec-Butylbenzene	134	11.409	11.409	0.000	95	38775	1.00	0.9793	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	158417	1.00	1.01	
114 1,3-Dichlorobenzene	146	11.560	11.567	-0.007	98	80014	1.00	1.12	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	92	76418	1.00	1.17	
117 n-Butylbenzene	91	11.860	11.860	0.000	97	142053	1.00	1.01	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	97	61516	1.00	1.10	
119 1,2-Dibromo-3-Chloropropan	157	12.704	12.704	0.000	85	1244	1.00	1.22	
121 1,2,4-Trichlorobenzene	180	13.647	13.640	0.007	93	33914	1.00	0.99	
122 Hexachlorobutadiene	225	13.805	13.798	0.007	97	34412	1.00	1.18	
123 Naphthalene	128	13.998	13.998	0.000	95	25082	1.00	1.25	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	25994	1.00	1.05	
S 149 1,2-Dichloroethene, Total	96				0		2.00	2.23	
S 150 Trihalomethanes, Total	1				0		4.00	4.75	
S 151 Xylenes, Total (URS)	1				0		2.00	2.06	
S 152 Total BTEX	1				0			5.46	
S 153 1,3-Dichloropropene, Total	1				0		2.00	2.04	
S 154 1,2-Dichloroethene, Total	1				0		2.00	2.23	
S 155 Xylenes, Total	106				0		2.00	2.06	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

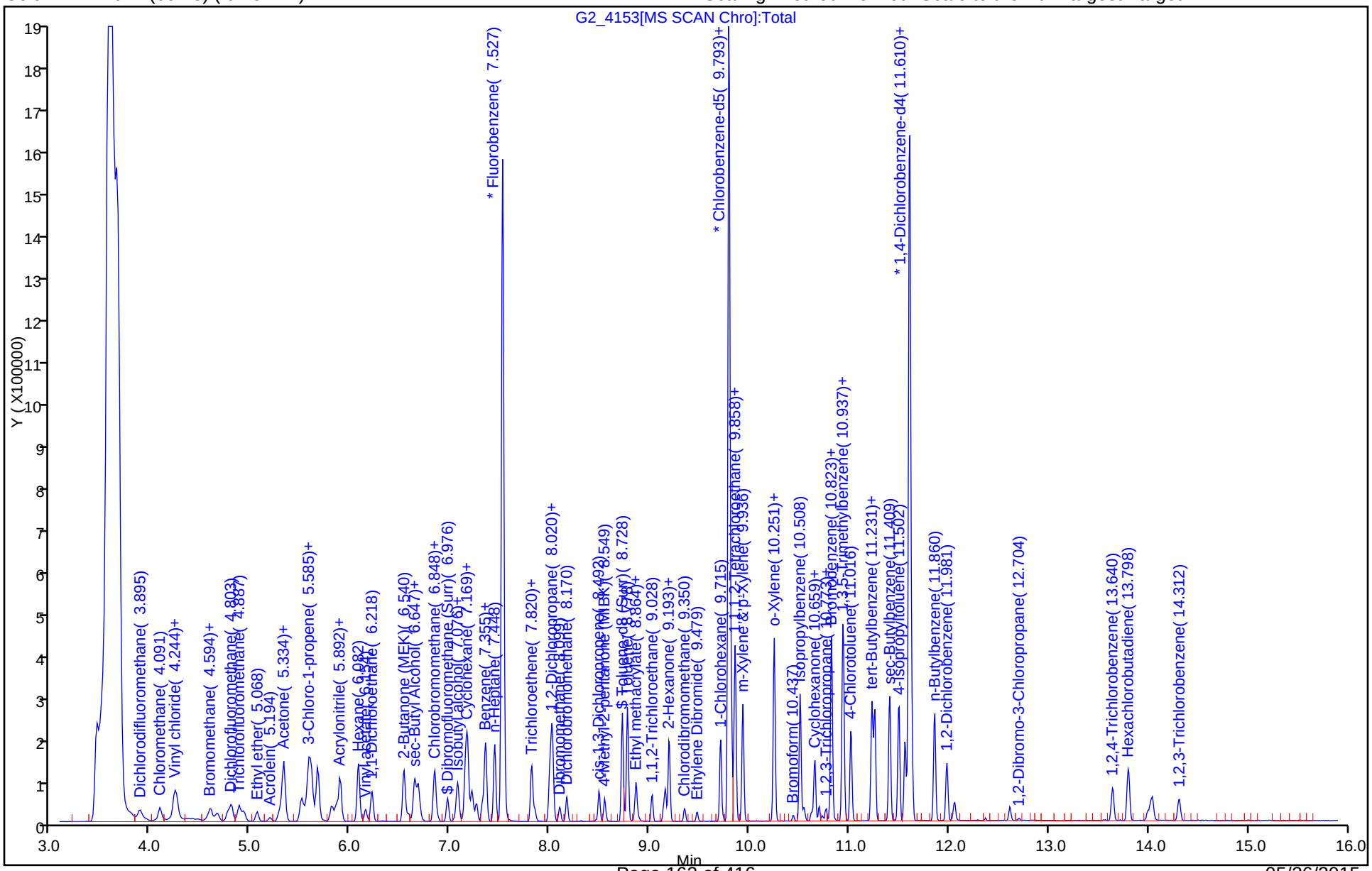
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.08	Units: uL
MV-Main A_00022	Amount Added:	0.50	Units: uL
MV-Gas/Ket A_00032	Amount Added:	0.50	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.50	Units: uL

Report Date: 11-May-2015 11:29:46 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4153.D				
Injection Date:	11-May-2015 08:04:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4154.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-May-2015 08:23:30 ALS Bottle#: 15 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 11:29:47 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: ilczyszynd Date: 11-May-2015 10:04:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	156500	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	1548231	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	87	354931	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.610	0.000	95	514514	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	93	63338	2.00	1.90	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.269	0.000	98	57253	2.00	1.95	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	277470	2.00	1.88	
$ 9 4-Bromofluorobenzene (Surr	95	10.651	10.659	-0.008	92	87292	2.00	1.90	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	111018	2.00	2.16	
14 Chloromethane	50	4.091	4.105	-0.014	99	94529	2.00	2.03	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	96675	2.00	2.12	
138 Butadiene	54	4.258	4.258	0.000	0	77686	NC	NC	
19 Bromomethane	94	4.594	4.607	-0.013	92	68460	2.00	1.96	
20 Chloroethane	64	4.663	4.663	0.000	100	65703	2.00	1.95	
21 Dichlorofluoromethane	67	4.803	4.817	-0.014	97	166968	2.00	1.96	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	149690	2.00	2.06	
25 Ethyl ether	59	5.068	5.068	0.000	90	31373	2.00	1.86	
28 Acrolein	56	5.194	5.194	0.000	98	24348	20.0	18.1	
29 Acetone	43	5.292	5.292	0.000	98	28856	8.00	7.92	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	94	76098	2.00	2.01	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	97	78149	2.00	1.92	
34 Iodomethane	142	5.501	5.515	-0.014	99	122707	2.00	1.90	
35 Methyl acetate	43	5.529	5.529	0.000	96	76247	10.0	9.59	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	78	120913	2.00	1.80	
37 Carbon disulfide	76	5.613	5.613	0.000	99	348621	2.00	1.99	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	92	16757	20.0	17.7	
39 Methylene Chloride	84	5.669	5.683	-0.014	94	101490	2.00	1.75	
40 Acrylonitrile	53	5.809	5.809	0.000	97	75137	20.0	18.8	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	97	98236	2.00	1.85	
42 trans-1,2-Dichloroethene	96	5.906	5.906	0.000	97	86337	2.00	1.94	
43 Hexane	57	6.082	6.082	0.000	93	134893	2.00	1.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	94537	4.00	3.59	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	150668	2.00	1.99	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	99	46955	8.00	7.97	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	36	28425	60.0	88.8	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	80	77971	2.00	1.91	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	90	122692	2.00	1.93	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	26746	2.00	1.91	
57 Chloroform	83	6.848	6.848	0.000	94	129825	2.00	2.09	
58 Tetrahydrofuran	42	6.876	6.876	0.000	85	9275	4.00	3.46	
59 Isobutyl alcohol	41	7.048	7.048	0.000	91	10372	50.0	42.1	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	98	129992	2.00	1.98	
61 Cyclohexane	56	7.162	7.162	0.000	90	149783	2.00	1.88	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	95	116106	2.00	1.94	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	98763	2.00	1.92	
64 1,2-Dichloroethane	62	7.327	7.327	0.000	98	70456	2.00	2.16	
66 Benzene	78	7.355	7.355	0.000	96	316344	2.00	2.05	
67 n-Heptane	43	7.448	7.448	0.000	90	137241	2.00	1.91	
69 Trichloroethene	95	7.820	7.820	0.000	98	83587	2.00	1.92	
70 2-Pentanone	43	7.849	7.849	0.000	98	63864	8.00	7.11	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	91	68116	2.00	1.91	
73 Methylcyclohexane	55	8.020	8.027	-0.007	93	127372	2.00	1.94	
74 1,4-Dioxane	88	8.056	8.056	0.000	79	3500	40.0	33.3	
75 Dibromomethane	93	8.099	8.099	0.000	96	23465	2.00	1.89	
76 Dichlorobromomethane	83	8.170	8.170	0.000	98	71696	2.00	1.91	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	83	2636	2.00	4.16	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	94	77902	2.00	1.88	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	69839	8.00	6.92	
81 Toluene	91	8.778	8.778	0.000	98	339209	2.00	1.93	
82 Ethyl methacrylate	69	8.864	8.864	0.000	88	26976	2.00	1.91	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	56025	2.00	1.74	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	93	35255	2.00	1.96	
85 2-Hexanone	43	9.143	9.143	0.000	98	43866	8.00	6.75	
86 1,3-Dichloropropane	76	9.157	9.164	-0.007	96	65192	2.00	2.04	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	79458	2.00	1.96	
88 Chlorodibromomethane	129	9.350	9.350	0.000	90	33796	2.00	1.81	
90 Ethylene Dibromide	107	9.479	9.479	0.000	98	29185	2.00	1.86	
91 1-Chlorohexane	91	9.715	9.715	0.000	96	109513	2.00	1.80	
92 Chlorobenzene	112	9.822	9.822	0.000	96	215477	2.00	2.07	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.851	0.000	90	52936	2.00	1.85	
94 Ethylbenzene	106	9.858	9.858	0.000	99	125313	2.00	1.90	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	148656	2.00	1.88	
96 Styrene	104	10.251	10.251	0.000	83	174220	2.00	1.72	
97 o-Xylene	106	10.251	10.251	0.000	89	135242	2.00	1.89	
98 Bromoform	173	10.444	10.444	0.000	96	13648	2.00	1.88	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	371201	2.00	1.93	
101 Cyclohexanone	55	10.623	10.623	0.000	93	19320	80.0	65.4	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	96	31676	2.00	1.99	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.737	-0.007	79	6592	2.00	1.68	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	84	8696	2.00	1.91	
105 Bromobenzene	156	10.823	10.823	0.000	97	75580	2.00	1.93	
106 N-Propylbenzene	120	10.823	10.830	-0.007	99	105913	2.00	1.89	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	293107	2.00	1.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.945	10.945	0.000	96	86952	2.00	1.90	
109 4-Chlorotoluene	126	11.016	11.023	-0.007	98	85645	2.00	1.92	
110 tert-Butylbenzene	119	11.231	11.231	0.000	93	306804	2.00	1.90	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	97	298960	2.00	1.93	
112 sec-Butylbenzene	134	11.409	11.409	0.000	95	84737	2.00	1.88	
113 4-Isopropyltoluene	119	11.495	11.502	-0.007	97	339169	2.00	1.90	
114 1,3-Dichlorobenzene	146	11.560	11.567	-0.007	98	160224	2.00	1.97	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	96	151976	2.00	2.05	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	301063	2.00	1.87	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	97	123545	2.00	1.95	
119 1,2-Dibromo-3-Chloropropan	157	12.704	12.704	0.000	74	2983	2.00	1.89	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	70032	2.00	1.80	
122 Hexachlorobutadiene	225	13.805	13.798	0.007	96	69133	2.00	2.08	
123 Naphthalene	128	13.998	13.998	0.000	96	54178	2.00	1.82	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	96	51050	2.00	1.79	
S 149 1,2-Dichloroethene, Total	96				0		4.00	3.85	
S 150 Trihalomethanes, Total	1				0		8.00	7.68	
S 151 Xylenes, Total (URS)	1				0		4.00	3.77	
S 152 Total BTEX	1				0			9.66	
S 153 1,3-Dichloropropene, Total	1				0		4.00	3.62	
S 154 1,2-Dichloroethene, Total	1				0		4.00	3.85	
S 155 Xylenes, Total	106				0		4.00	3.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

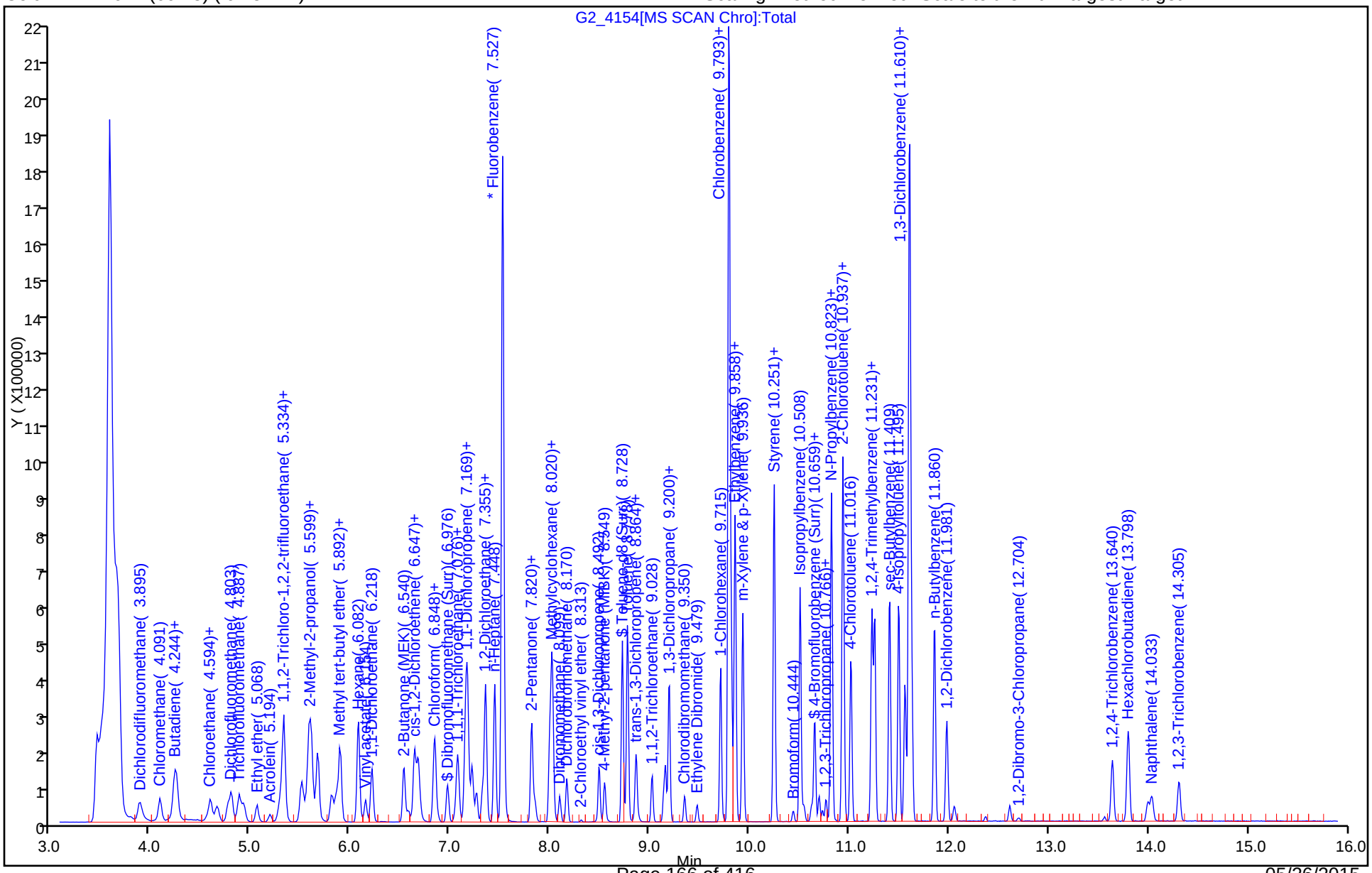
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.16	Units: uL
MV-Main A_00022	Amount Added:	1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	1.00	Units: uL

Report Date: 11-May-2015 11:29:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4154.D				
Injection Date:	11-May-2015 08:23:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4155.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 11-May-2015 08:42:30 ALS Bottle#: 16 Worklist Smp#: 12
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 11:29:47 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: ilczyszynd Date: 11-May-2015 10:05:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	152079	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1581027	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.793	0.007	86	369948	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	95	557619	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	93	164412	5.00	4.83	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.269	0.000	97	144232	5.00	4.81	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	773886	5.00	5.02	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.659	-0.001	91	242957	5.00	4.87	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	276345	5.00	5.26	
14 Chloromethane	50	4.090	4.105	-0.015	99	239697	5.00	5.04	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	246329	5.00	5.29	
138 Butadiene	54	4.258	4.258	0.000	0	204265	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	91	174208	5.00	4.87	
20 Chloroethane	64	4.663	4.663	0.000	100	171768	5.00	4.98	
21 Dichlorofluoromethane	67	4.803	4.817	-0.014	97	431267	5.00	4.95	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	380009	5.00	5.12	
25 Ethyl ether	59	5.068	5.068	0.000	91	79963	5.00	4.65	
28 Acrolein	56	5.194	5.194	0.000	99	63645	50.0	46.3	
29 Acetone	43	5.292	5.292	0.000	99	70881	20.0	19.1	
31 1,1,2-Trichloro-1,2,2-trif	151	5.333	5.334	-0.001	94	189965	5.00	4.92	
32 1,1-Dichloroethene	96	5.333	5.334	-0.001	96	201013	5.00	4.83	
34 Iodomethane	142	5.515	5.515	0.000	98	314923	5.00	4.77	
35 Methyl acetate	43	5.529	5.529	0.000	97	186126	25.0	22.9	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	80	322488	5.00	4.69	
37 Carbon disulfide	76	5.613	5.613	0.000	99	877855	5.00	4.91	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	93	44001	50.0	45.6	
39 Methylene Chloride	84	5.669	5.683	-0.014	94	204726	5.00	4.79	
40 Acrylonitrile	53	5.808	5.809	-0.001	98	191913	50.0	47.1	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	97	258815	5.00	4.77	
42 trans-1,2-Dichloroethene	96	5.906	5.906	0.000	97	220417	5.00	4.86	
43 Hexane	57	6.082	6.082	0.000	94	349336	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	254772	10.0	9.47	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	370747	5.00	4.80	
50 2-Butanone (MEK)	43	6.590	6.583	0.007	99	116080	20.0	19.3	
52 sec-Butyl Alcohol	45	6.640	6.633	0.007	38	67167	150.0	138.7	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	80	196638	5.00	4.71	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	90	316028	5.00	4.86	
56 Chlorobromomethane	128	6.840	6.840	0.000	95	67033	5.00	4.69	
57 Chloroform	83	6.854	6.848	0.006	95	327153	5.00	5.15	
58 Tetrahydrofuran	42	6.876	6.876	0.000	84	25476	10.0	9.32	
59 Isobutyl alcohol	41	7.055	7.048	0.007	93	27054	125.0	107.6	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	330041	5.00	4.91	
61 Cyclohexane	56	7.162	7.162	0.000	91	404165	5.00	4.96	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	95	305434	5.00	4.98	
63 Carbon tetrachloride	117	7.226	7.219	0.007	97	264284	5.00	4.83	
64 1,2-Dichloroethane	62	7.326	7.327	-0.001	98	172156	5.00	5.18	
66 Benzene	78	7.362	7.355	0.007	96	801911	5.00	5.07	
67 n-Heptane	43	7.448	7.448	0.000	91	372112	5.00	5.07	
69 Trichloroethene	95	7.820	7.820	0.000	98	218253	5.00	4.91	
70 2-Pentanone	43	7.855	7.849	0.006	99	175063	20.0	19.1	
72 1,2-Dichloropropane	63	7.998	7.999	-0.001	93	173446	5.00	4.76	
73 Methylcyclohexane	55	8.027	8.027	0.000	92	335005	5.00	4.99	
74 1,4-Dioxane	88	8.056	8.056	0.000	93	9791	100.0	91.1	
75 Dibromomethane	93	8.099	8.099	0.000	95	60214	5.00	4.75	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	191172	5.00	4.77	
78 2-Chloroethyl vinyl ether	63	8.320	8.313	0.007	93	9301	5.00	5.52	
79 cis-1,3-Dichloropropene	75	8.499	8.492	0.007	95	208424	5.00	4.59	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	195784	20.0	19.0	
81 Toluene	91	8.778	8.778	0.000	98	891339	5.00	4.96	
82 Ethyl methacrylate	69	8.864	8.864	0.000	90	77351	5.00	4.24	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	99	155475	5.00	4.72	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	93	87200	5.00	4.75	
85 2-Hexanone	43	9.142	9.143	-0.001	97	124823	20.0	18.4	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	96	166828	5.00	4.93	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	207446	5.00	4.92	
88 Chlorodibromomethane	129	9.350	9.350	0.000	90	95182	5.00	4.59	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	77759	5.00	4.75	
91 1-Chlorohexane	91	9.715	9.715	-0.001	98	319941	5.00	5.05	
92 Chlorobenzene	112	9.822	9.822	0.000	94	549425	5.00	5.07	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.851	-0.001	91	148741	5.00	4.73	
94 Ethylbenzene	106	9.858	9.858	0.000	98	338170	5.00	4.93	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	99	406438	5.00	4.94	
96 Styrene	104	10.251	10.251	0.000	85	519451	5.00	4.93	
97 o-Xylene	106	10.251	10.251	0.000	88	370663	5.00	4.96	
98 Bromoform	173	10.444	10.444	0.000	96	39992	5.00	4.26	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	1060788	5.00	5.08	
101 Cyclohexanone	55	10.623	10.623	0.000	94	55853	200.0	181.3	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	96	84885	5.00	4.79	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	83	19396	5.00	4.56	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	85	23250	5.00	4.70	
105 Bromobenzene	156	10.823	10.823	0.000	97	204776	5.00	4.84	
106 N-Propylbenzene	120	10.823	10.830	-0.007	99	298430	5.00	4.92	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	842490	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.944	10.945	-0.001	96	244285	5.00	4.93	
109 4-Chlorotoluene	126	11.016	11.023	-0.007	98	237124	5.00	4.91	
110 tert-Butylbenzene	119	11.230	11.231	-0.001	93	882225	5.00	5.05	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	97	839387	5.00	5.00	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	249651	5.00	5.11	
113 4-Isopropyltoluene	119	11.495	11.502	-0.007	97	991998	5.00	5.12	
114 1,3-Dichlorobenzene	146	11.559	11.567	-0.008	98	428232	5.00	4.85	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	411675	5.00	5.12	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	902492	5.00	5.17	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	331375	5.00	4.81	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.704	-0.001	77	9759	5.00	4.47	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	208141	5.00	4.94	
122 Hexachlorobutadiene	225	13.797	13.798	-0.001	97	191311	5.00	5.30	
123 Naphthalene	128	13.998	13.998	0.000	96	185742	5.00	4.43	
124 1,2,3-Trichlorobenzene	180	14.305	14.312	-0.007	95	155536	5.00	4.98	
S 149 1,2-Dichloroethene, Total	96				0		10.0	9.57	
S 150 Trihalomethanes, Total	1				0		20.0	18.8	
S 151 Xylenes, Total (URS)	1				0		10.0	9.90	
S 152 Total BTEX	1				0			24.9	
S 153 1,3-Dichloropropene, Total	1				0		10.0	9.31	
S 154 1,2-Dichloroethene, Total	1				0		10.0	9.57	
S 155 Xylenes, Total	106				0		10.0	9.90	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

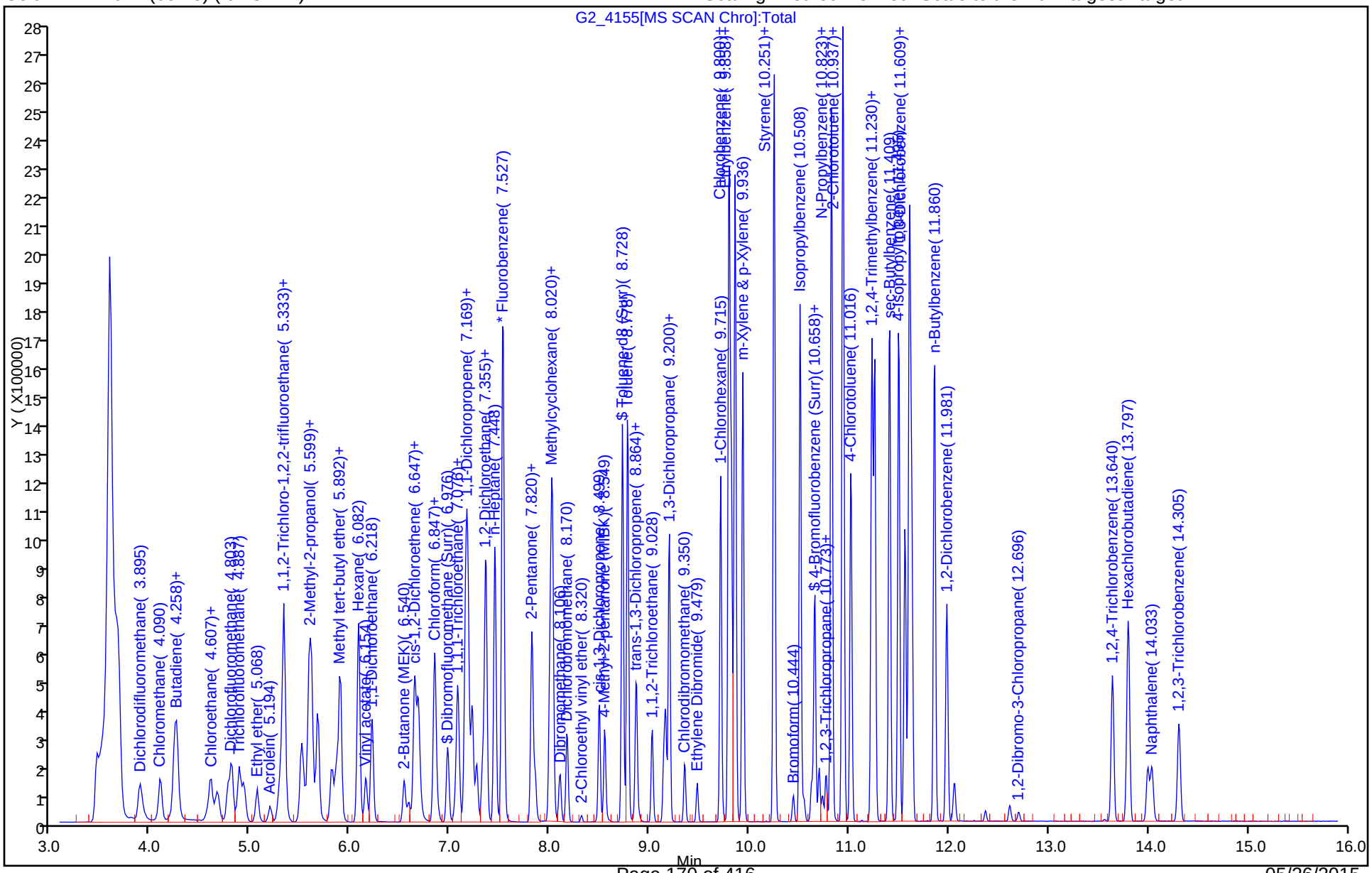
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.40	Units: uL
MV-Main A_00022	Amount Added:	2.50	Units: uL
MV-Gas/Ket A_00032	Amount Added:	2.50	Units: uL
MV-2cleve+AVA_00009	Amount Added:	2.50	Units: uL

Report Date: 11-May-2015 11:29:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4155.D				
Injection Date:	11-May-2015 08:42:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ic			Worklist Smp#:	12
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4156.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-May-2015 09:01:30 ALS Bottle#: 17 Worklist Smp#: 13
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 11:29:48 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: ilczyszynd Date: 11-May-2015 10:08:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	165829	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	1507570	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	88	358251	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.610	0.000	94	534935	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	93	340852	10.0	10.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.269	0.000	97	292871	10.0	10.2	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1598387	10.0	10.7	
$ 9 4-Bromofluorobenzene (Surr	95	10.659	10.659	0.000	91	509356	10.0	10.6	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	557417	10.0	11.1	
14 Chloromethane	50	4.105	4.105	0.000	99	476957	10.0	10.5	
16 Vinyl chloride	62	4.244	4.244	0.000	98	498926	10.0	11.2	
138 Butadiene	54	4.258	4.258	0.000	0	429026	NC	NC	
19 Bromomethane	94	4.607	4.607	0.000	91	359362	10.0	10.5	
20 Chloroethane	64	4.663	4.663	0.000	100	348764	10.0	10.6	
21 Dichlorofluoromethane	67	4.817	4.817	0.000	97	869123	10.0	10.5	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	738830	10.0	10.4	
25 Ethyl ether	59	5.068	5.068	0.000	93	175139	10.0	10.7	
28 Acrolein	56	5.194	5.194	0.000	99	145316	100.0	110.9	
29 Acetone	43	5.292	5.292	0.000	99	147969	40.0	41.7	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	93	388835	10.0	10.6	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	96	428362	10.0	10.8	
34 Iodomethane	142	5.515	5.515	0.000	98	666430	10.0	10.6	
35 Methyl acetate	43	5.529	5.529	0.000	97	399996	50.0	51.7	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	82	706103	10.0	10.8	
37 Carbon disulfide	76	5.613	5.613	0.000	99	1814265	10.0	10.6	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	92	98468	100.0	107.0	
39 Methylene Chloride	84	5.683	5.683	0.000	95	390116	10.0	11.0	
40 Acrylonitrile	53	5.809	5.809	0.000	98	412428	100.0	106.2	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	558092	10.0	10.8	
42 trans-1,2-Dichloroethene	96	5.906	5.906	0.000	98	458491	10.0	10.6	
43 Hexane	57	6.082	6.082	0.000	93	748999	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	569027	20.0	22.2	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	768901	10.0	10.4	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	219220	40.0	38.2	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	94	173556	300.0	288.8	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	79	422323	10.0	10.6	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	88	656483	10.0	10.6	
56 Chlorobromomethane	128	6.840	6.840	0.000	95	143223	10.0	10.5	
57 Chloroform	83	6.848	6.848	0.000	94	677798	10.0	11.2	
58 Tetrahydrofuran	42	6.876	6.876	0.000	85	56631	20.0	21.7	
59 Isobutyl alcohol	41	7.048	7.048	0.000	91	65538	250.0	273.4	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	678071	10.0	10.6	
61 Cyclohexane	56	7.162	7.162	0.000	91	863414	10.0	11.1	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	95	625551	10.0	10.7	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	564296	10.0	10.7	
64 1,2-Dichloroethane	62	7.327	7.327	0.000	98	354366	10.0	11.2	
66 Benzene	78	7.355	7.355	0.000	96	1675591	10.0	11.1	
67 n-Heptane	43	7.448	7.448	0.000	91	775086	10.0	11.1	
69 Trichloroethene	95	7.820	7.820	0.000	97	440081	10.0	10.4	
70 2-Pentanone	43	7.849	7.849	0.000	99	386133	40.0	44.2	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	94	365064	10.0	10.5	
73 Methylcyclohexane	55	8.027	8.027	0.000	92	694750	10.0	10.8	
74 1,4-Dioxane	88	8.056	8.056	0.000	87	21256	200.0	207.4	
75 Dibromomethane	93	8.099	8.099	0.000	95	125293	10.0	10.4	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	404288	10.0	10.4	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	92	24263	10.0	8.84	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	472127	10.0	10.5	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	433465	40.0	44.1	
81 Toluene	91	8.778	8.778	0.000	98	1857248	10.0	10.8	
82 Ethyl methacrylate	69	8.864	8.864	0.000	90	187384	10.0	9.75	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	345339	10.0	11.0	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	93	183584	10.0	10.5	
85 2-Hexanone	43	9.143	9.143	0.000	97	288146	40.0	44.0	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	97	352140	10.0	10.7	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	425063	10.0	10.4	
88 Chlorodibromomethane	129	9.350	9.350	0.000	90	212252	10.0	10.4	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	163938	10.0	10.3	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	680763	10.0	11.1	
92 Chlorobenzene	112	9.822	9.822	0.000	96	1145443	10.0	10.9	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.851	0.000	94	323545	10.0	10.4	
94 Ethylbenzene	106	9.858	9.858	0.000	98	704596	10.0	10.6	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	856633	10.0	10.8	
96 Styrene	104	10.251	10.251	0.000	86	1144325	10.0	11.2	
97 o-Xylene	106	10.251	10.251	0.000	88	781025	10.0	10.8	
98 Bromoform	173	10.444	10.444	0.000	97	92207	10.0	9.37	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	2241028	10.0	11.2	
101 Cyclohexanone	55	10.623	10.623	0.000	94	130210	400.0	436.5	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	93	182839	10.0	10.7	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	84	43586	10.0	10.7	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	51346	10.0	10.8	
105 Bromobenzene	156	10.823	10.823	0.000	97	422299	10.0	10.4	
106 N-Propylbenzene	120	10.830	10.830	0.000	98	636142	10.0	10.9	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	1780308	10.0	11.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.945	10.945	0.000	96	506738	10.0	10.7	
109 4-Chlorotoluene	126	11.023	11.023	0.000	98	496778	10.0	10.7	
110 tert-Butylbenzene	119	11.231	11.231	0.000	92	1846469	10.0	11.0	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	97	1755042	10.0	10.9	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	513500	10.0	11.0	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	2086240	10.0	11.2	
114 1,3-Dichlorobenzene	146	11.567	11.567	0.000	98	883551	10.0	10.4	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	838828	10.0	10.9	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	1879591	10.0	11.2	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	693764	10.0	10.5	
119 1,2-Dibromo-3-Chloropropan	157	12.704	12.704	0.000	78	22112	10.0	9.72	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	437145	10.0	10.8	
122 Hexachlorobutadiene	225	13.798	13.798	0.000	97	382876	10.0	11.1	
123 Naphthalene	128	13.998	13.998	0.000	97	423780	10.0	9.70	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	316182	10.0	10.5	
S 149 1,2-Dichloroethene, Total	96				0		20.0	21.2	
S 150 Trihalomethanes, Total	1				0		40.0	41.3	
S 151 Xylenes, Total (URS)	1				0		20.0	21.6	
S 152 Total BTEX	1				0			54.1	
S 153 1,3-Dichloropropene, Total	1				0		20.0	21.5	
S 154 1,2-Dichloroethene, Total	1				0		20.0	21.2	
S 155 Xylenes, Total	106				0		20.0	21.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

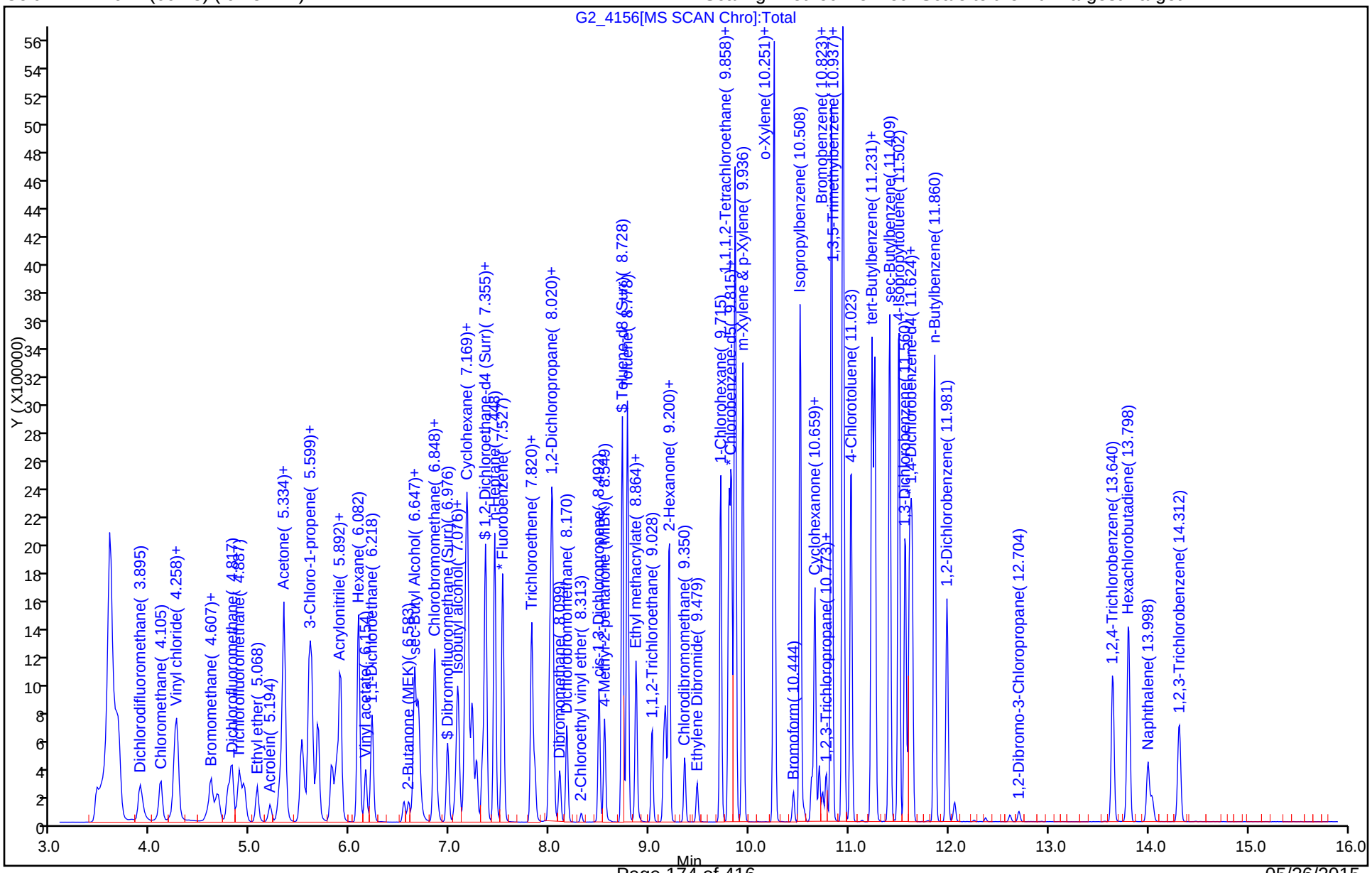
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL
MV-Main A_00022	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL

Report Date: 11-May-2015 11:29:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4156.D				
Injection Date:	11-May-2015 09:01:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ic			Worklist Smp#:	13
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4157.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-May-2015 09:20:30 ALS Bottle#: 18 Worklist Smp#: 14
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 11:29:49 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: ilczyszynd Date: 11-May-2015 10:08:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.585	5.571	0.014	0	193843	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1678597	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.793	0.007	85	398236	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	95	609463	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	979506	30.0	27.1	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.269	0.000	97	838420	30.0	26.3	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	4582689	30.0	27.6	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.659	-0.001	91	1484233	30.0	27.2	
13 Dichlorodifluoromethane	85	3.909	3.895	0.014	99	1590369	30.0	28.5	
14 Chloromethane	50	4.119	4.105	0.014	99	1401577	30.0	27.8	
16 Vinyl chloride	62	4.258	4.244	0.014	98	1455499	30.0	29.4	
138 Butadiene	54	4.272	4.258	0.014	0	1226797	NC	NC	
19 Bromomethane	94	4.607	4.607	0.000	90	1078257	30.0	28.4	
20 Chloroethane	64	4.677	4.663	0.014	100	1036385	30.0	28.3	
21 Dichlorofluoromethane	67	4.817	4.817	0.000	97	2530742	30.0	27.4	
22 Trichlorofluoromethane	101	4.901	4.887	0.014	99	2090877	30.0	26.5	
25 Ethyl ether	59	5.068	5.068	0.000	92	540895	30.0	29.6	
28 Acrolein	56	5.208	5.194	0.014	99	445411	300.0	305.2	
29 Acetone	43	5.292	5.292	0.000	99	407569	120.0	103.2	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	94	1105483	30.0	27.0	
32 1,1-Dichloroethene	96	5.348	5.334	0.014	98	1236994	30.0	28.0	
34 Iodomethane	142	5.515	5.515	0.000	98	1999993	30.0	28.5	
35 Methyl acetate	43	5.529	5.529	0.000	98	1187649	150.0	137.8	
36 3-Chloro-1-propene	41	5.599	5.585	0.014	83	2107857	30.0	28.9	
37 Carbon disulfide	76	5.613	5.613	0.000	99	5159794	30.0	27.2	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	92	304378	300.0	297.0	
39 Methylene Chloride	84	5.683	5.683	0.000	93	1084341	30.0	29.4	
40 Acrylonitrile	53	5.822	5.809	0.013	98	1246365	300.0	288.3	
41 Methyl tert-butyl ether	73	5.878	5.864	0.014	96	1711574	30.0	29.7	
42 trans-1,2-Dichloroethene	96	5.906	5.906	0.000	98	1324658	30.0	27.5	
43 Hexane	57	6.082	6.082	0.000	92	2115424	30.0	27.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	1785861	60.0	62.5	
46 1,1-Dichloroethane	63	6.225	6.218	0.007	96	2240424	30.0	27.3	
50 2-Butanone (MEK)	43	6.590	6.583	0.007	99	673907	120.0	105.6	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	93	615195	900.0	808.6	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	80	1242281	30.0	28.0	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	87	1909080	30.0	27.7	
56 Chlorobromomethane	128	6.840	6.840	0.000	96	419328	30.0	27.6	
57 Chloroform	83	6.855	6.848	0.007	93	1941296	30.0	28.8	
58 Tetrahydrofuran	42	6.883	6.876	0.007	86	177145	60.0	61.0	
59 Isobutyl alcohol	41	7.048	7.048	0.000	93	210026	750.0	786.9	
60 1,1,1-Trichloroethane	97	7.083	7.076	0.007	99	1927458	30.0	27.0	
61 Cyclohexane	56	7.162	7.162	0.000	90	2452347	30.0	28.3	
62 1,1-Dichloropropene	75	7.183	7.176	0.007	94	1750263	30.0	26.9	
63 Carbon tetrachloride	117	7.226	7.219	0.007	97	1634451	30.0	27.5	
64 1,2-Dichloroethane	62	7.326	7.327	-0.001	97	1023576	30.0	29.0	
66 Benzene	78	7.362	7.355	0.007	96	4870172	30.0	28.9	
67 n-Heptane	43	7.448	7.448	0.000	91	2171960	30.0	27.8	
69 Trichloroethene	95	7.820	7.820	0.000	98	1286221	30.0	27.3	
70 2-Pentanone	43	7.848	7.849	-0.001	99	1166253	120.0	119.8	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	95	1087573	30.0	28.1	
73 Methylcyclohexane	55	8.027	8.027	0.000	92	1966036	30.0	27.6	
74 1,4-Dioxane	88	8.056	8.056	0.000	94	72337	600.0	633.9	
75 Dibromomethane	93	8.099	8.099	0.000	94	378318	30.0	28.1	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	1232017	30.0	28.3	
78 2-Chloroethyl vinyl ether	63	8.320	8.313	0.007	92	119781	30.0	26.8	
79 cis-1,3-Dichloropropene	75	8.499	8.492	0.007	95	1479413	30.0	29.4	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	1365831	120.0	124.9	
81 Toluene	91	8.778	8.778	0.000	98	5321090	30.0	27.9	
82 Ethyl methacrylate	69	8.864	8.864	0.000	90	639811	30.0	28.8	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	1079568	30.0	30.9	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	92	555183	30.0	28.5	
85 2-Hexanone	43	9.143	9.143	0.000	96	927642	120.0	127.3	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	91	1068890	30.0	29.1	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	1192836	30.0	26.3	
88 Chlorodibromomethane	129	9.357	9.350	0.007	90	686917	30.0	29.8	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	516091	30.0	29.3	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	1955247	30.0	28.7	
92 Chlorobenzene	112	9.822	9.822	0.000	95	3340247	30.0	28.6	
93 1,1,1,2-Tetrachloroethane	131	9.858	9.851	0.007	95	1003807	30.0	28.9	
94 Ethylbenzene	106	9.865	9.858	0.007	98	2043419	30.0	27.7	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	2500852	30.0	28.3	
96 Styrene	104	10.251	10.251	0.000	88	3535313	30.0	31.2	
97 o-Xylene	106	10.251	10.251	0.000	87	2291056	30.0	28.5	
98 Bromoform	173	10.444	10.444	0.000	97	319941	30.0	28.0	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	6322931	30.0	27.7	
101 Cyclohexanone	55	10.623	10.623	0.000	94	433944	1200.0	1308.7	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	93	559773	30.0	28.5	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	92	145351	30.0	31.3	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	153071	30.0	28.3	
105 Bromobenzene	156	10.823	10.823	0.000	96	1273383	30.0	27.5	
106 N-Propylbenzene	120	10.830	10.830	0.000	98	1824492	30.0	27.5	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	97	5098261	30.0	27.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.944	10.945	-0.001	97	1467901	30.0	27.1	
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	1458872	30.0	27.7	
110 tert-Butylbenzene	119	11.231	11.231	-0.001	92	5243924	30.0	27.5	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	97	5075965	30.0	27.6	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	1467719	30.0	27.5	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	5836395	30.0	27.5	
114 1,3-Dichlorobenzene	146	11.567	11.567	0.000	98	2605326	30.0	27.0	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	94	2477158	30.0	28.2	
117 n-Butylbenzene	91	11.860	11.860	0.000	97	5163652	30.0	27.1	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	2066916	30.0	27.5	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.704	-0.001	83	74169	30.0	27.4	
121 1,2,4-Trichlorobenzene	180	13.647	13.640	0.007	94	1351573	30.0	29.3	
122 Hexachlorobutadiene	225	13.805	13.798	0.007	96	1046177	30.0	26.5	
123 Naphthalene	128	13.998	13.998	0.000	97	1487923	30.0	28.6	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	995763	30.0	29.0	
S 149 1,2-Dichloroethene, Total	96				0		60.0	55.5	
S 150 Trihalomethanes, Total	1				0		120.0	114.9	
S 151 Xylenes, Total (URS)	1				0		60.0	56.7	
S 152 Total BTEX	1				0			141.2	
S 153 1,3-Dichloropropene, Total	1				0		60.0	60.3	
S 154 1,2-Dichloroethene, Total	1				0		60.0	55.5	
S 155 Xylenes, Total	106				0		60.0	56.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

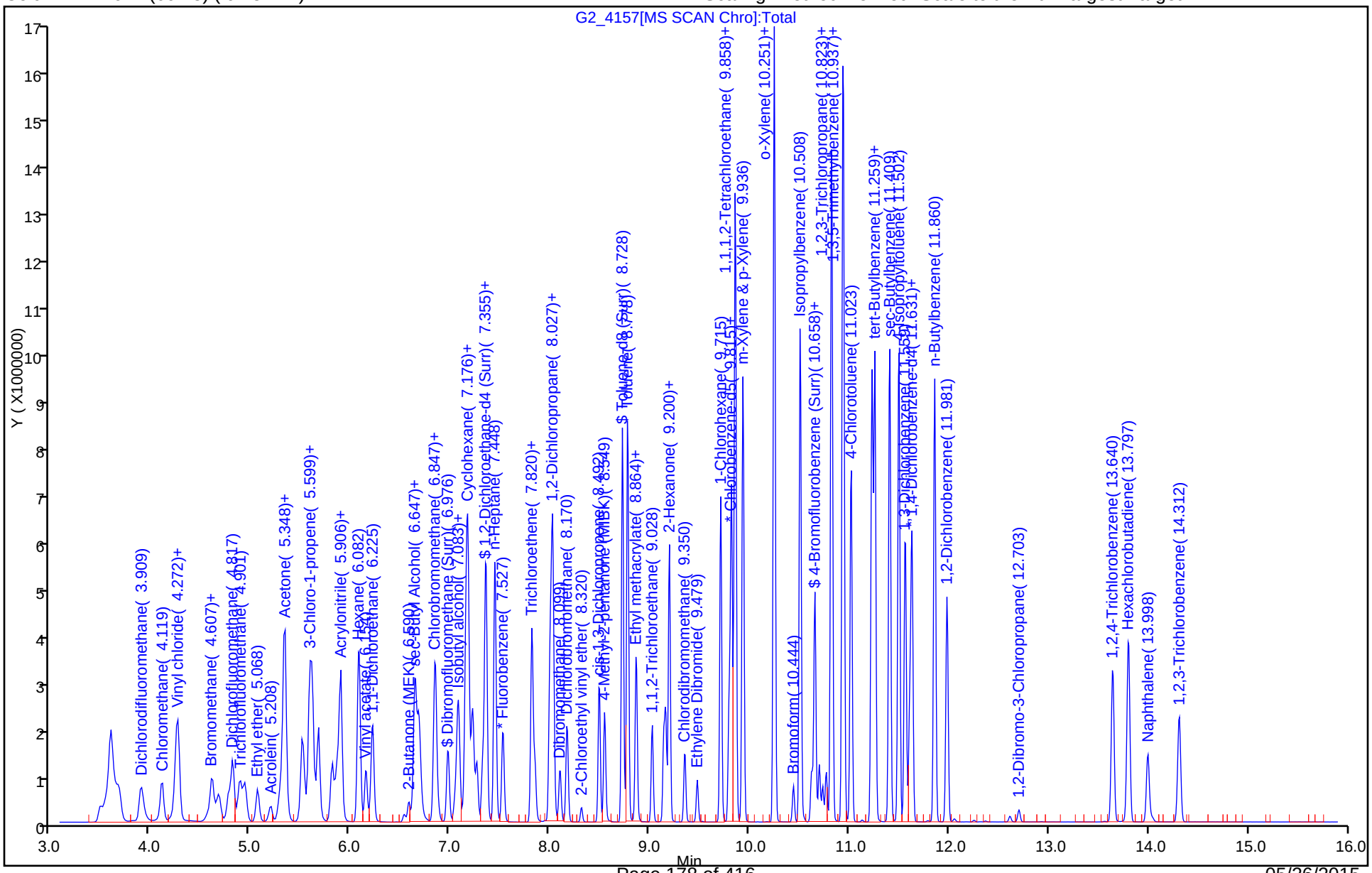
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00043	Amount Added: 2.40	Units: uL
MV-Main A_00022	Amount Added: 15.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 15.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 15.00	Units: uL

Report Date: 11-May-2015 11:29:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4157.D				
Injection Date:	11-May-2015 09:20:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ic			Worklist Smp#:	14
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-May-2015 09:39:30 ALS Bottle#: 19 Worklist Smp#: 15
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 11:29:50 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: ilczyszynd Date: 11-May-2015 10:09:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	206158	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1946868	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	87	455785	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	95	678445	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	2410625	60.0	57.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.269	-0.007	98	2018760	60.0	54.7	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	10737723	60.0	56.6	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.659	-0.001	92	3679525	60.0	60.6	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	3357093	60.0	51.9	
14 Chloromethane	50	4.105	4.105	0.000	99	3076702	60.0	52.6	
16 Vinyl chloride	62	4.244	4.244	0.000	98	3136382	60.0	54.7	
138 Butadiene	54	4.258	4.258	0.000	0	2657696	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	90	2325662	60.0	52.8	
20 Chloroethane	64	4.663	4.663	0.000	100	2270562	60.0	53.5	
21 Dichlorofluoromethane	67	4.803	4.817	-0.014	97	5727730	60.0	53.4	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	99	4609072	60.0	50.5	
25 Ethyl ether	59	5.068	5.068	0.000	91	1352227	60.0	63.8	
28 Acrolein	56	5.194	5.194	0.000	99	1087610	599.9	642.6	
29 Acetone	43	5.292	5.292	0.000	100	1004183	240.0	219.2	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	94	2569371	60.0	54.0	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	3013298	60.0	58.8	
34 Iodomethane	142	5.501	5.515	-0.014	98	4798876	60.0	59.0	
35 Methyl acetate	43	5.529	5.529	0.000	98	2904912	300.0	290.6	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	87	4957950	60.0	58.6	
37 Carbon disulfide	76	5.613	5.613	0.000	99	12206041	60.0	55.4	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	93	755269	600.0	635.5	
39 Methylene Chloride	84	5.669	5.683	-0.014	92	2579025	60.0	61.8	
40 Acrylonitrile	53	5.808	5.809	-0.001	98	3050107	600.0	608.4	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	4139653	60.0	62.0	
42 trans-1,2-Dichloroethene	96	5.892	5.906	-0.014	98	3255829	60.0	58.3	
43 Hexane	57	6.082	6.082	0.000	92	5203017	60.0	59.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	4421460	120.0	133.4	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	5450391	60.0	57.4	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	1677974	240.0	226.6	
52 sec-Butyl Alcohol	45	6.626	6.633	-0.007	94	1691298	1800.0	1846.9	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	79	3062909	60.0	59.6	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	89	4537608	60.0	56.7	
56 Chlorobromomethane	128	6.840	6.840	0.000	96	1037787	60.0	58.9	
57 Chloroform	83	6.847	6.848	-0.001	94	4655427	60.0	59.5	
58 Tetrahydrofuran	42	6.876	6.876	0.000	87	439695	120.0	130.6	
59 Isobutyl alcohol	41	7.040	7.048	-0.008	94	551929	1500.0	1782.9	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	4637149	60.0	56.1	
61 Cyclohexane	56	7.155	7.162	-0.007	92	5930807	60.0	59.1	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	4339655	60.0	57.5	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	4036019	60.0	58.4	
64 1,2-Dichloroethane	62	7.326	7.327	-0.001	98	2426445	60.0	59.3	
66 Benzene	78	7.355	7.355	0.000	97	11682315	60.0	59.8	
67 n-Heptane	43	7.448	7.448	0.000	90	5300174	60.0	58.6	
69 Trichloroethene	95	7.820	7.820	0.000	97	3148822	60.0	57.6	
70 2-Pentanone	43	7.848	7.849	-0.001	99	3046168	240.0	269.8	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	96	2619441	60.0	58.3	
73 Methylcyclohexane	55	8.027	8.027	0.000	92	4759513	60.0	57.5	
74 1,4-Dioxane	88	8.049	8.056	-0.007	93	184914	1200.0	1397.1	
75 Dibromomethane	93	8.099	8.099	0.000	95	915489	60.0	58.7	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	2987222	60.0	59.0	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	92	347964	60.0	61.7	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	96	3631184	60.0	62.9	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	3278418	240.0	258.5	
81 Toluene	91	8.778	8.778	0.000	98	12367555	60.0	55.9	
82 Ethyl methacrylate	69	8.857	8.864	-0.007	90	1598677	60.0	62.1	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	2640382	60.0	65.1	
84 1,1,2-Trichloroethane	97	9.021	9.028	-0.007	91	1334554	60.0	59.0	
85 2-Hexanone	43	9.135	9.143	-0.008	95	2305086	240.0	276.4	
86 1,3-Dichloropropane	76	9.157	9.164	-0.007	92	2536035	60.0	60.2	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	2953187	60.0	56.8	
88 Chlorodibromomethane	129	9.350	9.350	0.000	90	1716287	60.0	64.9	
90 Ethylene Dibromide	107	9.479	9.479	0.000	98	1265076	60.0	62.8	
91 1-Chlorohexane	91	9.715	9.715	0.000	97	4964591	60.0	63.7	
92 Chlorobenzene	112	9.822	9.822	0.000	95	8044332	60.0	60.2	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.851	-0.001	96	2453830	60.0	61.6	
94 Ethylbenzene	106	9.858	9.858	0.000	97	5052385	60.0	59.7	e
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	98	6198348	60.0	61.2	a
96 Styrene	104	10.251	10.251	0.000	88	8503853	60.0	65.5	
97 o-Xylene	106	10.251	10.251	0.000	86	5534569	60.0	60.1	
98 Bromoform	173	10.444	10.444	0.000	97	834452	60.0	63.2	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	14225929	60.0	56.0	e
101 Cyclohexanone	55	10.623	10.623	0.000	90	1095379	2400.0	2886.4	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	92	1334728	60.0	60.9	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	94	355062	60.0	68.7	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	364129	60.0	60.6	
105 Bromobenzene	156	10.823	10.823	0.000	95	3096646	60.0	60.1	
106 N-Propylbenzene	120	10.823	10.830	-0.007	95	4620100	60.0	62.6	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	12109102	60.0	59.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.944	10.945	-0.001	97	3576359	60.0	59.3	
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	3634199	60.0	61.9	
110 tert-Butylbenzene	119	11.230	11.231	-0.001	92	12754338	60.0	60.0	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	97	12183397	60.0	59.6	
112 sec-Butylbenzene	134	11.409	11.409	0.000	95	3740299	60.0	62.9	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	95	13878905	60.0	58.8	
114 1,3-Dichlorobenzene	146	11.559	11.567	-0.008	98	6371441	60.0	59.3	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	6069186	60.0	62.1	
117 n-Butylbenzene	91	11.860	11.860	0.000	96	12704907	60.0	59.9	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	4995923	60.0	59.7	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.704	-0.001	86	192912	60.0	63.3	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	3258038	60.0	63.5	
122 Hexachlorobutadiene	225	13.805	13.798	0.007	96	2718178	60.0	61.9	
123 Naphthalene	128	13.998	13.998	0.000	97	3640061	60.0	62.2	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	2390659	60.0	62.6	
S 149 1,2-Dichloroethene, Total	96				0		120.0	117.8	
S 150 Trihalomethanes, Total	1				0		240.0	246.5	
S 151 Xylenes, Total (URS)	1				0		120.0	121.3	
S 152 Total BTEX	1				0			296.7	
S 153 1,3-Dichloropropene, Total	1				0		120.0	128.0	
S 154 1,2-Dichloroethene, Total	1				0		120.0	117.8	
S 155 Xylenes, Total	106				0		120.0	121.3	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- e - Potential Peak Saturated

Review Flags
- a - User Assigned ID

Reagents:

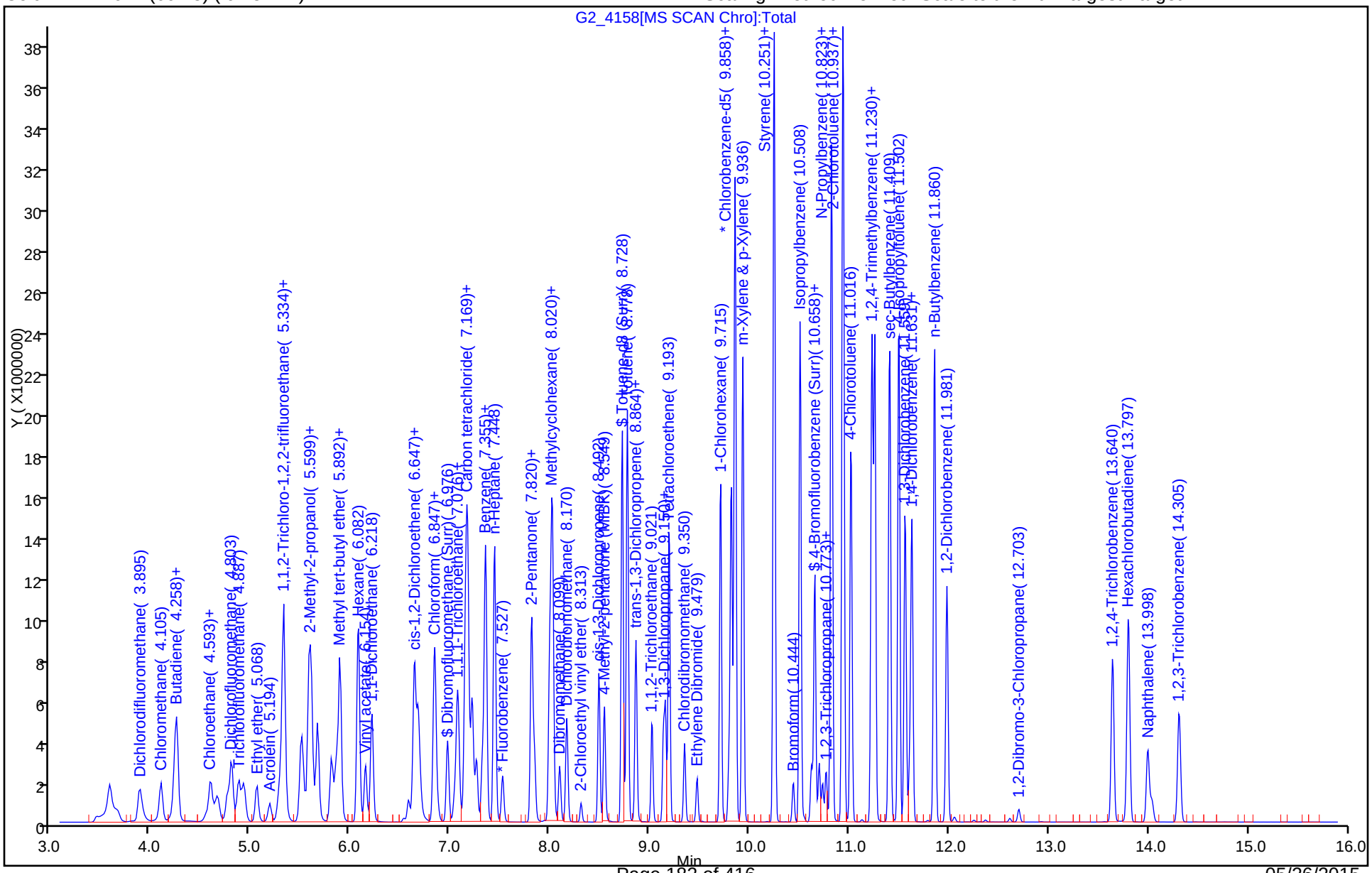
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00043	Amount Added: 4.80	Units: uL
MV-Main A_00022	Amount Added: 30.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 30.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 30.00	Units: uL

Report Date: 11-May-2015 11:29:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D				
Injection Date:	11-May-2015 09:39:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ic			Worklist Smp#:	15
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

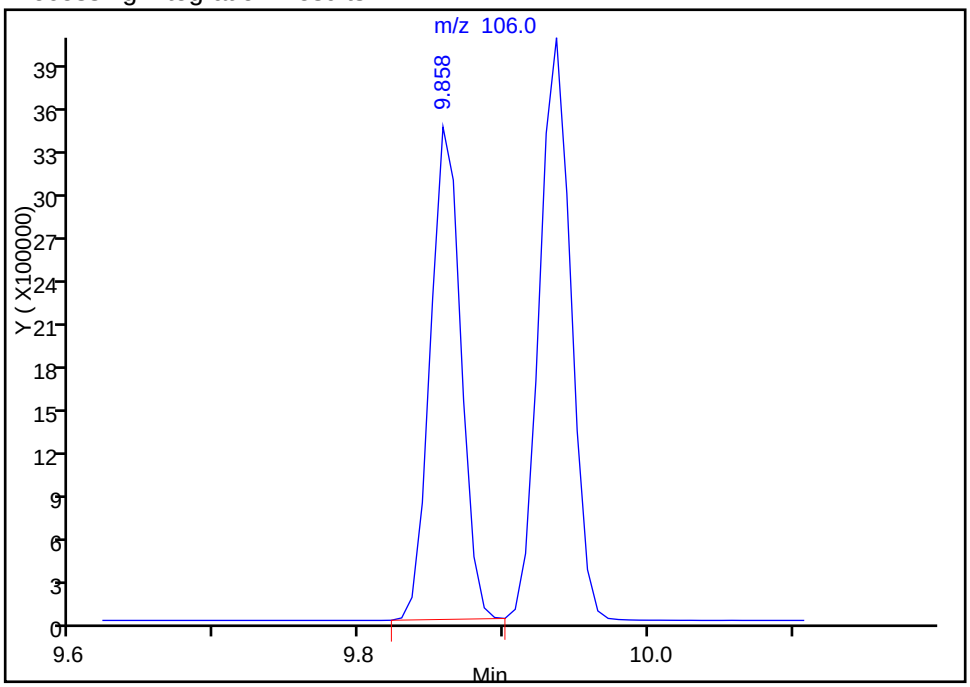
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D				
Injection Date:	11-May-2015 09:39:30	Instrument ID:	VMS_G2		
Lims ID:	ic				
Client ID:					
Operator ID:	ilczyszynd	ALS Bottle#:	19	Worklist Smp#:	15
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

95 m-Xylene & p-Xylene, CAS: 179601-23-1

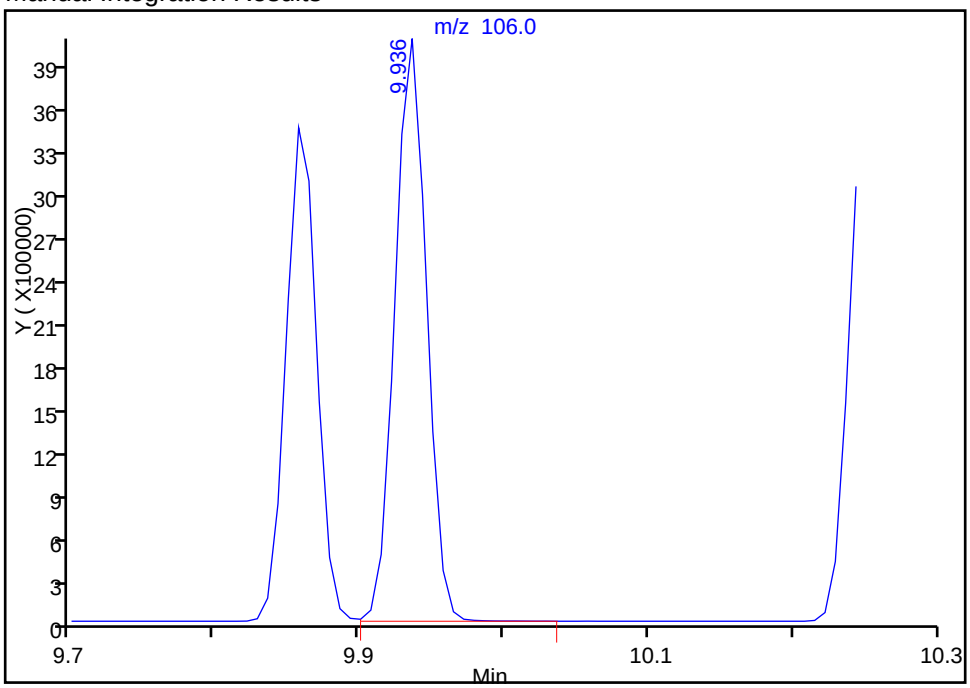
Processing Integration Results

RT: 9.86
Area: 5052385
Amount: 51.494623
Amount Units: ug/l



Manual Integration Results

RT: 9.94
Area: 6198348
Amount: 61.189221
Amount Units: ug/l



Reviewer: ilczyszynd, 11-May-2015 10:10:44
Audit Action: Assigned Compound ID
Audit Reason: Wrong peak

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274661

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/27/2015 11:28 Calibration End Date: 04/27/2015 13:21 Calibration ID: 22133

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274661/18	Z6773.D
Level 2	IC 280-274661/19	Z6774.D
Level 3	IC 280-274661/20	Z6775.D
Level 4	ICIS 280-274661/21	Z6776.D
Level 5	IC 280-274661/22	Z6777.D
Level 6	IC 280-274661/23	Z6778.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	+++++ 0.0049	0.0045	0.0060	0.0047	0.0049	Ave		0.0050				11.8		15.0			
Isopropyl ether	0.2232 0.2455	0.2282	0.2608	0.2459	0.2399	Ave		0.2406				5.6		15.0			
2-Chloro-1,3-butadiene	0.4796 0.4637	0.4433	0.4974	0.4799	0.4464	Ave		0.4684				4.5		15.0			
Tert-butyl ethyl ether	0.8498 0.7717	0.7763	0.8444	0.7658	0.7595	Ave		0.7946				5.2		15.0			
Propionitrile	+++++ 0.0074	0.0083	0.0091	0.0082	0.0074	Ave		0.0081				8.6		15.0			
Ethyl acetate	+++++ 0.0892	0.0786	0.0941	0.0878	0.0894	Ave		0.0878				6.5		15.0			
Methacrylonitrile	0.0475 0.0528	0.0485	0.0555	0.0520	0.0537	Ave		0.0517				6.0		15.0			
Tert-amyl methyl ether	0.6939 0.6681	0.6748	0.7251	0.6646	0.6668	Ave		0.6822				3.5		15.0			
n-Butanol	+++++ 0.0021	0.0017	0.0021	0.0019	0.0021	Ave		0.0020				9.0		15.0			
Methyl methacrylate	0.0352 0.0423	0.0385	0.0444	0.0422	0.0421	Ave		0.0408				8.2		15.0			
2-Nitropropane	+++++ 0.0211	0.0217	0.0241	0.0221	0.0206	Ave		0.0219				6.2		15.0			
cis-1,4-Dichloro-2-butene	0.1174 0.1004	0.1031	0.1167	0.1046	0.1020	Ave		0.1074				7.1		15.0			
1,2,3-Trimethylbenzene	1.9659 2.2087	1.9697	2.2410	2.1617	2.1310	Ave		2.1130				5.6		15.0			
Dibromofluoromethane (Surr)	+++++ 0.5375	0.6438	0.5798	0.5428	0.5219	Ave		0.5651				8.6		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2056	0.2837	0.2329	0.2171	0.2015	Ave		0.2282				14.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274661

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/27/2015 11:28 Calibration End Date: 04/27/2015 13:21 Calibration ID: 22133

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Toluene-d8 (Surr)	+++++ 4.2145	5.1360	4.5670	4.4332	4.1966	Ave		4.5095				8.5		15.0			
4-Bromofluorobenzene (Surr)	+++++ 1.3022	1.6502	1.4927	1.3282	1.2560	Ave		1.4058				11.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274661

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/27/2015 11:28 Calibration End Date: 04/27/2015 13:21 Calibration ID: 22133

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274661/18	Z6773.D
Level 2	IC 280-274661/19	Z6774.D
Level 3	IC 280-274661/20	Z6775.D
Level 4	ICIS 280-274661/21	Z6776.D
Level 5	IC 280-274661/22	Z6777.D
Level 6	IC 280-274661/23	Z6778.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acetonitrile	FB	Ave	+++++ 214863	6548	21913	33702	110004	+++++ 750	25.0	62.5	125	375
Isopropyl ether	FB	Ave	16599 1066526	33394	95054	176635	534134	1.25 75.0	2.50	6.25	12.5	37.5
2-Chloro-1,3-butadiene	FB	Ave	28533 1611823	51887	145034	275796	795276	1.00 60.0	2.00	5.00	10.0	30.0
Tert-butyl ethyl ether	FB	Ave	63198 3352492	113576	307762	550067	1691172	1.25 75.0	2.50	6.25	12.5	37.5
Propionitrile	FB	Ave	+++++ 323457	12197	33105	58619	164969	+++++ 750	25.0	62.5	125	375
Ethyl acetate	FB	Ave	+++++ 620096	18393	54849	100933	318541	+++++ 120	4.00	10.0	20.0	60.0
Methacrylonitrile	FB	Ave	28272 1836209	56812	161789	299078	957300	10.0 600	20.0	50.0	100	300
Tert-amyl methyl ether	FB	Ave	51602 2902753	98727	264266	477411	1484831	1.25 75.0	2.50	6.25	12.5	37.5
n-Butanol	FB	Ave	+++++ 182597	4950	15031	27767	94716	+++++ 1500	50.0	125	250	750
Methyl methacrylate	FB	Ave	4186 293982	9004	25904	48531	150167	2.00 120	4.00	10.0	20.0	60.0
2-Nitropropane	FB	Ave	+++++ 146763	5072	14063	25442	73412	+++++ 120	4.00	10.0	20.0	60.0
cis-1,4-Dichloro-2-butene	DCB	Ave	2883 145256	5073	14429	25239	77471	1.00 60.0	2.00	5.00	10.0	30.0
1,2,3-Trimethylbenzene	DCB	Ave	48257 3196937	96882	277104	521657	1618889	1.00 60.0	2.00	5.00	10.0	30.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 934013	75347	169047	311918	619752	+++++ 30.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 357211	33203	67920	124779	239256	+++++ 30.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	+++++ 1733116	142477	319697	596484	1168221	+++++ 30.0	2.00	5.00	10.0	20.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 274661

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/27/2015 11:28 Calibration End Date: 04/27/2015 13:21 Calibration ID: 22133

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4-Bromofluorobenzene (Surr)	DCB	Ave	+++++ 942404	81163	184575	320514	636132	+++++ 30.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6773.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Apr-2015 11:28:30 ALS Bottle#: 13 Worklist Smp#: 18
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:16 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 13:07:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.457	3.487	-0.030	96	129754	250.0	250.0	
* 2 Fluorobenzene	96	6.364	6.377	-0.013	98	743646	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.012	11.007	0.005	87	173309	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.103	15.115	-0.012	98	306843	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.442	5.469	-0.027	93	41734	1.00	1.24	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.877	5.905	-0.028	93	18542	1.00	1.37	
$ 10 Toluene-d8 (Surr)	98	8.697	8.690	0.007	93	81624	1.00	1.31	
$ 11 4-Bromofluorobenzene (Surr	95	13.049	13.042	0.007	88	45272	1.00	1.31	
34 Ethylene oxide	43	2.274	2.301	-0.027	99	58609	200.0	212.2	
39 Ethanol	45		2.684				ND	ND	
42 Propene oxide	58	2.848	2.876	-0.028	96	52488	50.0	46.2	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41		3.276				ND	ND	
60 Isopropyl ether	87	4.275	4.303	-0.028	97	16599	1.25	1.16	
63 2-Chloro-1,3-butadiene	53	4.293	4.303	-0.010	89	28533	1.00	1.02	
64 Tert-butyl ethyl ether	59	4.711	4.738	-0.027	98	63198	1.25	1.34	
69 Propionitrile	54		4.912				ND	ND	
68 Ethyl acetate	43		4.947				ND	ND	
73 Methacrylonitrile	41	5.094	5.121	-0.027	93	28272	10.0	9.19	
83 Tert-amyl methyl ether	73	6.190	6.183	0.007	85	51602	1.25	1.27	M
86 n-Butanol	56		6.792				ND	ND	
88 Ethyl acrylate	55	6.817	6.792	0.025	26	201	NC	NC	
91 Methyl methacrylate	100	7.391	7.384	0.007	90	4186	2.00	1.73	
95 2-Nitropropane	41		7.889				ND	ND	
106 Tetrahydrothiophene	60	10.020	10.030	-0.010	84	6755	1.00	0.9391	
120 cis-1,4-Dichloro-2-butene	53	12.892	12.885	0.007	0	2883	1.00	1.09	
135 1,2,3-Trimethylbenzene	105	15.259	15.270	-0.011	95	48257	1.00	0.9304	
140 1,3,5-Trichlorobenzene	180	17.209	17.202	0.007	95	28221	1.00	0.9628	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MV-ARCH SS A_00042	Amount Added:	0.08	Units: uL
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp A_00011	Amount Added:	0.50	Units: uL

Report Date: 27-Apr-2015 20:56:17 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6773.D

Injection Date: 27-Apr-2015 11:28:30 Instrument ID: VMS_Z Operator ID: moanm

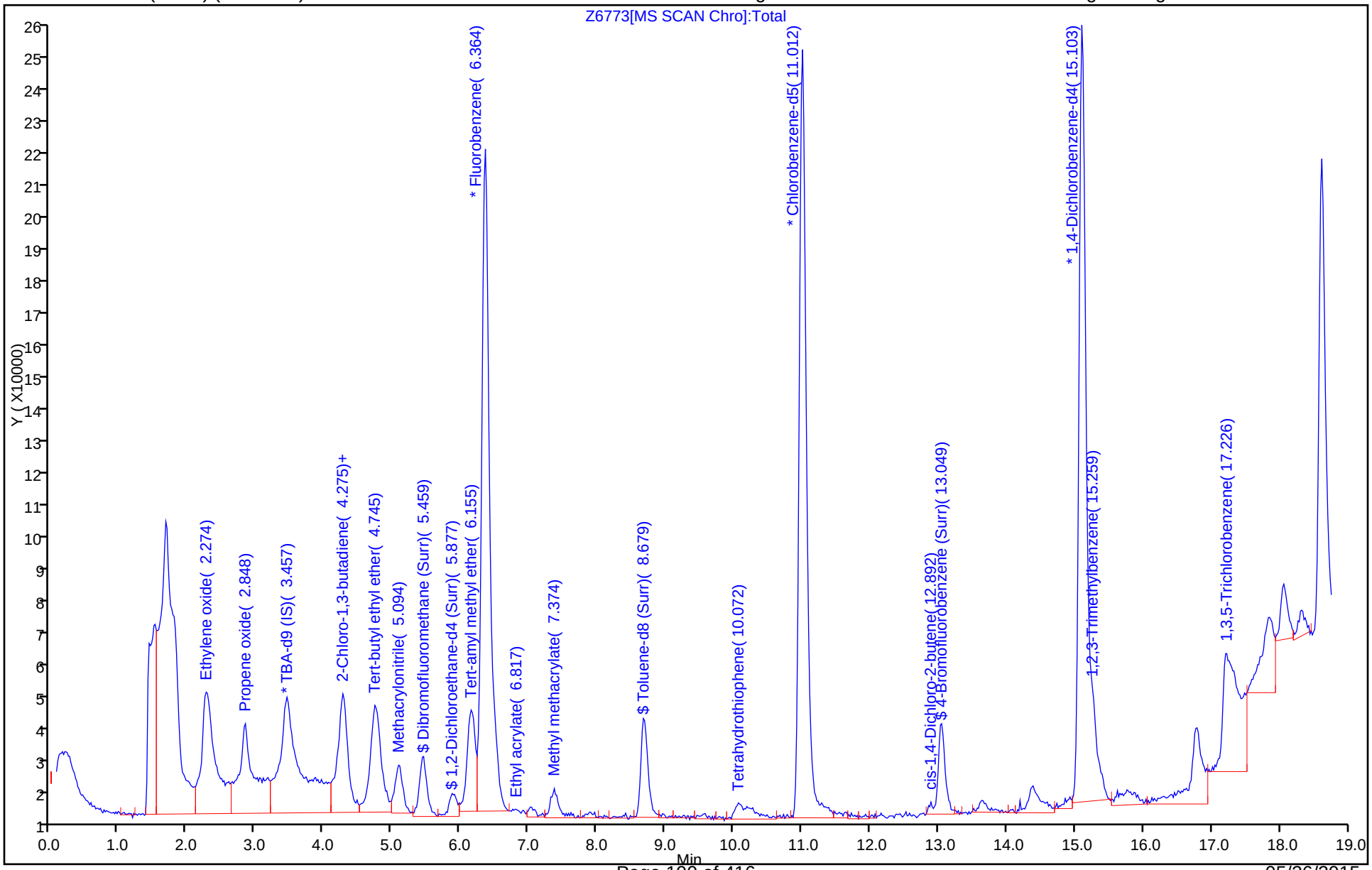
Lims ID: ic Worklist Smp#: 18

Client ID:

Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: AQ_VMSZ_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

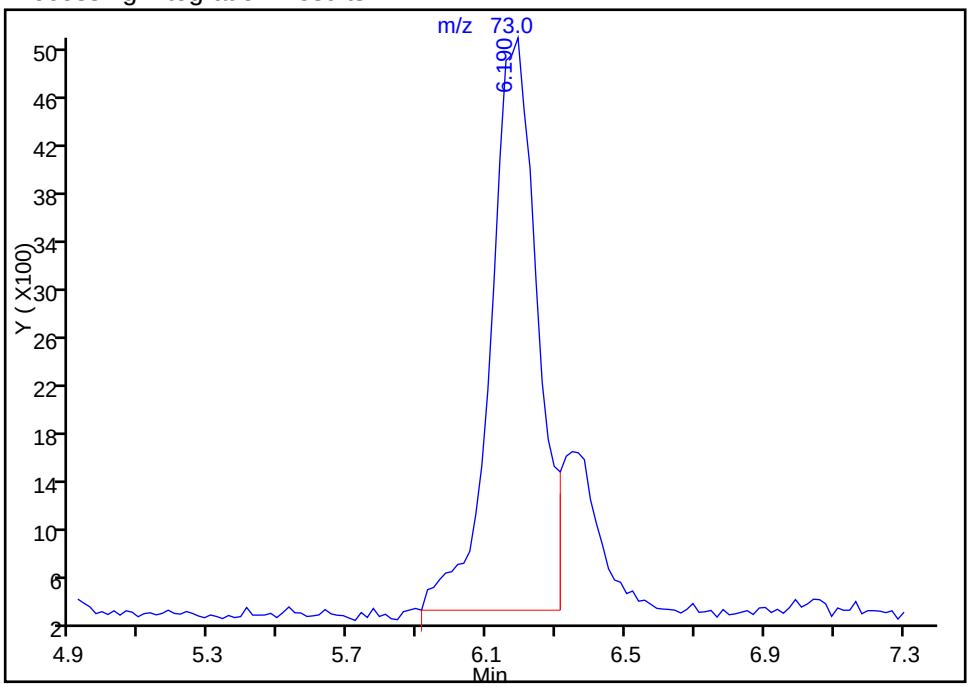
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6773.D				
Injection Date:	27-Apr-2015 11:28:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

83 Tert-amyl methyl ether, CAS: 994-05-8

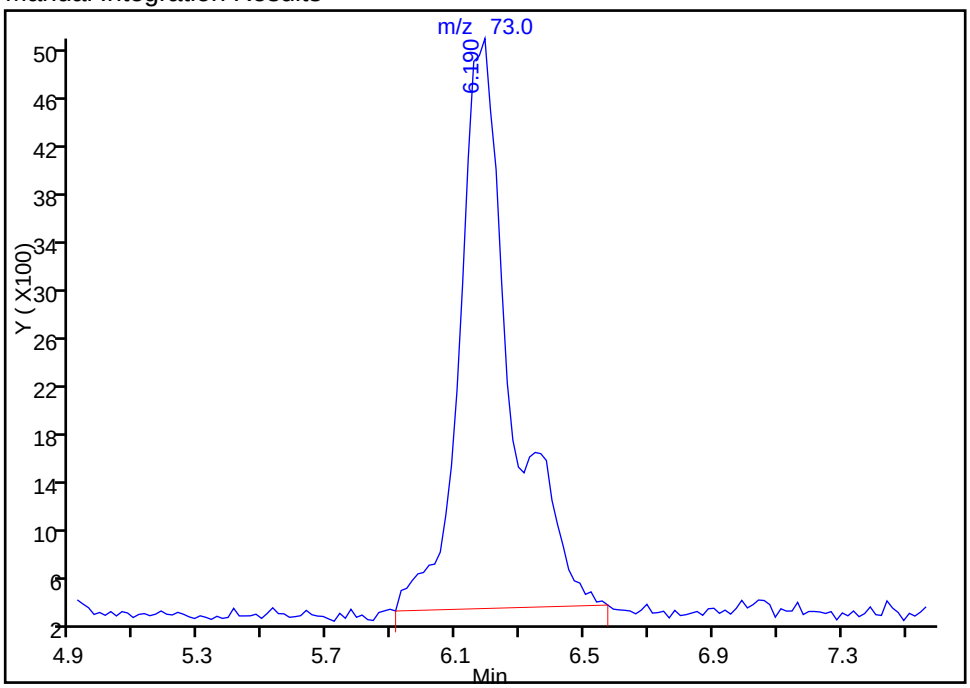
Processing Integration Results

RT: 6.19
Area: 43749
Amount: 1.152088
Amount Units: ug/l



Manual Integration Results

RT: 6.19
Area: 51602
Amount: 1.271390
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:40:02
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6774.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 27-Apr-2015 11:51:30 ALS Bottle#: 14 Worklist Smp#: 19
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 21:01:01 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 13:07:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.491	3.485	0.006	94	139671	250.0	250.0	
* 2 Fluorobenzene	96	6.381	6.375	0.006	98	731523	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.011	11.005	0.006	87	173380	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.102	15.113	-0.011	95	307406	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.476	5.469	0.007	94	75347	2.00	2.28	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.911	5.905	0.006	93	33203	2.00	2.49	
$ 10 Toluene-d8 (Surr)	98	8.696	8.690	0.006	93	142477	2.00	2.28	
$ 11 4-Bromofluorobenzene (Surr	95	13.048	13.042	0.006	89	81163	2.00	2.35	
34 Ethylene oxide	43	2.290	2.301	-0.011	99	99298	400.0	365.5	
39 Ethanol	45		2.684				ND	ND	
42 Propene oxide	58	2.864	2.876	-0.012	96	106309	100.0	95.2	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.300	3.276	0.024	91	6548	25.0	22.3	M
60 Isopropyl ether	87	4.292	4.303	-0.011	98	33394	2.50	2.37	
63 2-Chloro-1,3-butadiene	53	4.309	4.303	0.006	89	51887	2.00	1.89	
64 Tert-butyl ethyl ether	59	4.727	4.738	-0.011	98	113576	2.50	2.44	
69 Propionitrile	54	4.918	4.912	0.006	57	12197	25.0	25.8	
68 Ethyl acetate	43	4.936	4.947	-0.011	99	18393	4.00	3.58	
73 Methacrylonitrile	41	5.110	5.121	-0.011	93	56812	20.0	18.8	
83 Tert-amyl methyl ether	73	6.189	6.183	0.006	96	98727	2.50	2.47	M
86 n-Butanol	56	6.798	6.792	0.006	89	4950	50.0	42.7	
88 Ethyl acrylate	55	6.798	6.792	0.006	28	1215	NC	NC	
91 Methyl methacrylate	100	7.390	7.384	0.006	92	9004	4.00	3.77	
95 2-Nitropropane	41	7.895	7.889	0.006	94	5072	4.00	3.95	
106 Tetrahydrothiophene	60	10.019	10.030	-0.011	90	12971	2.00	2.24	
120 cis-1,4-Dichloro-2-butene	53	12.891	12.885	0.006	0	5073	2.00	1.92	
135 1,2,3-Trimethylbenzene	105	15.276	15.270	0.006	96	96882	2.00	1.86	
140 1,3,5-Trichlorobenzene	180	17.208	17.202	0.006	94	54830	2.00	1.87	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

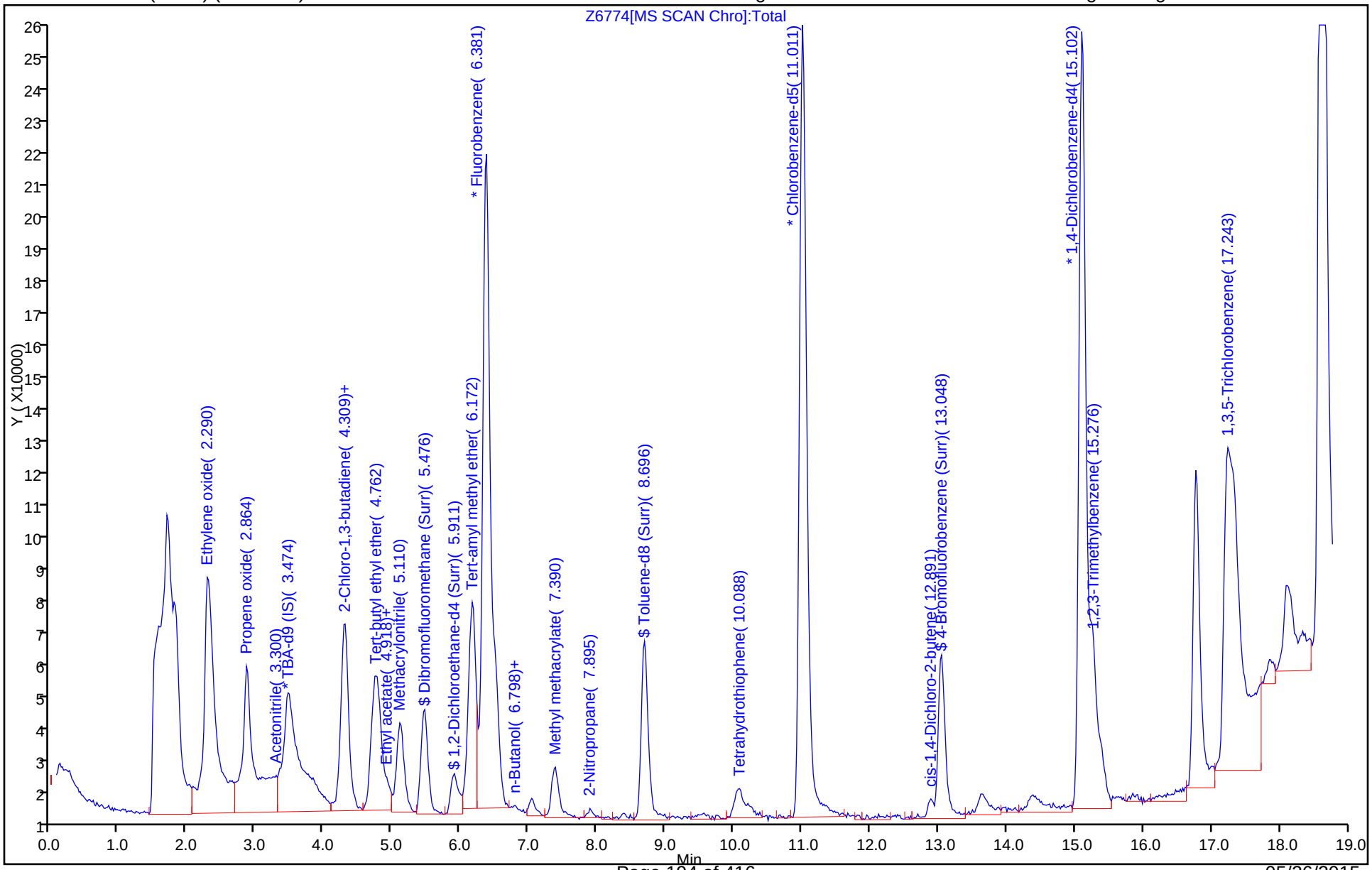
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.16	Units: uL
MV-Supp A_00011	Amount Added:	1.00	Units: uL

Report Date: 27-Apr-2015 21:01:01 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6774.D				
Injection Date:	27-Apr-2015 11:51:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	19
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

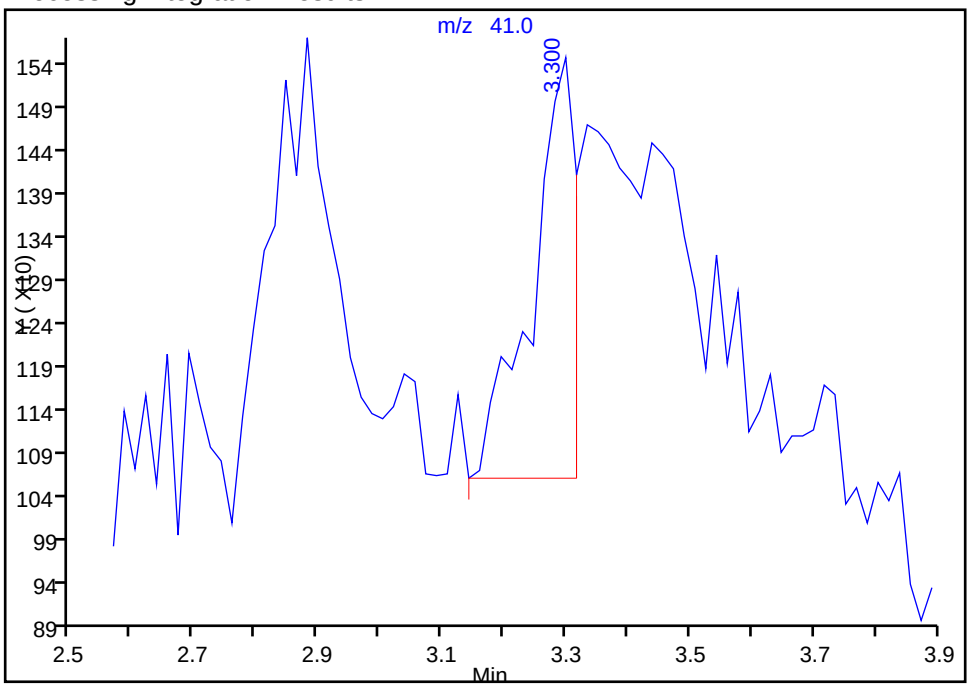
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6774.D				
Injection Date:	27-Apr-2015 11:51:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

53 Acetonitrile, CAS: 75-05-8

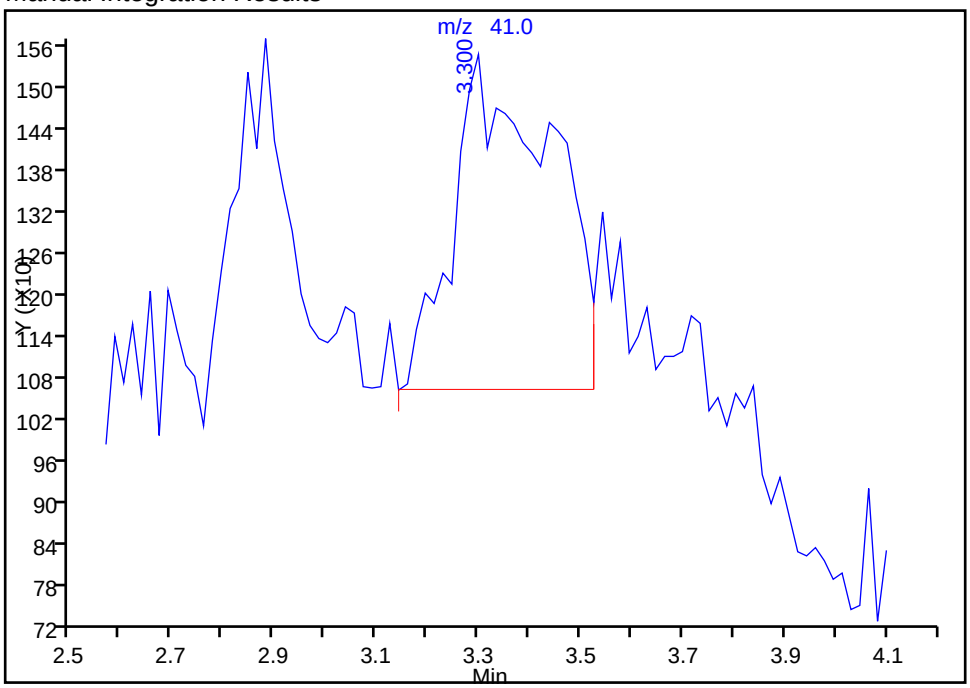
Processing Integration Results

RT: 3.30
Area: 2415
Amount: 17.304155
Amount Units: ug/l



Manual Integration Results

RT: 3.30
Area: 6548
Amount: 22.319387
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:43:47
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

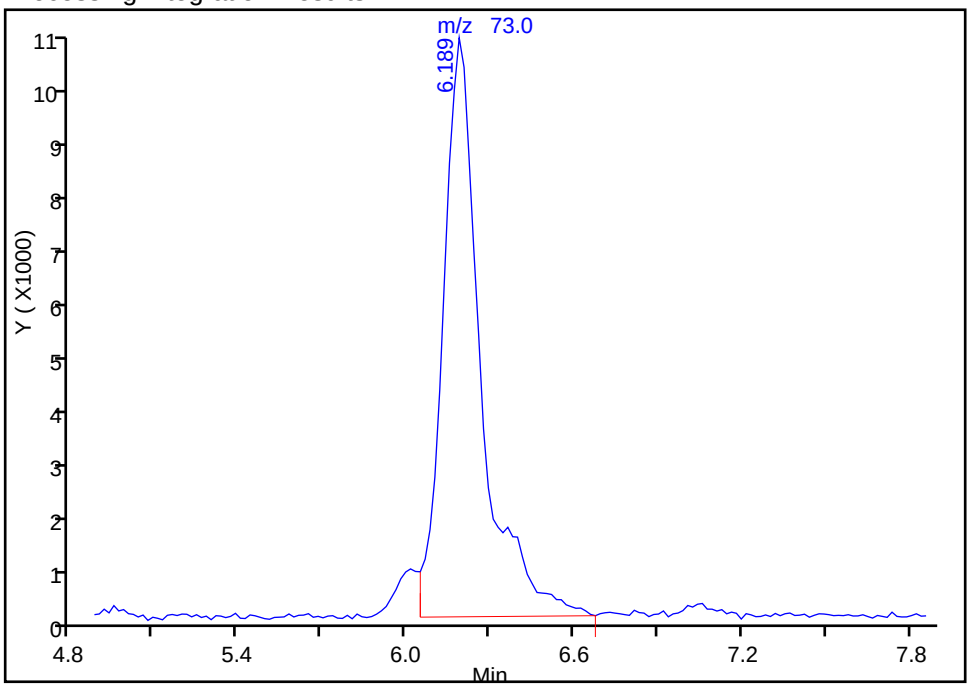
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6774.D				
Injection Date:	27-Apr-2015 11:51:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

83 Tert-amyl methyl ether, CAS: 994-05-8

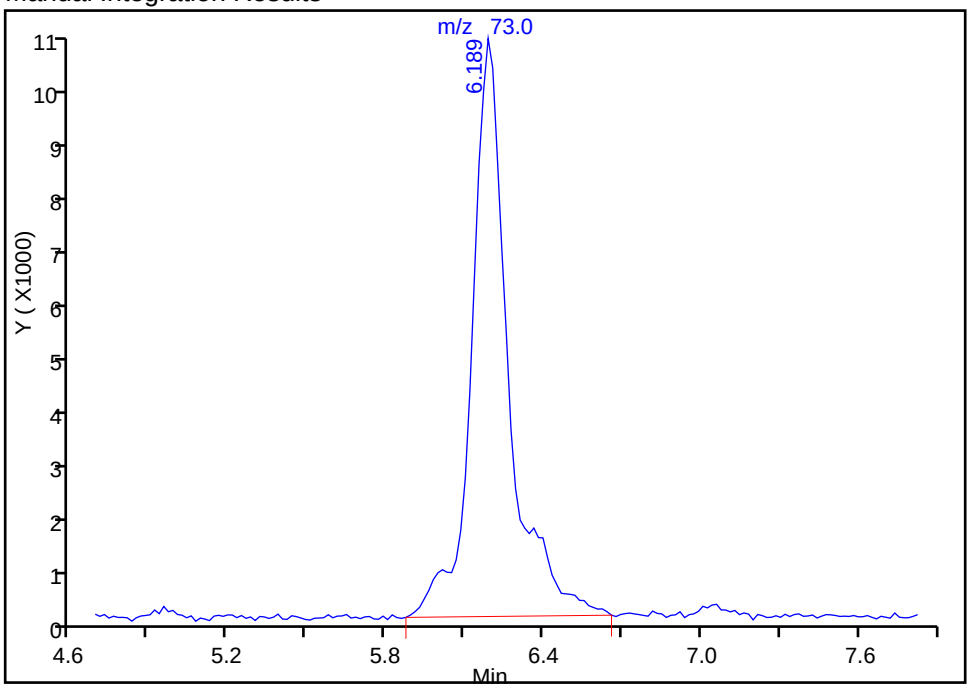
Processing Integration Results

RT: 6.19
Area: 95236
Amount: 2.481099
Amount Units: ug/l



Manual Integration Results

RT: 6.19
Area: 98727
Amount: 2.472785
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:40:13
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6775.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 27-Apr-2015 12:13:30 ALS Bottle#: 15 Worklist Smp#: 20
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:18 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 13:10:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.474	3.487	-0.013	95	139018	250.0	250.0	
* 2 Fluorobenzene	96	6.381	6.377	0.004	99	728927	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.011	11.007	0.004	87	175003	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.102	15.115	-0.013	95	309132	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.458	5.469	-0.011	94	169047	5.00	5.13	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.893	5.905	-0.012	93	67920	5.00	5.10	
$ 10 Toluene-d8 (Surr)	98	8.696	8.690	0.006	93	319697	5.00	5.06	
$ 11 4-Bromofluorobenzene (Surr	95	13.030	13.042	-0.012	85	184575	5.00	5.31	
34 Ethylene oxide	43	2.308	2.301	0.007	99	280205	1000.0	1035.2	
39 Ethanol	45		2.684				ND	ND	
42 Propene oxide	58	2.865	2.876	-0.011	96	302131	250.0	271.5	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.300	3.276	0.024	98	21913	62.5	75.0	
60 Isopropyl ether	87	4.292	4.303	-0.011	97	95054	6.25	6.78	
63 2-Chloro-1,3-butadiene	53	4.309	4.303	0.006	89	145034	5.00	5.31	
64 Tert-butyl ethyl ether	59	4.727	4.738	-0.011	98	307762	6.25	6.64	
69 Propionitrile	54	4.936	4.912	0.024	50	33105	62.5	70.2	
68 Ethyl acetate	43	4.953	4.947	0.006	96	54849	10.0	10.7	
73 Methacrylonitrile	41	5.110	5.121	-0.011	93	161789	50.0	53.7	
83 Tert-amyl methyl ether	73	6.189	6.183	0.006	97	264266	6.25	6.64	M
86 n-Butanol	56	6.799	6.792	0.007	86	15031	125.0	130.0	
88 Ethyl acrylate	55	6.799	6.792	0.007	26	3048	NC	NC	
91 Methyl methacrylate	100	7.390	7.384	0.006	94	25904	10.0	10.9	
95 2-Nitropropane	41	7.895	7.889	0.006	94	14063	10.0	11.0	
106 Tetrahydrothiophene	60	10.019	10.030	-0.011	91	27007	5.00	5.12	
120 cis-1,4-Dichloro-2-butene	53	12.891	12.885	0.006	0	14429	5.00	5.43	
135 1,2,3-Trimethylbenzene	105	15.258	15.270	-0.012	97	277104	5.00	5.30	
140 1,3,5-Trichlorobenzene	180	17.208	17.202	0.006	95	159324	5.00	5.40	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

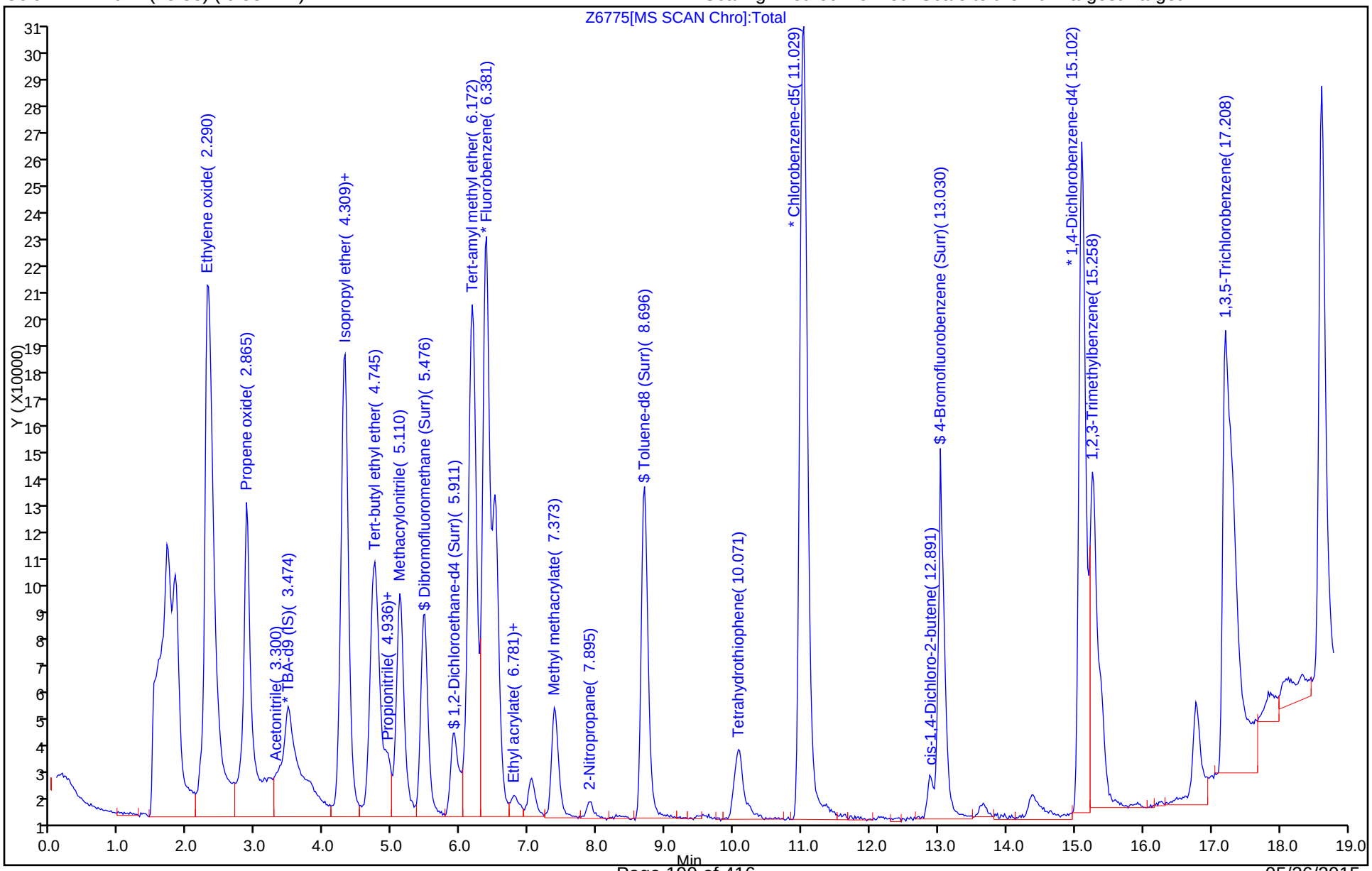
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.40	Units: uL
MV-Supp A_00011	Amount Added:	2.50	Units: uL

Report Date: 27-Apr-2015 20:56:19 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6775.D				
Injection Date:	27-Apr-2015 12:13:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	20
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

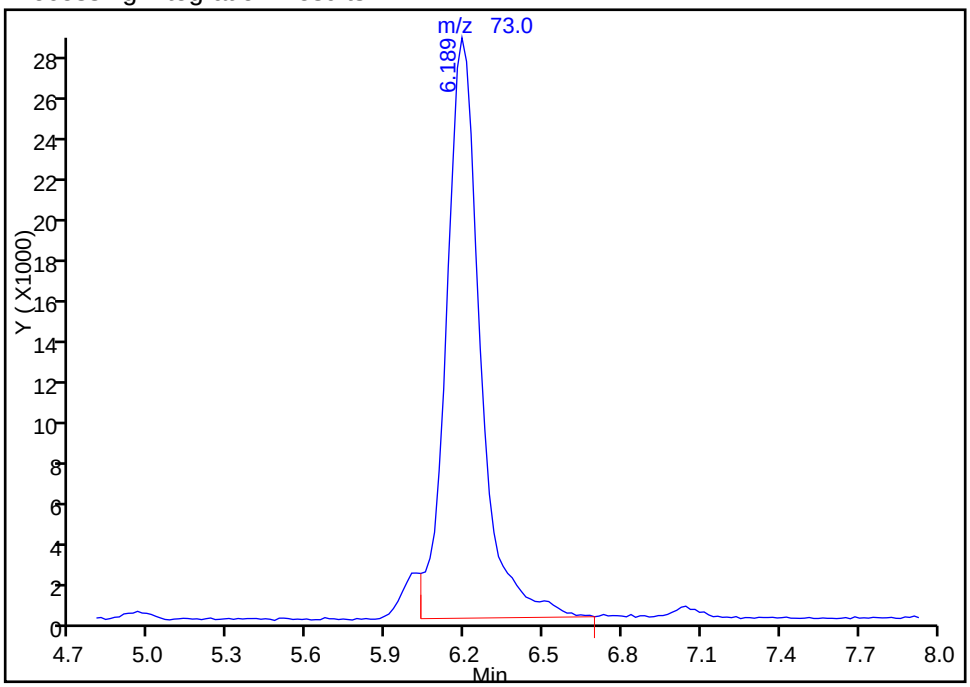
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6775.D				
Injection Date:	27-Apr-2015 12:13:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

83 Tert-amyl methyl ether, CAS: 994-05-8

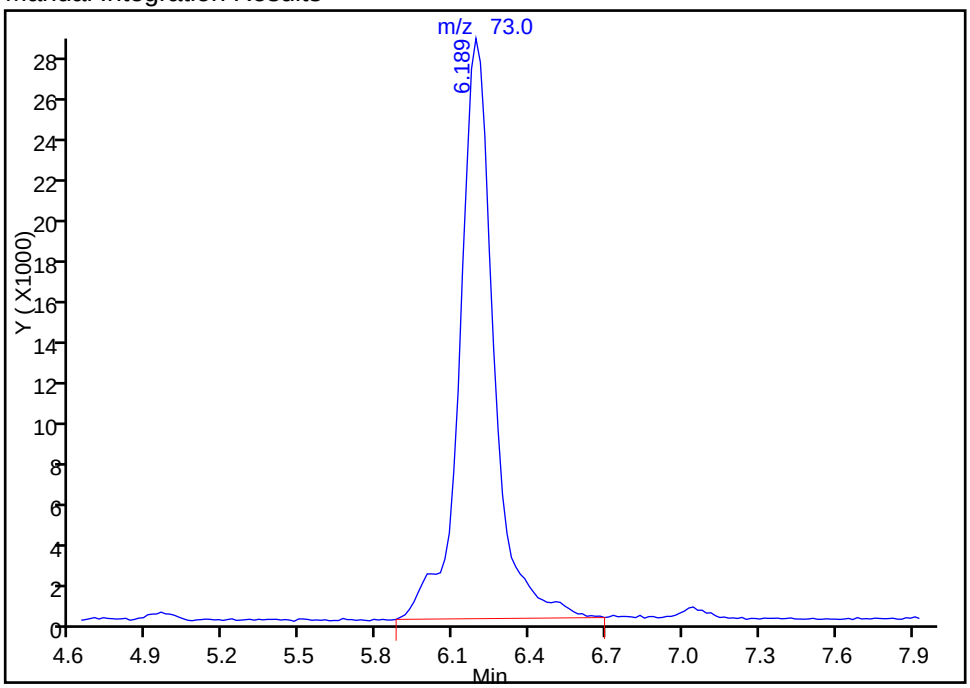
Processing Integration Results

RT: 6.19
Area: 255200
Amount: 6.631965
Amount Units: ug/l



Manual Integration Results

RT: 6.19
Area: 264266
Amount: 6.642563
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:40:23
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6776.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 27-Apr-2015 12:36:30 ALS Bottle#: 16 Worklist Smp#: 21
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icis
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:20 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 13:09:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.485	3.485	0.000	94	129478	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.375	0.000	99	718308	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.005	11.005	0.000	87	168188	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.113	15.113	0.000	94	301653	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.469	5.469	0.000	94	311918	10.0	9.60	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.905	5.905	0.000	93	124779	10.0	9.52	
$ 10 Toluene-d8 (Surr)	98	8.690	8.690	0.000	93	596484	10.0	9.83	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.042	0.000	89	320514	10.0	9.45	
34 Ethylene oxide	43	2.301	2.301	0.000	99	525989	2000.0	1971.9	
39 Ethanol	45		2.684				ND	ND	
42 Propene oxide	58	2.876	2.876	0.000	96	550597	500.0	502.0	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.276	3.276	0.000	100	33702	125.0	117.0	
60 Isopropyl ether	87	4.303	4.303	0.000	98	176635	12.5	12.8	
63 2-Chloro-1,3-butadiene	53	4.303	4.303	0.000	88	275796	10.0	10.2	
64 Tert-butyl ethyl ether	59	4.738	4.738	0.000	98	550067	12.5	12.0	
69 Propionitrile	54	4.912	4.912	0.000	98	58619	125.0	126.1	
68 Ethyl acetate	43	4.947	4.947	0.000	99	100933	20.0	20.0	
73 Methacrylonitrile	41	5.121	5.121	0.000	93	299078	100.0	100.7	
83 Tert-amyl methyl ether	73	6.183	6.183	0.000	98	477411	12.5	12.2	M
86 n-Butanol	56	6.792	6.792	0.000	86	27767	250.0	243.7	
88 Ethyl acrylate	55	6.792	6.792	0.000	27	6529	NC	NC	
91 Methyl methacrylate	100	7.384	7.384	0.000	93	48531	20.0	20.7	
95 2-Nitropropane	41	7.889	7.889	0.000	97	25442	20.0	20.2	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	92	47477	10.0	9.76	
120 cis-1,4-Dichloro-2-butene	53	12.885	12.885	0.000	0	25239	10.0	9.74	
135 1,2,3-Trimethylbenzene	105	15.270	15.270	0.000	97	521657	10.0	10.2	
140 1,3,5-Trichlorobenzene	180	17.202	17.202	0.000	97	291918	10.0	10.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

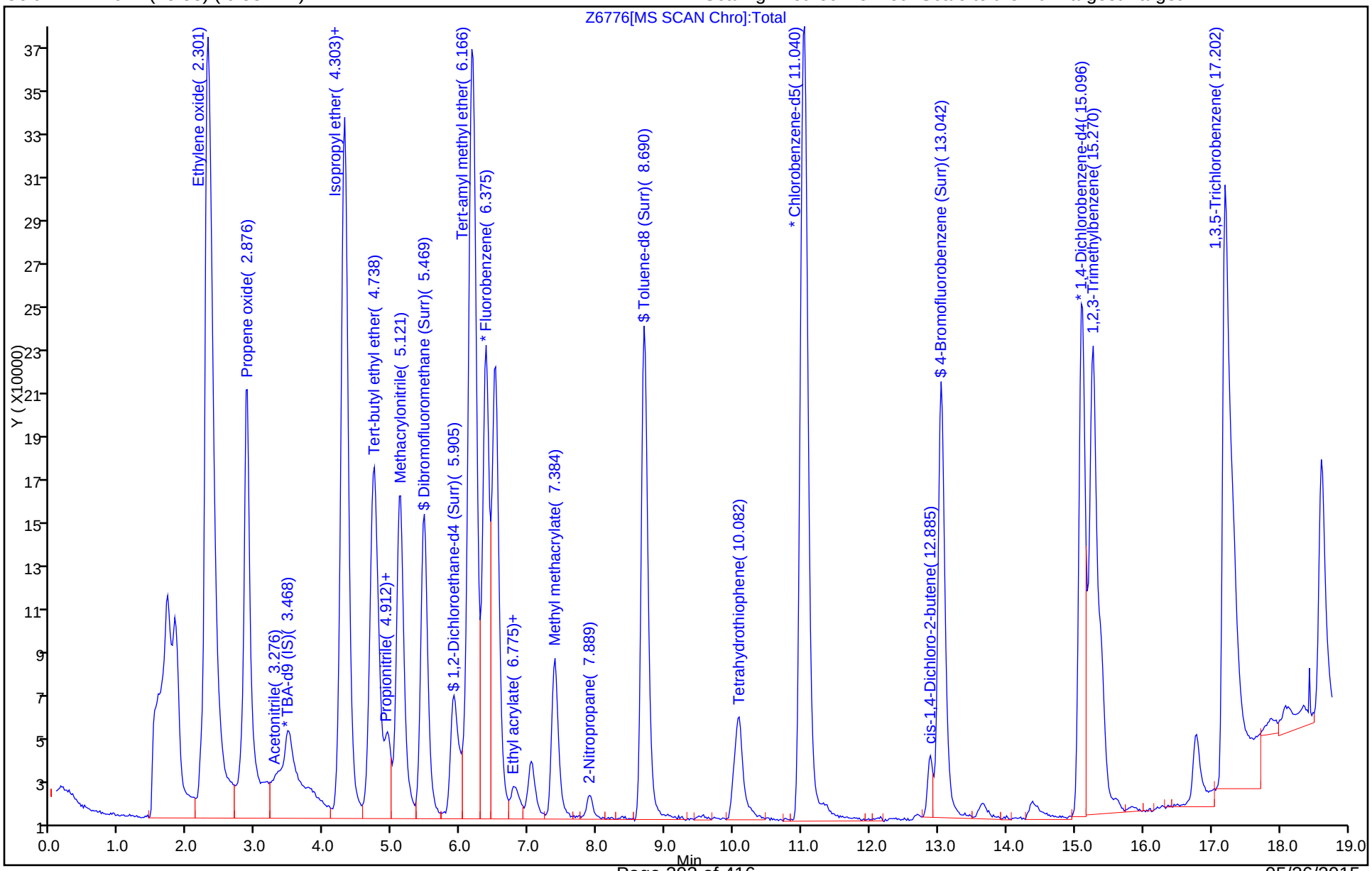
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL
MV-Supp A_00011	Amount Added:	5.00	Units: uL

Report Date: 27-Apr-2015 20:56:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6776.D				
Injection Date:	27-Apr-2015 12:36:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	icis			Worklist Smp#:	21
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



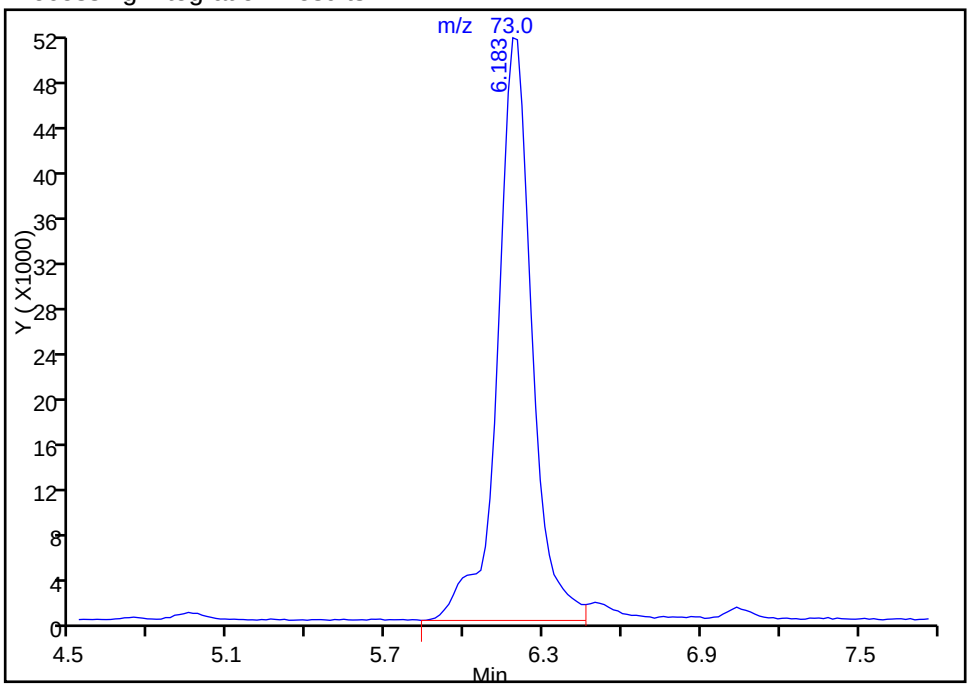
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6776.D				
Injection Date:	27-Apr-2015 12:36:30	Instrument ID:	VMS_Z		
Lims ID:	icis				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

83 Tert-amyl methyl ether, CAS: 994-05-8

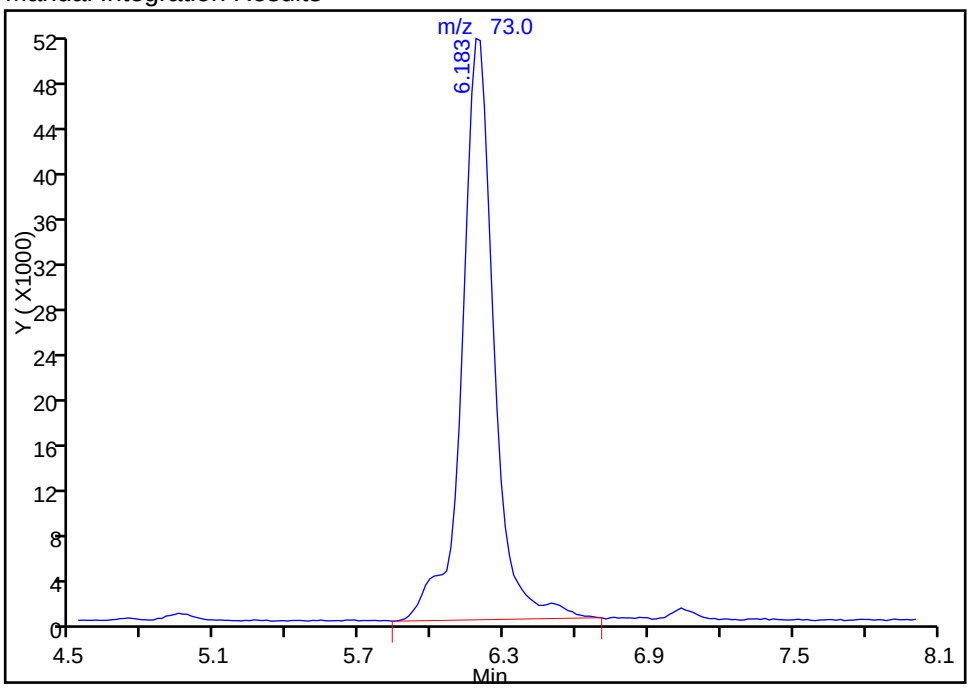
Processing Integration Results

RT: 6.18
Area: 473191
Amount: 12.400848
Amount Units: ug/l



Manual Integration Results

RT: 6.18
Area: 477411
Amount: 12.177557
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:40:36
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6777.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Apr-2015 12:59:30 ALS Bottle#: 17 Worklist Smp#: 22
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:22 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 13:31:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.486	3.485	0.001	94	128205	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.375	0.000	98	742235	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.006	11.005	0.001	88	173985	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.114	15.113	0.001	95	316536	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.453	5.469	-0.016	94	619752	20.0	18.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.888	5.905	-0.017	93	239256	20.0	17.7	
$ 10 Toluene-d8 (Surr)	98	8.691	8.690	0.001	93	1168221	20.0	18.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.042	0.000	89	636132	20.0	17.9	
34 Ethylene oxide	43	2.285	2.301	-0.016	99	1638145	6000.0	5943.3	
39 Ethanol	45		2.684				ND	ND	
42 Propene oxide	58	2.859	2.876	-0.017	96	1720052	1500.0	1517.7	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.277	3.276	0.001	99	110004	375.0	369.5	
60 Isopropyl ether	87	4.287	4.303	-0.016	97	534134	37.5	37.4	
63 2-Chloro-1,3-butadiene	53	4.304	4.303	0.001	89	795276	30.0	28.6	
64 Tert-butyl ethyl ether	59	4.722	4.738	-0.016	98	1691172	37.5	35.8	
69 Propionitrile	54	4.913	4.912	0.001	97	164969	375.0	343.6	
68 Ethyl acetate	43	4.931	4.947	-0.016	98	318541	60.0	61.1	
73 Methacrylonitrile	41	5.105	5.121	-0.016	93	957300	300.0	311.9	
83 Tert-amyl methyl ether	73	6.184	6.183	0.001	98	1484831	37.5	36.7	M
86 n-Butanol	56	6.793	6.792	0.001	87	94716	750.0	804.4	
88 Ethyl acrylate	55	6.776	6.792	-0.016	26	14573	NC	NC	
91 Methyl methacrylate	100	7.385	7.384	0.001	93	150167	60.0	62.0	
95 2-Nitropropane	41	7.890	7.889	0.001	97	73412	60.0	56.4	
106 Tetrahydrothiophene	60	10.013	10.030	-0.017	93	142927	30.0	29.3	
120 cis-1,4-Dichloro-2-butene	53	12.886	12.885	0.001	0	77471	30.0	28.5	
135 1,2,3-Trimethylbenzene	105	15.270	15.270	0.000	97	1618889	30.0	30.3	
140 1,3,5-Trichlorobenzene	180	17.203	17.202	0.001	98	892838	30.0	29.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

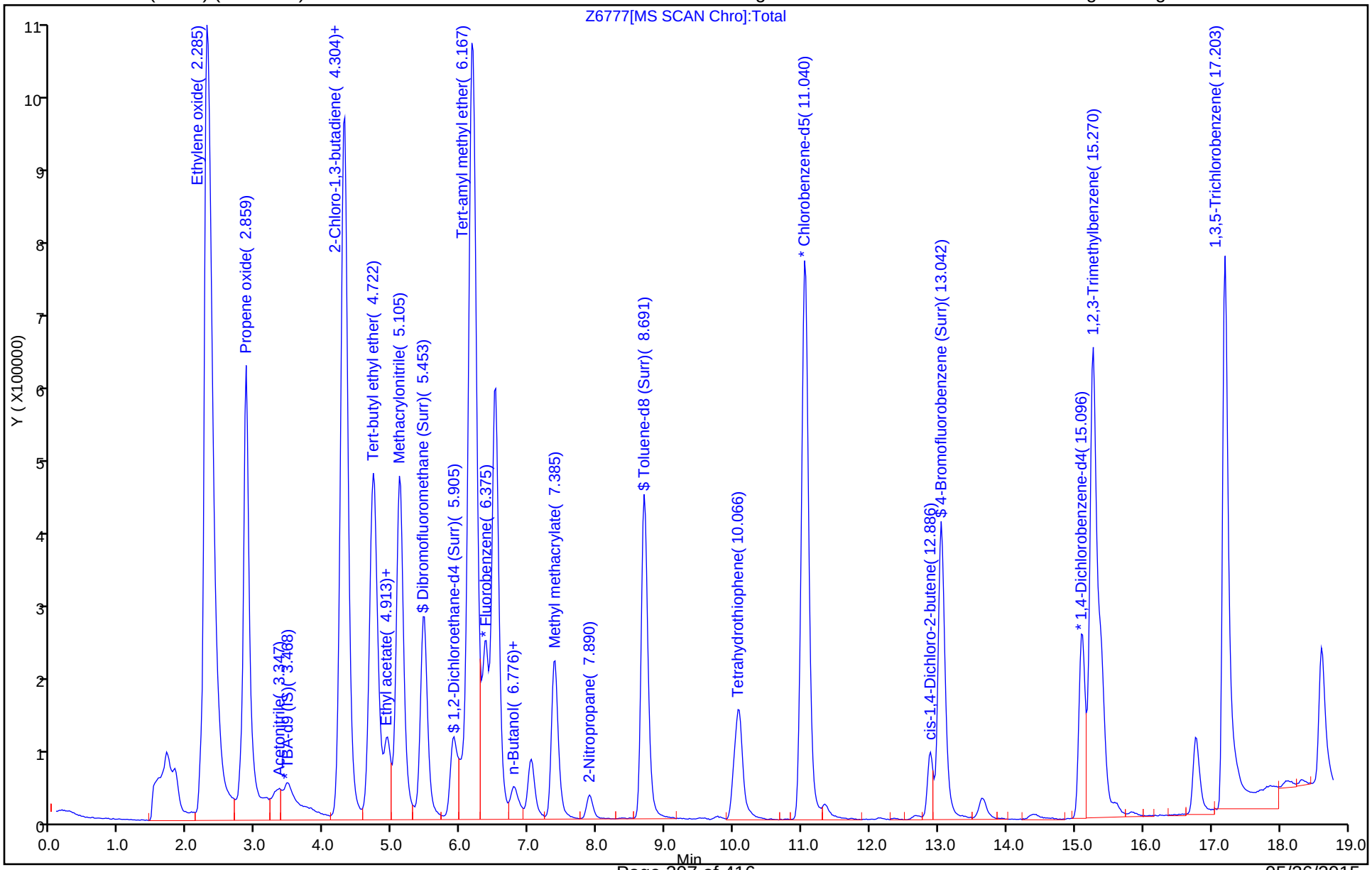
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 1.60	Units: uL
MV-Supp A_00011	Amount Added: 15.00	Units: uL

Report Date: 27-Apr-2015 20:56:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6777.D				
Injection Date:	27-Apr-2015 12:59:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	22
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

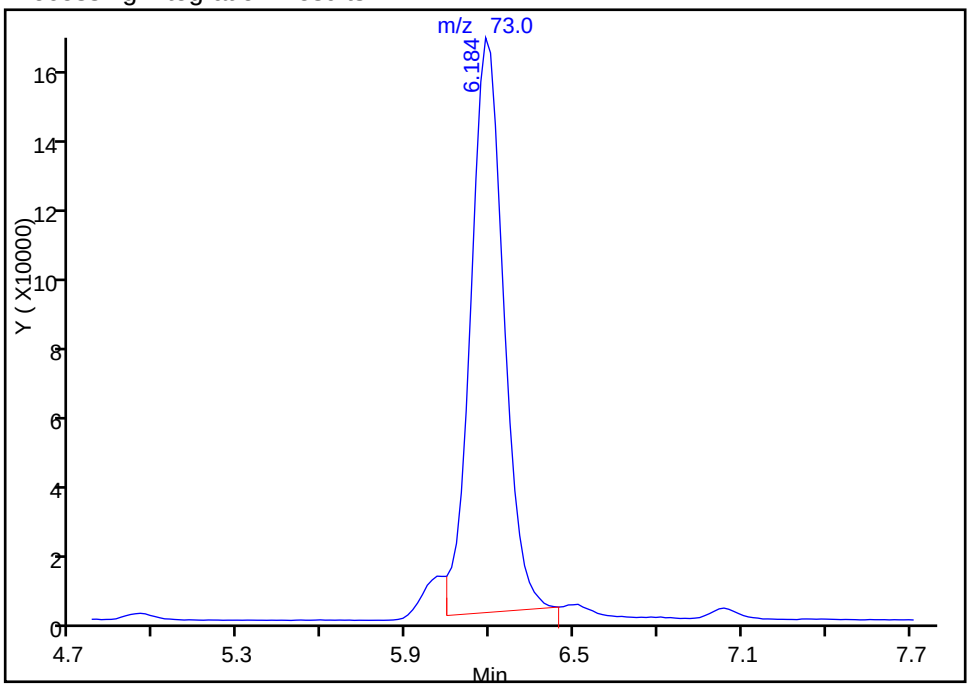
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6777.D				
Injection Date:	27-Apr-2015 12:59:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	17	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

83 Tert-amyl methyl ether, CAS: 994-05-8

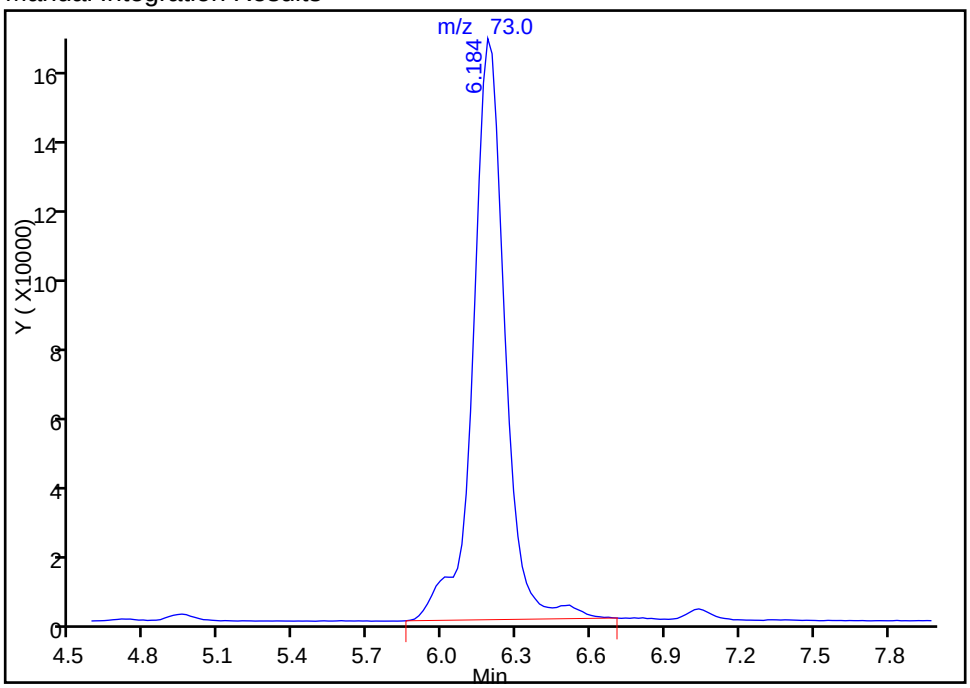
Processing Integration Results

RT: 6.18
Area: 1341029
Amount: 33.961153
Amount Units: ug/l



Manual Integration Results

RT: 6.18
Area: 1484831
Amount: 36.653380
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:41:05
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Apr-2015 13:21:30 ALS Bottle#: 18 Worklist Smp#: 23
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:23 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 14:28:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.485	3.485	0.000	94	125501	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.375	0.000	96	724095	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.005	11.005	0.000	89	171344	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.113	15.113	0.000	94	301551	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.470	5.469	0.001	94	934013	30.0	28.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.905	5.905	0.000	94	357211	30.0	27.0	
$ 10 Toluene-d8 (Surr)	98	8.690	8.690	0.000	94	1733116	30.0	28.0	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.042	0.000	90	942404	30.0	27.8	
34 Ethylene oxide	43	2.302	2.301	0.001	99	3269595	12000	12160	
39 Ethanol	45		2.684				ND	ND	
42 Propene oxide	58	2.859	2.876	-0.017	96	3390410	3000.0	3066.5	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.294	3.276	0.018	100	214863	750.0	739.9	
60 Isopropyl ether	87	4.303	4.303	0.000	98	1066526	75.0	76.5	
63 2-Chloro-1,3-butadiene	53	4.303	4.303	0.000	89	1611823	60.0	59.4	
64 Tert-butyl ethyl ether	59	4.721	4.738	-0.017	98	3352492	75.0	72.8	
69 Propionitrile	54	4.913	4.912	0.001	98	323457	750.0	690.5	
68 Ethyl acetate	43	4.947	4.947	0.000	99	620096	120.0	121.9	
73 Methacrylonitrile	41	5.121	5.121	0.000	93	1836209	600.0	613.2	
83 Tert-amyl methyl ether	73	6.201	6.183	0.018	98	2902753	75.0	73.5	M
86 n-Butanol	56	6.793	6.792	0.001	87	182597	1500.0	1589.6	
88 Ethyl acrylate	55	6.793	6.792	0.001	26	27908	NC	NC	
91 Methyl methacrylate	100	7.384	7.384	0.000	93	293982	120.0	124.4	
95 2-Nitropropane	41	7.889	7.889	0.000	96	146763	120.0	115.5	
106 Tetrahydrothiophene	60	10.013	10.030	-0.017	93	275236	60.0	57.8	
120 cis-1,4-Dichloro-2-butene	53	12.885	12.885	0.000	0	145256	60.0	56.1	
135 1,2,3-Trimethylbenzene	105	15.270	15.270	0.000	98	3196937	60.0	62.7	
140 1,3,5-Trichlorobenzene	180	17.202	17.202	0.000	98	1775865	60.0	61.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

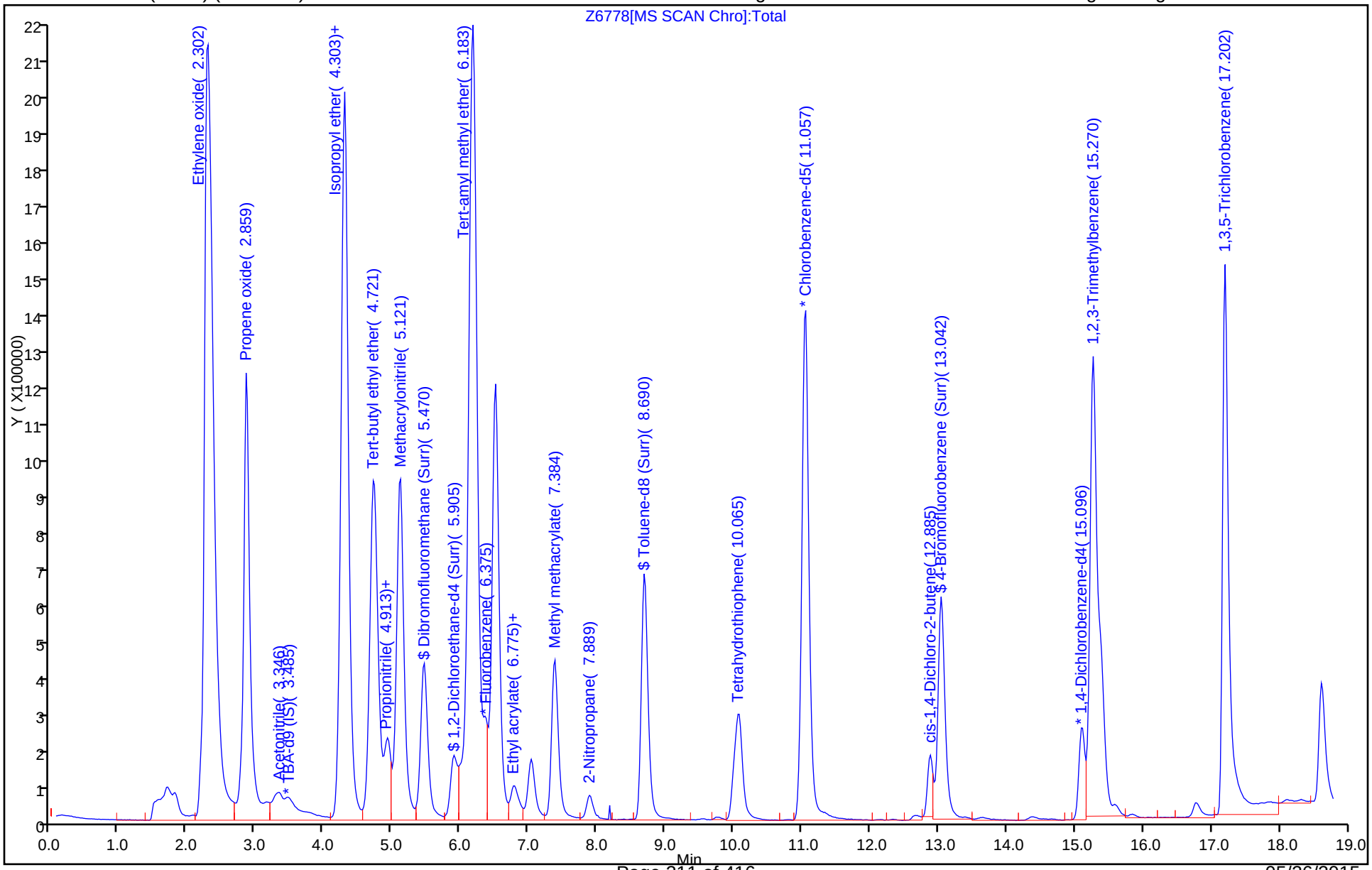
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 2.40	Units: uL
MV-Supp A_00011	Amount Added: 30.00	Units: uL

Report Date: 27-Apr-2015 20:56:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D				
Injection Date:	27-Apr-2015 13:21:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	23
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



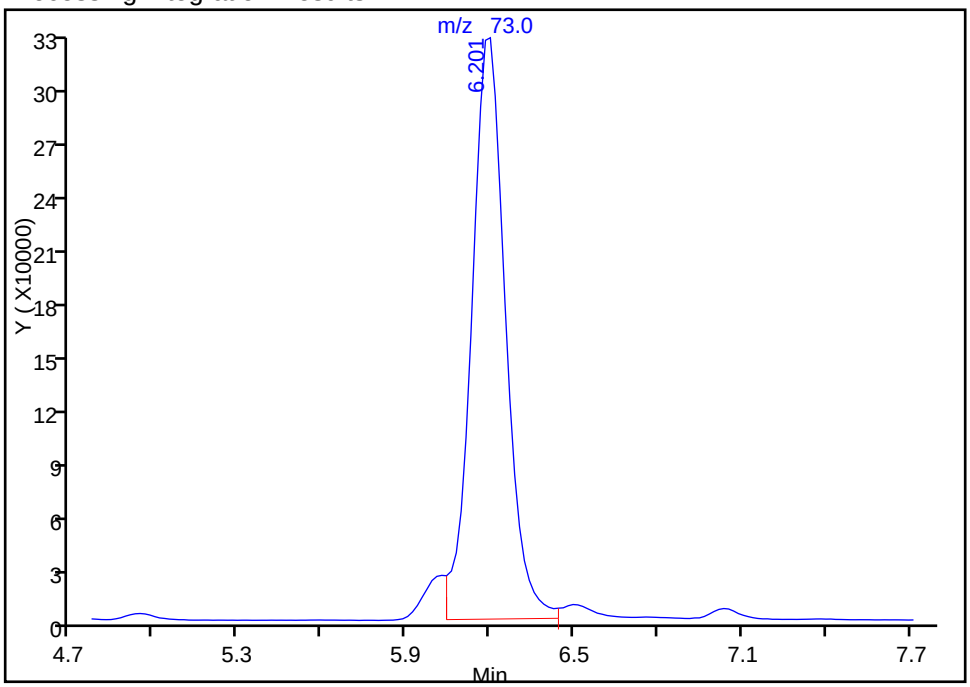
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D				
Injection Date:	27-Apr-2015 13:21:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	18	Worklist Smp#:	23
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

83 Tert-amyl methyl ether, CAS: 994-05-8

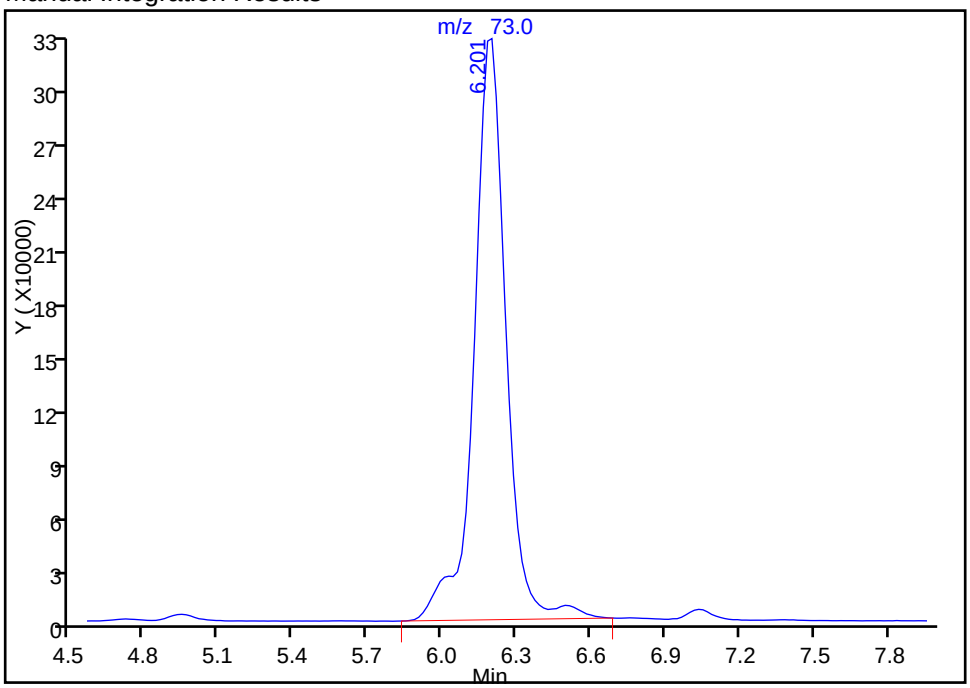
Processing Integration Results

RT: 6.20
Area: 2734262
Amount: 69.848529
Amount Units: ug/l



Manual Integration Results

RT: 6.20
Area: 2902753
Amount: 73.450198
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:41:24
Audit Action: Manually Integrated
Audit Reason: Split Peak

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-277378/9	Z7570.D
Level 2	IC 280-277378/10	Z7571.D
Level 3	IC 280-277378/11	Z7572.D
Level 4	IC 280-277378/12	Z7573.D
Level 5	IC 280-277378/13	Z7574.D
Level 6	IC 280-277378/14	Z7575.D
Level 7	IC 280-277378/15	Z7576.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.4447 0.5068	0.4355 0.5378	0.3515	0.5551	0.4971	Ave		0.4755				14.8		15.0			
Chloromethane	+++++ 0.3083	0.3034 0.3365	0.2499	0.3367	0.3189	Ave		0.3090			0.1000	10.4		15.0			
Vinyl chloride	0.3229 0.2971	0.2929 0.3158	0.2484	0.3080	0.3020	Ave		0.2982				8.2		30.0			
Bromomethane	+++++ 0.3095	0.3454 0.3203	0.2960	0.3279	0.3238	Ave		0.3205				5.2		15.0			
Chloroethane	0.2242 0.1936	0.2107 0.2001	0.1869	0.2089	0.2051	Ave		0.2042				6.0		15.0			
Dichlorofluoromethane	0.9728 0.7629	0.8488 0.7843	0.7643	0.8164	0.7876	Ave		0.8196				9.0		15.0			
Trichlorofluoromethane	0.8168 0.6551	0.7446 0.6860	0.6403	0.7240	0.6737	Ave		0.7058				8.7		15.0			
Ethyl ether	0.1276 0.1340	0.1226 0.1353	0.1420	0.1440	0.1404	Ave		0.1351				5.8		15.0			
Acrolein	+++++ 0.0074	+++++ 0.0077	0.0092	0.0087	0.0072	Ave		0.0080				10.9		15.0			
1,1-Dichloroethene	0.4151 0.3078	0.3450 0.3153	0.2775	0.3338	0.3118	Ave		0.3295				13.2		30.0			
Acetone	+++++ 0.0146	+++++ 0.0161	0.0126	0.0170	0.0151	Ave		0.0151				11.0		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5315 0.4834	0.4916 0.5043	0.4514	0.5128	0.4946	Ave		0.4956				5.1		15.0			
Iodomethane	0.9254 0.8514	0.8329 0.8807	0.8147	0.8673	0.8640	Ave		0.8624				4.1		15.0			
Carbon disulfide	1.2323 1.1063	1.0759 1.1369	1.0482	1.1394	1.1181	Ave		1.1225				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.5205 0.4741	0.4523 0.4770	0.4765	0.5080	0.4892	Ave		0.4854				4.7		15.0			
Methyl acetate	+++++ 0.0648	0.0670 0.0680	0.0696	0.0701	0.0656	Ave		0.0675				3.2		15.0			
Methylene Chloride	+++++ 0.2596	+++++ 0.2605	0.3222	0.2896	0.2743	Ave		0.2812				9.2		15.0			
tert-Butyl alcohol	+++++ 0.6211	+++++ 0.6005	0.6439	0.6979	0.8692	Lin	10.964	0.5855							0.9950		0.9900
Acrylonitrile	0.0218 0.0208	0.0211 0.0210	0.0237	0.0226	0.0211	Ave		0.0217				4.9		15.0			
trans-1,2-Dichloroethene	0.4337 0.3275	0.3563 0.3248	0.3506	0.3549	0.3450	Ave		0.3561				10.2		15.0			
Methyl tert-butyl ether	0.6131 0.4645	0.4875 0.4595	0.5259	0.5210	0.4814	Ave		0.5076				10.5		15.0			
Hexane	2.6445 1.9026	2.2883 1.8492	1.9658	2.0885	1.9982	Ave		2.1053				13.2		15.0			
1,1-Dichloroethane	0.7144 0.6059	0.6223 0.5883	0.6026	0.6564	0.6319	Ave		0.6317			0.1000	6.8		15.0			
Vinyl acetate	+++++ 0.2960	0.3247 0.2939	0.3106	0.3273	0.2775	Ave		0.3050				6.4		15.0			
2-Butanone (MEK)	+++++ 0.0335	0.0411 0.0339	0.0386	0.0388	0.0344	Ave		0.0367				8.6		15.0			
cis-1,2-Dichloroethene	0.4131 0.3302	0.3462 0.3261	0.3385	0.3554	0.3477	Ave		0.3510				8.3		15.0			
2,2-Dichloropropane	+++++ 0.5297	0.7691 0.5062	0.7923	0.6457	0.5875	Lin1	0.4113	0.5116							0.9970		0.9900
sec-Butyl Alcohol	+++++ 0.8076	0.8130 0.7709	0.7278	0.8075	0.8063	Ave		0.7889				4.3		15.0			
Bromochloromethane	0.1578 0.1721	0.1585 0.1738	0.1705	0.1770	0.1736	Ave		0.1690				4.6		15.0			
Chloroform	0.6919 0.6018	0.6086 0.5924	0.6196	0.6354	0.6198	Ave		0.6242				5.3		30.0			
Tetrahydrofuran	+++++ 0.0214	0.0281 0.0225	0.0285	0.0239	0.0219	Ave		0.0244				12.9		15.0			
1,1,1-Trichloroethane	0.7206 0.5801	0.6301 0.5954	0.5899	0.6223	0.5999	Ave		0.6197				7.7		15.0			
Cyclohexane	0.6970 0.5271	0.5806 0.5390	0.5261	0.5753	0.5378	Ave		0.5690				10.6		15.0			
1,1-Dichloropropene	0.5719 0.4853	0.5093 0.5061	0.4850	0.5207	0.4974	Ave		0.5108				5.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.6591 0.5981	0.6220 0.6217	0.5770	0.6286	0.5977	Ave		0.6149				4.3		15.0			
Isobutyl alcohol	+++++ 0.2717	+++++ 0.2753	0.2042	0.2846	0.2673	Ave		0.2606				12.3		15.0			
1,2-Dichloroethane	0.2490 0.2409	0.2332 0.2446	0.2574	0.2582	0.2476	Ave		0.2473				3.6		15.0			
Benzene	1.1173 0.9443	0.9410 0.9596	0.9484	0.9923	0.9639	Ave		0.9810				6.4		15.0			
Trichloroethene	0.5121 0.4016	0.4300 0.3927	0.4081	0.4285	0.4203	Ave		0.4276				9.3		15.0			
2-Pentanone	+++++ 0.0746	0.0897 0.0774	0.0808	0.0794	0.0738	Ave		0.0793				7.2		15.0			
1,2-Dichloropropane	0.3647 0.3357	0.3111 0.3258	0.3359	0.3508	0.3430	Ave		0.3382				5.1		30.0			
Methylcyclohexane	0.5345 0.4479	0.5501 0.4433	0.4828	0.4748	0.4574	Ave		0.4844				8.7		15.0			
Dibromomethane	0.1948 0.1840	0.1820 0.1830	0.1969	0.1963	0.1863	Ave		0.1890				3.5		15.0			
Bromodichloromethane	0.5628 0.5281	0.5132 0.5200	0.5382	0.5338	0.5433	Ave		0.5342				3.1		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1050	0.1005 0.1043	0.1128	0.1091	0.1104	Ave		0.1070				4.2		15.0			
cis-1,3-Dichloropropene	1.7523 1.7701	1.7236 1.7262	1.7784	1.8618	1.8849	Ave		1.7853				3.6		15.0			
4-Methyl-2-pentanone (MIBK)	0.1243 0.1061	0.1019 0.1073	0.1152	0.1166	0.1082	Ave		0.1114				6.9		15.0			
Toluene	1.1890 1.0031	1.0193 0.9799	1.0290	1.0599	1.0484	Ave		1.0470				6.5		30.0			
trans-1,3-Dichloropropene	0.3239 0.2903	0.2799 0.2858	0.3048	0.3086	0.3023	Ave		0.2994				5.0		15.0			
Ethyl methacrylate	+++++ 0.9424	1.0700 0.9241	1.0598	1.0400	0.9981	Ave		1.0057				6.1		15.0			
1,1,2-Trichloroethane	0.1908 0.1841	0.1765 0.1811	0.1984	0.1983	0.1874	Ave		0.1881				4.4		15.0			
1,3-Dichloropropane	1.2297 1.3044	1.1953 1.2761	1.3077	1.3552	1.3473	Ave		1.2879				4.6		15.0			
Tetrachloroethene	1.5608 1.5694	1.5616 1.5464	1.4908	1.6337	1.6828	Ave		1.5779				4.0		15.0			
2-Hexanone	+++++ 0.2834	0.3259 0.2813	0.3148	0.3014	0.2846	Ave		0.2986				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	1.4720 1.6036	1.3774 1.6210	1.5334	1.5588	1.6517	Ave		1.5454				6.2		15.0			
1,2-Dibromoethane	0.9381 1.0457	0.9353 1.0376	1.0319	1.0872	1.0744	Ave		1.0214				6.0		15.0			
Chlorobenzene	3.0403 3.0716	2.9526 2.9405	2.9907	3.1817	3.2741	Ave		3.0645			0.3000	4.0		15.0			
1-Chlorohexane	2.4916 1.8440	2.0899 1.7537	1.9020	2.0081	1.9921	Ave		2.0116				11.9		15.0			
1,1,1,2-Tetrachloroethane	1.4404 1.5689	1.3830 1.5331	1.4921	1.5927	1.6429	Ave		1.5219				5.9		15.0			
Ethylbenzene	1.6255 1.4358	1.5270 1.3953	1.4503	1.5229	1.5944	Ave		1.5073				5.6		30.0			
m-Xylene & p-Xylene	2.0547 1.9781	1.9889 1.8417	1.9983	2.0445	2.0656	Ave		1.9960				3.8		15.0			
o-Xylene	1.7368 1.6896	1.6954 1.6033	1.7247	1.8365	1.8387	Ave		1.7321				4.8		15.0			
Styrene	2.5813 2.7554	2.6126 2.6412	2.7352	2.9064	2.9660	Ave		2.7426				5.4		15.0			
Bromoform	+++++ 0.8393	0.6712 0.8838	0.7751	0.8492	0.8667	Ave		0.8142			0.1000	9.7		15.0			
Isopropylbenzene	3.6911 3.0599	3.3390 2.9080	3.1678	3.3104	3.2226	Ave		3.2427				7.6		15.0			
Cyclohexanone	0.0110 0.0112	0.0194 0.0120	0.0168	0.0129	0.0122	Lin1	0.0978	0.0118							0.9930		0.9900
Bromobenzene	0.8388 0.8706	0.8255 0.8459	0.8470	0.8981	0.8880	Ave		0.8591				3.1		15.0			
1,1,2,2-Tetrachloroethane	0.6821 0.5688	0.5550 0.5528	0.5992	0.6135	0.5659	Ave		0.5910			0.3000	7.8		15.0			
1,2,3-Trichloropropane	+++++ 0.1377	0.1156 0.1370	0.1422	0.1448	0.1383	Ave		0.1359				7.7		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1105	0.0743 0.1080	0.1078	0.1143	0.1153	Ave		0.1050				14.6		15.0			
N-Propylbenzene	0.9399 0.8183	0.9051 0.7804	0.8702	0.8942	0.8811	Ave		0.8699				6.2		15.0			
2-Chlorotoluene	+++++ 0.6927	0.7435 0.6778	0.7516	0.7754	0.7636	Ave		0.7341				5.4		15.0			
4-Chlorotoluene	+++++ 0.8313	0.8677 0.7925	0.8376	0.8118	0.8581	Ave		0.8332				3.4		15.0			
1,3,5-Trimethylbenzene	2.9198 2.3445	2.5878 2.2003	2.5092	2.5454	2.4833	Ave		2.5129				8.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butylbenzene	3.3749 2.7076	3.0518 2.5654	2.8704	2.9734	2.9133	Ave		2.9224				8.8		15.0			
1,2,4-Trimethylbenzene	2.8247 2.2590	2.5525 2.1288	2.3710	2.4509	2.4385	Ave		2.4322				9.1		15.0			
sec-Butylbenzene	0.8623 0.7346	0.8091 0.6988	0.7767	0.8156	0.7977	Ave		0.7850				6.9		15.0			
1,3-Dichlorobenzene	1.6302 1.4288	1.4330 1.3264	1.4569	1.5124	1.4862	Ave		1.4677				6.3		15.0			
p-Isopropyltoluene	3.9401 3.0323	3.4629 2.8756	3.1926	3.3868	3.3052	Ave		3.3136				10.4		15.0			
1,4-Dichlorobenzene	1.7822 1.6996	1.7917 1.6520	1.8185	1.7889	1.7859	Ave		1.7598				3.4		15.0			
1,2-Dichlorobenzene	1.3316 1.2769	1.2283 1.2275	1.3307	1.2942	1.2935	Ave		1.2832				3.3		15.0			
n-Butylbenzene	3.4382 2.5582	3.0180 2.4025	2.8223	2.9123	2.7828	Ave		2.8478				11.7		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1052	0.0729 0.1045	0.0990	0.1095	0.0981	Ave		0.0982				13.3		15.0			
1,2,4-Trichlorobenzene	+++++ 0.8632	0.9118 0.8014	0.9381	0.9531	0.8981	Ave		0.8943				6.2		15.0			
Hexachlorobutadiene	0.9875 0.7966	0.9405 0.7397	0.8869	0.8979	0.8261	Ave		0.8679				9.9		15.0			
Naphthalene	+++++ 0.8401	0.8459 0.8045	0.9054	0.9100	0.8383	Ave		0.8574				4.9		15.0			
1,2,3-Trichlorobenzene	+++++ 0.6482	0.6856 0.6042	0.7615	0.7201	0.6780	Ave		0.6829				8.0		15.0			
Dibromofluoromethane (Surr)	0.5526	+++++ 0.5553	0.6837	0.5956	0.5631	Ave		0.5901				9.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2392	+++++ 0.2518	0.3039	0.2562	0.2290	Ave		0.2560				11.3		15.0			
Toluene-d8 (Surr)	3.9739	+++++ 3.8252	4.6553	4.2338	4.2196	Ave		4.1816				7.6		15.0			
4-Bromofluorobenzene (Surr)	1.2206	+++++ 1.1703	1.6062	1.3527	1.2849	Ave		1.3269				12.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-277378/9	Z7570.D
Level 2	IC 280-277378/10	Z7571.D
Level 3	IC 280-277378/11	Z7572.D
Level 4	IC 280-277378/12	Z7573.D
Level 5	IC 280-277378/13	Z7574.D
Level 6	IC 280-277378/14	Z7575.D
Level 7	IC 280-277378/15	Z7576.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	7709 890676	25581 1847006	41538	161778	297541	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloromethane	FB	Ave	+++++ 541882	17819 1155711	29530	98126	190881	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	5598 522229	17203 1084568	29350	89754	180758	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromomethane	FB	Ave	+++++ 544022	20286 1099923	34982	95577	193819	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chloroethane	FB	Ave	3887 340212	12373 687122	22092	60875	122778	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	16862 1340833	49854 2693540	90320	237948	471397	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	14159 1151415	43732 2355922	75673	211012	403249	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl ether	FB	Ave	2211 235569	7198 464773	16778	41975	84038	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acrolein	FB	Ave	+++++ 129425	+++++ 263232	10834	25315	42858	+++++ 300	+++++ 600	20.0	50.0	100.0
1,1-Dichloroethene	FB	Ave	7196 540922	20263 1082932	32796	97296	186610	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acetone	FB	Ave	+++++ 102876	+++++ 221062	5952	19807	36147	+++++ 120	+++++ 240	8.00	20.0	40.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	9213 849656	28872 1731781	53342	149448	296052	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Iodomethane	FB	Ave	16041 1496329	48920 3024646	96279	252788	517133	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon disulfide	FB	Ave	21361 1944444	63190 3904398	123871	332090	669232	0.300 30.0	1.00 60.0	2.00	5.00	10.0
3-Chloro-1-propene	FB	Ave	9022 833192	26566 1638267	56312	148067	292800	0.300 30.0	1.00 60.0	2.00	5.00	10.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

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
Methyl acetate	FB	Ave	+++++ 569432	19687 1166999	41155	102167	196230	+++++ 150	5.00 300	10.0	25.0	50.0
Methylene Chloride	FB	Ave	+++++ 456278	+++++ 894658	38072	84395	164177	+++++ 30.0	+++++ 60.0	2.00	5.00	10.0
tert-Butyl alcohol	TBA	Lin	+++++ 89496	+++++ 189201	7306	18755	41806	+++++ 300	+++++ 600	20.0	50.0	100
Acrylonitrile	FB	Ave	3774 365573	12393 721582	27995	66010	126311	3.00 300	10.0 600	20.0	50.0	100
trans-1,2-Dichloroethene	FB	Ave	7518 575682	20928 1115432	41434	103443	206494	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methyl tert-butyl ether	FB	Ave	10628 816390	28634 1577984	62146	151850	288131	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexane	CBZ	Ave	11972 810362	32919 1558387	57755	147748	281865	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	12384 1064910	36549 2020412	71215	191302	378189	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl acetate	FB	Ave	+++++ 1040408	38138 2018425	73404	190774	332133	+++++ 60.0	2.00 120	4.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	+++++ 235659	9653 466192	18255	45287	82420	+++++ 120	4.00 240	8.00	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	7161 580355	20335 1119973	39997	103578	208123	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2,2-Dichloropropane	FB	Lin1	+++++ 930970	45174 1738421	93631	188189	351619	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butyl Alcohol	TBA	Ave	+++++ 349073	12273 728725	24776	65102	116342	+++++ 900	30.0 1800	60.0	150	300
Bromochloromethane	FB	Ave	2735 302441	9308 596946	20151	51580	103892	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloroform	FB	Ave	11993 1057680	35742 2034517	73220	185180	370987	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 75392	3306 154878	6737	13905	26224	+++++ 60.0	2.00 120	4.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	12491 1019505	37006 2044728	69711	181377	359060	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	12082 926425	34102 1851103	62176	167669	321904	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	9914 852975	29910 1738117	57317	151758	297723	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Ave	11425 1051212	36532 2135062	68190	183217	357743	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Isobutyl alcohol	TBA	Ave	+++++ 97857	+++++ 216857	5794	19117	32142	+++++ 750	+++++ 1500	50.0	125	250

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	4317 423318	13698 840077	30420	75267	148223	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Benzene	FB	Ave	19368 1659761	55268 3295430	112077	289210	576941	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	8876 705908	25255 1348734	48225	124898	251576	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Pentanone	FB	Ave	+++++ 524737	21064 1063528	38172	92534	176774	+++++ 120	4.00 240	8.00	20.0	40.0
1,2-Dichloropropane	FB	Ave	6322 590069	18273 1119022	39697	102231	205319	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methylcyclohexane	FB	Ave	9265 787171	32310 1522306	57060	138374	273737	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dibromomethane	FB	Ave	3377 323359	10692 628511	23266	57201	111513	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromodichloromethane	FB	Ave	9755 928115	30143 1785739	63600	155573	325173	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 184483	5902 358143	13325	31796	66069	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBZ	Ave	7933 753925	24796 1454781	52250	131710	265882	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	8621 746019	23945 1473574	54452	135962	258950	1.20 120	4.00 240	8.00	20.0	40.0
Toluene	FB	Ave	20610 1763105	59869 3365323	121599	308919	627507	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	FB	Ave	5614 510270	16439 981386	36024	89947	180932	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl methacrylate	CBZ	Ave	+++++ 401380	15393 778778	31137	73572	140784	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloroethane	FB	Ave	3307 323489	10364 622005	23441	57787	112136	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichloropropane	CBZ	Ave	5567 555578	17195 1075440	38421	95870	190040	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrachloroethene	CBZ	Ave	7066 668423	22465 1303187	43799	115570	237372	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Hexanone	CBZ	Ave	+++++ 482826	18756 948098	36995	85284	160598	+++++ 120	4.00 240	8.00	20.0	40.0
Chlorodibromomethane	CBZ	Ave	6664 683003	19815 1366054	45052	110270	232979	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromoethane	CBZ	Ave	4247 445382	13455 874401	30316	76908	151556	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chlorobenzene	CBZ	Ave	13764 1308263	42476 2478055	87867	225081	461840	0.300 30.0	1.00 60.0	2.00	5.00	10.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1-Chlorohexane	CBZ	Ave	11280 785415	30065 1477919	55880	142059	281001	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	6521 668217	19896 1292047	43837	112669	231738	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylbenzene	CBZ	Ave	7359 611541	21968 1175882	42609	107737	224900	0.300 30.0	1.00 60.0	2.00	5.00	10.0
m-Xylene & p-Xylene	CBZ	Ave	9302 842517	28612 1552082	58710	144634	291369	0.300 30.0	1.00 60.0	2.00	5.00	10.0
o-Xylene	CBZ	Ave	7863 719628	24390 1351146	50672	129917	259365	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Styrene	CBZ	Ave	11686 1173599	37585 2225830	80359	205608	418378	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromoform	CBZ	Ave	+++++ 357480	9656 744798	22771	60072	122259	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Isopropylbenzene	DCB	Ave	26292 2132432	79344 4111449	156342	398151	801280	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexanone	CBZ	Lin1	1993 190128	11171 405168	19734	36570	68866	12.0 1200	40.0 2400	80.0	200	400
Bromobenzene	DCB	Ave	5975 606678	19615 1195996	41804	108015	220808	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCB	Ave	4859 396358	13189 781606	29572	73781	140712	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCB	Ave	+++++ 95965	2746 193726	7018	17413	34376	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 76984	1766 152726	5321	13743	28676	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
N-Propylbenzene	DCB	Ave	6695 570298	21507 1103334	42948	107549	219095	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chlorotoluene	DCB	Ave	+++++ 482729	17668 958270	37094	93257	189875	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
4-Chlorotoluene	DCB	Ave	+++++ 579357	20620 1120394	41338	97639	213358	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCB	Ave	20798 1633843	61493 3110830	123839	306142	617458	0.300 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butylbenzene	DCB	Ave	24040 1886898	72520 3627084	141668	357618	724376	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCB	Ave	20121 1574288	60654 3009752	117017	294769	606325	0.300 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butylbenzene	DCB	Ave	6142 511917	19226 987928	38335	98091	198353	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCB	Ave	11612 995742	34053 1875299	71904	181894	369530	0.300 30.0	1.00 60.0	2.00	5.00	10.0

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

Lab Name: TestAmerica Denver Job No.: 280-68855-1 Analy Batch No.: 277378

SDG No.:

Instrument ID: VMS_Z GC Column: DB-624 (75. ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2015 08:19 Calibration End Date: 05/14/2015 10:35 Calibration ID: 22305

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
p-Isopropyltoluene	DCB	Ave	28066 2113180	82287 4065641	157566	407342	821824	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCB	Ave	12695 1184410	42576 2335706	89749	215153	444050	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCB	Ave	9485 889863	29188 1735474	65674	155661	321636	0.300 30.0	1.00 60.0	2.00	5.00	10.0
n-Butylbenzene	DCB	Ave	24491 1782761	71715 3396741	139293	350270	691937	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	+++++ 73310	1733 147715	4887	13167	24385	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trichlorobenzene	DCB	Ave	+++++ 601532	21668 1133094	46297	114634	223302	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Hexachlorobutadiene	DCB	Ave	7034 555161	22349 1045839	43774	107998	205417	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Naphthalene	DCB	Ave	+++++ 585486	20101 1137483	44685	109449	208430	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCB	Ave	+++++ 451729	16291 854203	37582	86604	168572	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	647480	+++++ 953464	80799	173606	337011	20.0	+++++ 30.0	2.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	280255	+++++ 432312	35910	74677	137087	20.0	+++++ 30.0	2.00	5.00	10.0
Toluene-d8 (Surr)	CBZ	Ave	1128395	+++++ 1611831	136773	299508	595203	20.0	+++++ 30.0	2.00	5.00	10.0
4-Bromofluorobenzene (Surr)	DCB	Ave	567072	+++++ 827270	79272	162692	319481	20.0	+++++ 30.0	2.00	5.00	10.0

Curve Type Legend:

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

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7570.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-May-2015 08:19:30 ALS Bottle#: 2 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:00 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 08:47:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.486	3.489	-0.003	92	132642	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.377	-0.003	98	722255	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.020	11.023	-0.003	87	188632	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.127	15.112	0.015	96	296797	12.5	12.5	
27 Dichlorodifluoromethane	85	1.903	1.923	-0.020	95	7709	0.3000	0.2806	
30 Chloromethane	50		1.992				ND	ND	
31 Butadiene	54	2.059	2.097	-0.038	86	3928	NC	NC	
32 Vinyl chloride	62	2.094	2.114	-0.020	95	5598	0.3000	0.3249	
35 Bromomethane	94	2.338	2.340	-0.002	93	8275	0.3000	0.4469	
36 Chloroethane	64	2.372	2.393	-0.021	91	3887	0.3000	0.3294	
37 Dichlorofluoromethane	67	2.546	2.549	-0.003	96	16862	0.3000	0.3561	
38 Trichlorofluoromethane	101	2.616	2.601	0.015	96	14159	0.3000	0.3472	
40 Ethyl ether	59	2.807	2.810	-0.003	86	2211	0.3000	0.2832	
44 Acrolein	56		2.915				ND	ND	
48 Acetone	43		3.036				ND	ND	
45 1,1-Dichloroethene	96	3.034	3.036	-0.002	94	7196	0.3000	0.3780	
46 1,1,2-Trichloro-1,2,2-trif	151	3.086	3.089	-0.003	95	9213	0.3000	0.3217	
49 Iodomethane	142	3.173	3.193	-0.020	98	16041	0.3000	0.3219	
50 Carbon disulfide	76	3.260	3.280	-0.020	98	21361	0.3000	0.3294	
52 3-Chloro-1-propene	41	3.329	3.350	-0.021	83	9022	0.3000	0.3217	
51 Methyl acetate	43		3.350				ND	ND	
54 Methylene Chloride	84	3.451	3.471	-0.020	96	11714	0.3000	0.7209	
55 2-Methyl-2-propanol	59		3.558				ND	ND	
58 Acrylonitrile	53	3.677	3.680	-0.003	94	3774	3.00	3.01	
57 trans-1,2-Dichloroethene	96	3.764	3.767	-0.003	97	7518	0.3000	0.3654	
56 Methyl tert-butyl ether	73	3.782	3.785	-0.003	88	10628	0.3000	0.3624	
59 Hexane	57	4.025	4.063	-0.038	92	11972	0.3000	0.3768	
62 1,1-Dichloroethane	63	4.182	4.202	-0.020	91	12384	0.3000	0.3393	
61 Vinyl acetate	43		4.220				ND	ND	
67 2-Butanone (MEK)	43		4.881				ND	ND	
65 cis-1,2-Dichloroethene	96	4.878	4.881	-0.003	80	7161	0.3000	0.3531	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77		4.898				ND	ND	
70 sec-Butyl Alcohol	45		5.107				ND	ND	
71 Chlorobromomethane	128	5.156	5.177	-0.021	83	2735	0.3000	0.2800	
72 Tetrahydrofuran	42		5.264				ND	ND	
74 Chloroform	83	5.261	5.264	-0.003	90	11993	0.3000	0.3325	
75 1,1,1-Trichloroethane	97	5.539	5.542	-0.003	95	12491	0.3000	0.3488	
76 Cyclohexane	56	5.661	5.647	0.015	88	12082	0.3000	0.3675	
78 1,1-Dichloropropene	75	5.748	5.751	-0.003	94	9914	0.3000	0.3359	
77 Carbon tetrachloride	117	5.800	5.786	0.014	94	11425	0.3000	0.3216	
80 Isobutyl alcohol	41		5.873				ND	ND	
82 1,2-Dichloroethane	62	5.992	5.995	-0.003	1	4317	0.3000	0.3021	a
81 Benzene	78	6.009	6.012	-0.003	96	19368	0.3000	0.3417	
84 n-Heptane	43	6.409	6.395	0.014	37	11677	0.3000	0.3522	
85 Trichloroethene	95	6.897	6.899	-0.002	94	8876	0.3000	0.3592	
89 2-Pentanone	43		7.143				ND	ND	
90 1,2-Dichloropropane	63	7.192	7.195	-0.003	72	6322	0.3000	0.3236	
87 Methylcyclohexane	55	7.210	7.213	-0.003	89	9265	0.3000	0.3310	
92 Dibromomethane	93	7.366	7.369	-0.003	95	3377	0.3000	0.3092	
94 Dichlorobromomethane	83	7.610	7.595	0.015	94	9755	0.3000	0.3161	
96 2-Chloroethyl vinyl ether	63		8.048				ND	ND	
97 cis-1,3-Dichloropropene	75	8.289	8.274	0.015	92	7933	0.3000	0.2944	
98 4-Methyl-2-pentanone (MIBK	43	8.532	8.518	0.014	93	8621	1.20	1.34	
99 Toluene	91	8.811	8.796	0.015	97	20610	0.3000	0.3407	
100 trans-1,3-Dichloropropene	75	9.124	9.127	-0.003	81	5614	0.3000	0.3246	
101 Ethyl methacrylate	69	9.315	9.318	-0.003	81	7422	0.3000	0.4890	
102 1,1,2-Trichloroethane	97	9.402	9.405	-0.003	83	3307	0.3000	0.3043	
104 1,3-Dichloropropane	76	9.681	9.666	0.015	68	5567	0.3000	0.2864	
103 Tetrachloroethene	164	9.698	9.701	-0.003	91	7066	0.3000	0.2967	
105 2-Hexanone	43		9.840				ND	ND	
107 Chlorodibromomethane	129	10.046	10.049	-0.003	83	6664	0.3000	0.2858	
109 Ethylene Dibromide	107	10.220	10.223	-0.003	92	4247	0.3000	0.2755	
111 Chlorobenzene	112	11.055	11.058	-0.003	49	13764	0.3000	0.2976	
110 1-Chlorohexane	91	11.073	11.058	0.015	48	11280	0.3000	0.3716	
113 1,1,1,2-Tetrachloroethane	131	11.212	11.215	-0.003	71	6521	0.3000	0.2839	
112 Ethylbenzene	106	11.282	11.267	0.015	98	7359	0.3000	0.3235	
114 m-Xylene & p-Xylene	106	11.490	11.476	0.014	96	9302	0.3000	0.3088	
115 o-Xylene	106	12.169	12.154	0.015	95	7863	0.3000	0.3008	
116 Styrene	104	12.169	12.172	-0.003	88	11686	0.3000	0.2824	
117 Bromoform	173		12.450				ND	ND	
118 Isopropylbenzene	105	12.813	12.816	-0.003	96	26292	0.3000	0.3415	
119 Cyclohexanone	55	12.952	12.937	0.015	50	1993	12.0	2.90	
121 Bromobenzene	156	13.300	13.303	-0.003	93	5975	0.3000	0.2929	
122 1,1,2,2-Tetrachloroethane	83	13.317	13.320	-0.003	62	4859	0.3000	0.3462	
124 1,2,3-Trichloropropane	110		13.372				ND	ND	
125 trans-1,4-Dichloro-2-buten	53		13.425				ND	ND	
123 N-Propylbenzene	120	13.544	13.546	-0.002	98	6695	0.3000	0.3241	
126 2-Chlorotoluene	126		13.668				ND	ND	
128 4-Chlorotoluene	126		13.860				ND	ND	
127 1,3,5-Trimethylbenzene	105	13.874	13.877	-0.003	88	20798	0.3000	0.3486	
129 tert-Butylbenzene	119	14.431	14.451	-0.020	92	24040	0.3000	0.3465	
130 1,2,4-Trimethylbenzene	105	14.535	14.538	-0.003	93	20121	0.3000	0.3484	
131 sec-Butylbenzene	134	14.849	14.851	-0.002	94	6142	0.3000	0.3295	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
132 1,3-Dichlorobenzene	146	15.005	15.008	-0.003	88	11612	0.3000	0.3332	
133 4-Isopropyltoluene	119	15.127	15.130	-0.003	49	28066	0.3000	0.3567	
134 1,4-Dichlorobenzene	146	15.162	15.165	-0.003	38	12695	0.3000	0.3038	
138 1,2-Dichlorobenzene	146	15.806	15.808	-0.002	91	9485	0.3000	0.3113	
137 n-Butylbenzene	91	15.840	15.843	-0.003	97	24491	0.3000	0.3622	
139 1,2-Dibromo-3-Chloropropan	157		16.940				ND	ND	
141 1,2,4-Trichlorobenzene	180	17.876	17.862	0.014	90	7280	0.3000	0.3429	
142 Hexachlorobutadiene	225	18.068	18.071	-0.003	93	7034	0.3000	0.3413	
143 Naphthalene	128		18.088				ND	ND	
144 1,2,3-Trichlorobenzene	180	18.346	18.349	-0.003	93	5635	0.3000	0.3475	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		1.20	0.9343	
S 150 Xylenes, Total (URS)	1				0		0.6000	0.6096	
S 151 Total BTEX	1				0			1.62	
S 148 1,3-Dichloropropene, Total	1				0		0.6000	0.6190	
S 145 1,2-Dichloroethene, Total	1				0		0.6000	0.7184	
S 146 Xylenes, Total	106				0		0.6000	0.6096	
S 147 1,2-Dichloroethene, Total	96				0		0.6000	0.7184	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

a - User Assigned ID

Reagents:

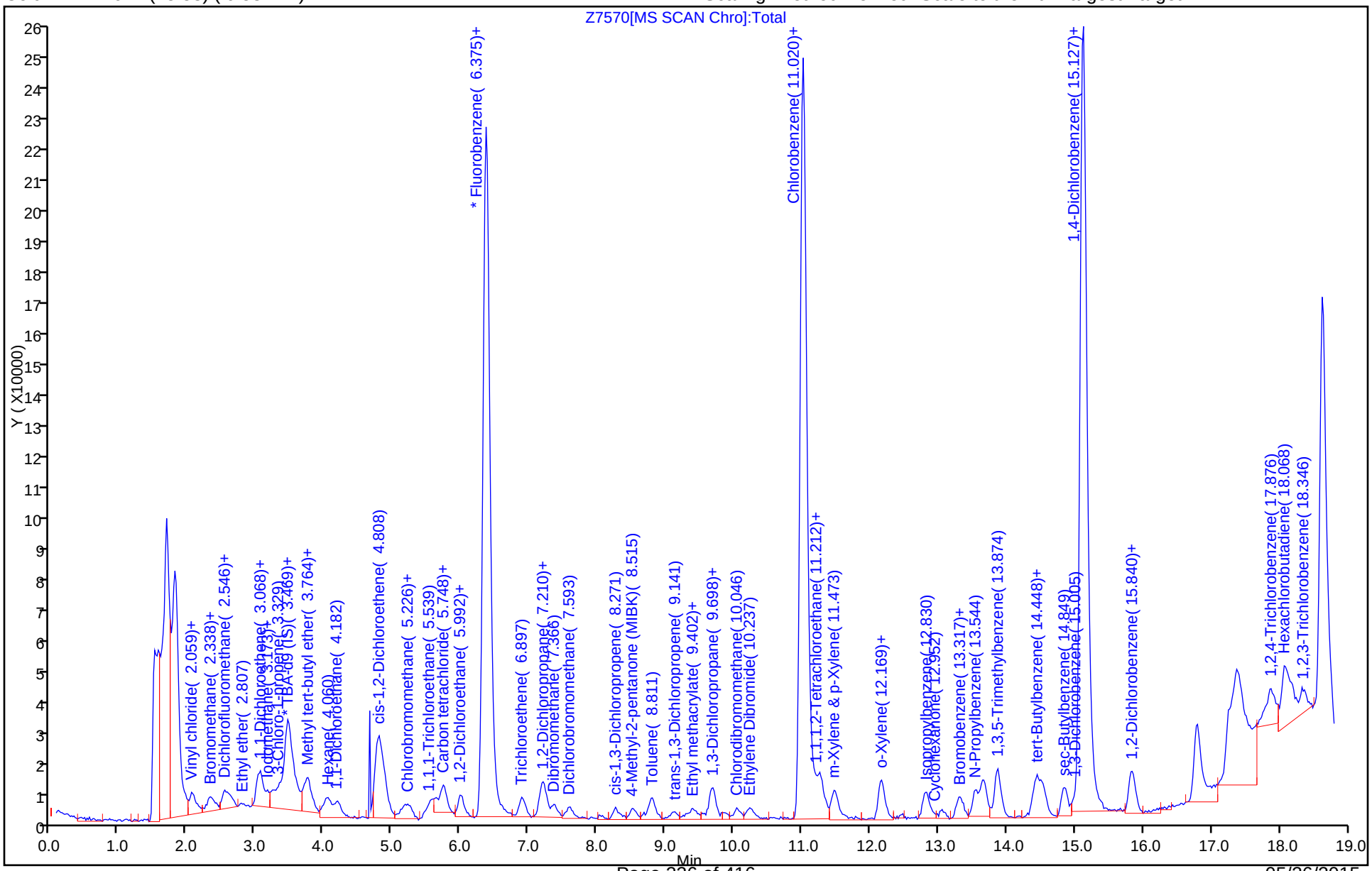
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	0.15	Units: uL
MV-Gas/Ket A_00032	Amount Added:	0.15	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.15	Units: uL

Report Date: 14-May-2015 14:33:00 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7570.D				
Injection Date:	14-May-2015 08:19:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

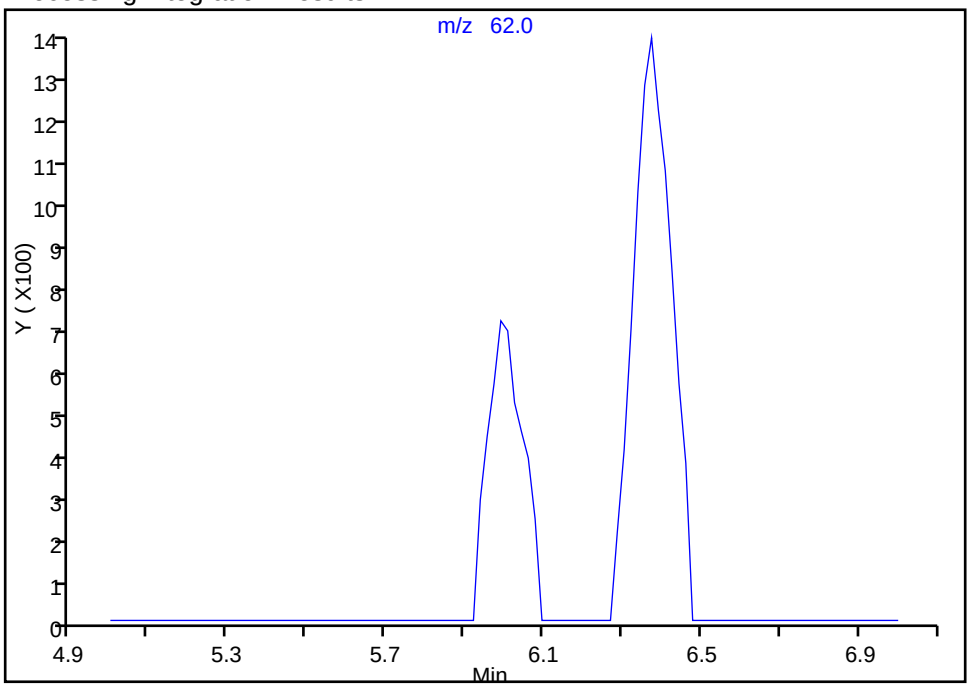
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7570.D				
Injection Date:	14-May-2015 08:19:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	2	Worklist Smp#:	9
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

82 1,2-Dichloroethane, CAS: 107-06-2

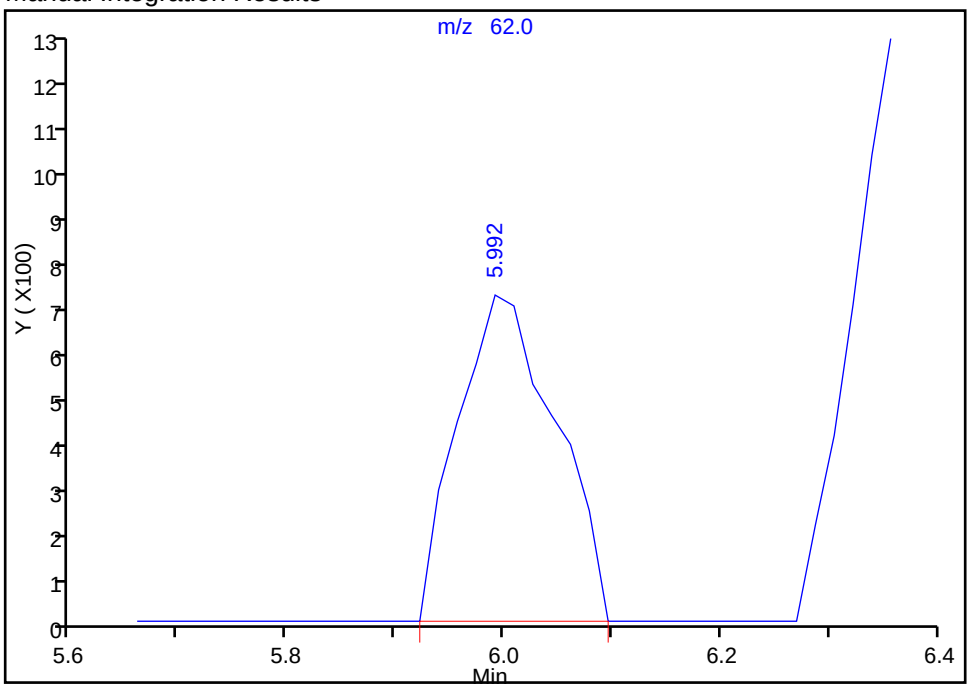
Not Detected
Expected RT: 5.99

Processing Integration Results



RT: 5.99
Area: 4317
Amount: 0.302128
Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 14-May-2015 12:41:39
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7571.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-May-2015 08:42:30 ALS Bottle#: 3 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:02 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 09:11:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.488	3.489	-0.001	76	125800	250.0	250.0	
* 2 Fluorobenzene	96	6.377	6.377	0.000	97	734158	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.023	11.023	0.000	86	179826	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.112	15.112	0.000	96	297034	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.472	5.473	0.000	46	45483	1.00	1.31	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.907	5.908	-0.001	75	19720	1.00	1.31	
$ 10 Toluene-d8 (Surr)	98	8.691	8.692	-0.001	78	80061	1.00	1.33	
$ 11 4-Bromofluorobenzene (Surr	95	13.058	13.059	-0.001	75	45168	1.00	1.43	
27 Dichlorodifluoromethane	85	1.905	1.923	-0.018	74	25581	1.00	0.9160	
30 Chloromethane	50	1.974	1.992	-0.018	68	17819	1.00	0.9820	
31 Butadiene	54	2.079	2.097	-0.018	68	11491	NC	NC	
32 Vinyl chloride	62	2.096	2.114	-0.018	54	17203	1.00	0.9824	
35 Bromomethane	94	2.340	2.340	0.000	72	20286	1.00	1.08	
36 Chloroethane	64	2.392	2.393	-0.001	55	12373	1.00	1.03	
37 Dichlorofluoromethane	67	2.548	2.549	-0.001	94	49854	1.00	1.04	
38 Trichlorofluoromethane	101	2.601	2.601	0.000	88	43732	1.00	1.05	
40 Ethyl ether	59	2.792	2.810	-0.018	83	7198	1.00	0.9070	a
44 Acrolein	56	2.914	2.915	-0.001	48	2869	10.0	6.10	
48 Acetone	43		3.036				ND	ND	
45 1,1-Dichloroethene	96	3.036	3.036	0.000	89	20263	1.00	1.05	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.089	-0.001	84	28872	1.00	0.99	
49 Iodomethane	142	3.192	3.193	-0.001	97	48920	1.00	0.9659	
50 Carbon disulfide	76	3.279	3.280	-0.001	97	63190	1.00	0.9585	
52 3-Chloro-1-propene	41	3.349	3.350	-0.001	67	26566	1.00	0.9319	
51 Methyl acetate	43	3.349	3.350	-0.001	68	19687	5.00	4.96	
54 Methylene Chloride	84	3.471	3.471	0.000	55	21464	1.00	1.30	
55 2-Methyl-2-propanol	59		3.558				ND	ND	
58 Acrylonitrile	53	3.680	3.680	0.000	82	12393	10.0	9.71	
57 trans-1,2-Dichloroethene	96	3.767	3.767	-0.001	85	20928	1.00	1.00	
56 Methyl tert-butyl ether	73	3.784	3.785	-0.001	1	28634	1.00	0.9605	
59 Hexane	57	4.062	4.063	-0.001	81	32919	1.00	1.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.202	4.202	0.000	58	36549	1.00	0.9851	
61 Vinyl acetate	43	4.219	4.220	-0.001	50	38138	2.00	2.13	
67 2-Butanone (MEK)	43	4.845	4.881	-0.036	27	9653	4.00	4.47	
65 cis-1,2-Dichloroethene	96	4.880	4.881	-0.001	80	20335	1.00	0.9863	
66 2,2-Dichloropropane	77	4.898	4.898	0.000	65	45174	1.00	0.6994	M
70 sec-Butyl Alcohol	45	5.106	5.107	-0.001	42	12273	30.0	30.9	
71 Chlorobromomethane	128	5.159	5.177	-0.018	72	9308	1.00	0.9376	
72 Tetrahydrofuran	42	5.246	5.264	-0.018	1	3306	2.00	2.31	a
74 Chloroform	83	5.246	5.264	-0.018	79	35742	1.00	0.9749	
75 1,1,1-Trichloroethane	97	5.541	5.542	-0.001	43	37006	1.00	1.02	
76 Cyclohexane	56	5.646	5.647	0.000	78	34102	1.00	1.02	
78 1,1-Dichloropropene	75	5.733	5.751	-0.018	75	29910	1.00	1.00	
77 Carbon tetrachloride	117	5.785	5.786	-0.001	65	36532	1.00	1.01	
80 Isobutyl alcohol	41		5.873				ND	ND	
82 1,2-Dichloroethane	62	5.994	5.995	-0.001	23	13698	1.00	0.9431	a
81 Benzene	78	6.011	6.012	-0.001	92	55268	1.00	0.9593	
84 n-Heptane	43	6.394	6.395	-0.001	37	34516	1.00	1.02	
85 Trichloroethene	95	6.899	6.899	0.000	79	25255	1.00	1.01	
89 2-Pentanone	43	7.142	7.143	-0.001	67	21064	4.00	4.52	
90 1,2-Dichloropropane	63	7.194	7.195	-0.001	61	18273	1.00	0.9200	
87 Methylcyclohexane	55	7.212	7.213	-0.001	85	32310	1.00	1.14	
92 Dibromomethane	93	7.368	7.369	-0.001	80	10692	1.00	0.9630	
94 Dichlorobromomethane	83	7.595	7.595	0.000	75	30143	1.00	0.9608	
96 2-Chloroethyl vinyl ether	63	8.047	8.048	-0.001	24	5902	1.00	0.9392	
97 cis-1,3-Dichloropropene	75	8.256	8.274	-0.018	57	24796	1.00	0.9654	
98 4-Methyl-2-pentanone (MIBK	43	8.517	8.518	-0.001	57	23945	4.00	3.66	
99 Toluene	91	8.795	8.796	-0.001	85	59869	1.00	0.9736	
100 trans-1,3-Dichloropropene	75	9.126	9.127	-0.001	56	16439	1.00	0.9349	
101 Ethyl methacrylate	69	9.335	9.318	0.017	56	15393	1.00	1.06	
102 1,1,2-Trichloroethane	97	9.404	9.405	-0.001	33	10364	1.00	0.9383	
104 1,3-Dichloropropane	76	9.683	9.666	0.017	44	17195	1.00	0.9280	
103 Tetrachloroethene	164	9.700	9.701	-0.001	91	22465	1.00	0.9897	
105 2-Hexanone	43	9.857	9.840	0.017	63	18756	4.00	4.37	
107 Chlorodibromomethane	129	10.048	10.049	-0.001	52	19815	1.00	0.8913	
109 Ethylene Dibromide	107	10.240	10.223	0.017	48	13455	1.00	0.9156	
111 Chlorobenzene	112	11.075	11.058	0.017	47	42476	1.00	0.9635	
110 1-Chlorohexane	91	11.057	11.058	-0.001	37	30065	1.00	1.04	
113 1,1,1,2-Tetrachloroethane	131	11.214	11.215	-0.001	41	19896	1.00	0.9088	
112 Ethylbenzene	106	11.266	11.267	-0.001	83	21968	1.00	1.01	
114 m-Xylene & p-Xylene	106	11.475	11.476	-0.001	89	28612	1.00	1.00	
115 o-Xylene	106	12.154	12.154	0.000	84	24390	1.00	0.9788	
116 Styrene	104	12.171	12.172	-0.001	79	37585	1.00	0.9526	
117 Bromoform	173	12.467	12.450	0.017	56	9656	1.00	0.8244	
118 Isopropylbenzene	105	12.815	12.816	-0.001	73	79344	1.00	1.03	
119 Cyclohexanone	55	12.937	12.937	0.000	49	11171	40.0	57.3	
121 Bromobenzene	156	13.302	13.303	-0.001	85	19615	1.00	0.9608	
122 1,1,2,2-Tetrachloroethane	83	13.319	13.320	-0.001	5	13189	1.00	0.9391	
124 1,2,3-Trichloropropane	110	13.372	13.372	0.000	21	2746	1.00	0.8502	
125 trans-1,4-Dichloro-2-buten	53	13.406	13.425	-0.019	1	1766	1.00	0.7075	
123 N-Propylbenzene	120	13.546	13.546	0.000	86	21507	1.00	1.04	
126 2-Chlorotoluene	126	13.667	13.668	-0.001	47	17668	1.00	1.01	a
128 4-Chlorotoluene	126	13.859	13.860	-0.001	82	20620	1.00	1.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.876	13.877	-0.001	82	61493	1.00	1.03	
129 tert-Butylbenzene	119	14.451	14.451	0.000	82	72520	1.00	1.04	
130 1,2,4-Trimethylbenzene	105	14.538	14.538	0.000	84	60654	1.00	1.05	
131 sec-Butylbenzene	134	14.833	14.851	-0.018	63	19226	1.00	1.03	
132 1,3-Dichlorobenzene	146	14.990	15.008	-0.018	19	34053	1.00	0.9764	
133 4-Isopropyltoluene	119	15.129	15.130	-0.001	47	82287	1.00	1.05	
134 1,4-Dichlorobenzene	146	15.164	15.165	-0.001	41	42576	1.00	1.02	
138 1,2-Dichlorobenzene	146	15.808	15.808	0.000	67	29188	1.00	0.9572	
137 n-Butylbenzene	91	15.843	15.843	0.000	88	71715	1.00	1.06	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.940	-0.001	7	1733	1.00	0.7427	
141 1,2,4-Trichlorobenzene	180	17.878	17.862	0.016	59	21668	1.00	1.02	
142 Hexachlorobutadiene	225	18.070	18.071	-0.001	79	22349	1.00	1.08	
143 Naphthalene	128	18.105	18.088	0.017	53	20101	1.00	0.9866	
144 1,2,3-Trichlorobenzene	180	18.348	18.349	-0.001	56	16291	1.00	1.00	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		4.00	3.65	
S 150 Xylenes, Total (URS)	1				0		2.00	1.98	
S 151 Total BTEX	1				0			4.92	
S 148 1,3-Dichloropropene, Total	1				0		2.00	1.90	
S 145 1,2-Dichloroethene, Total	1				0		2.00	1.99	
S 146 Xylenes, Total	106				0		2.00	1.98	
S 147 1,2-Dichloroethene, Total	96				0		2.00	1.99	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

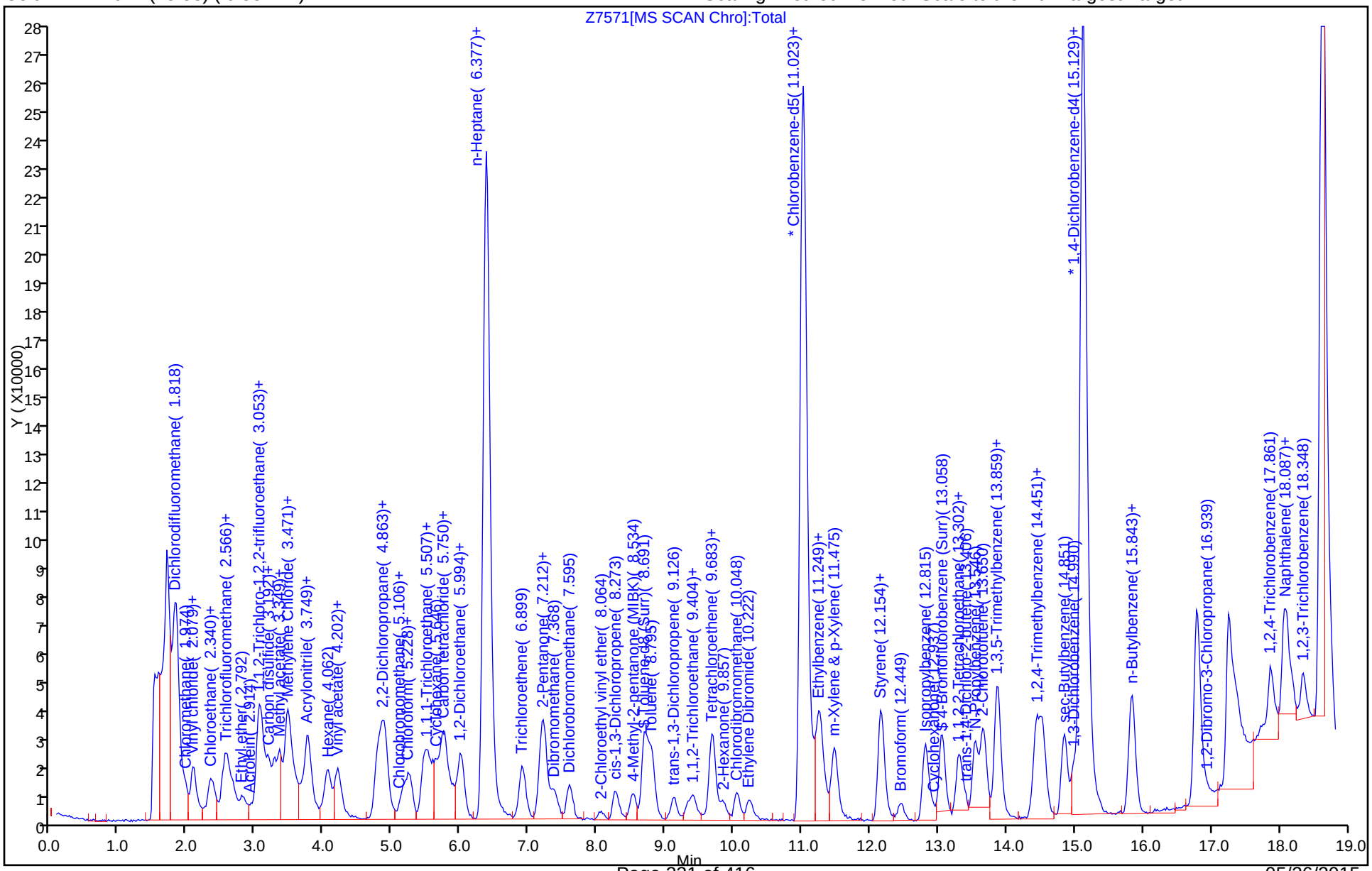
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	0.50	Units: uL
MV-Gas/Ket A_00032	Amount Added:	0.50	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.50	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.08	Units: uL

Report Date: 14-May-2015 14:33:02 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7571.D				
Injection Date:	14-May-2015 08:42:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

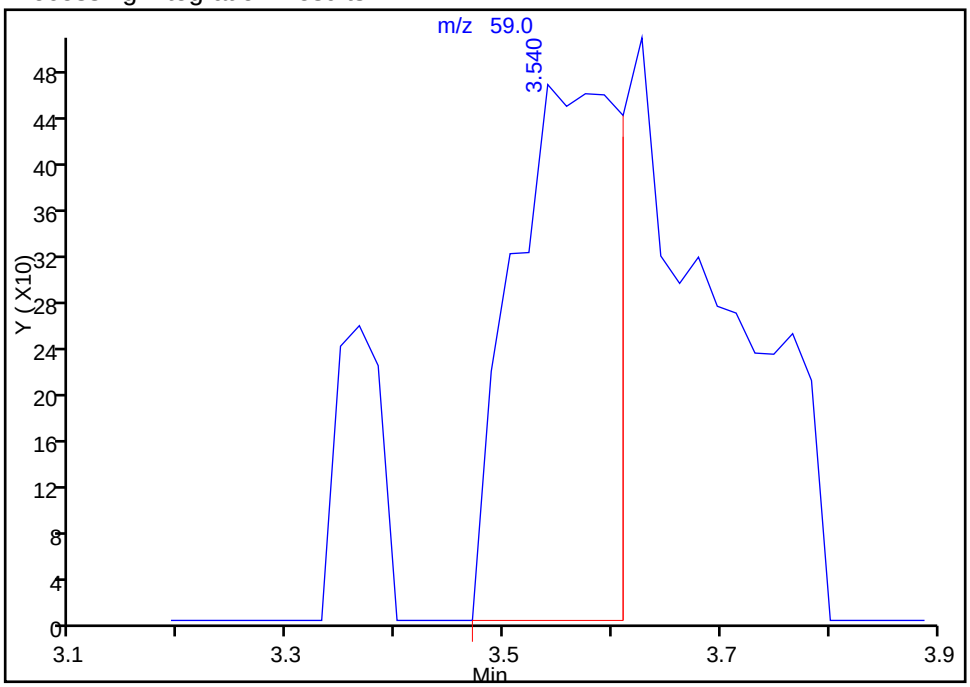
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7571.D				
Injection Date:	14-May-2015 08:42:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

40 Ethyl ether, CAS: 60-29-7

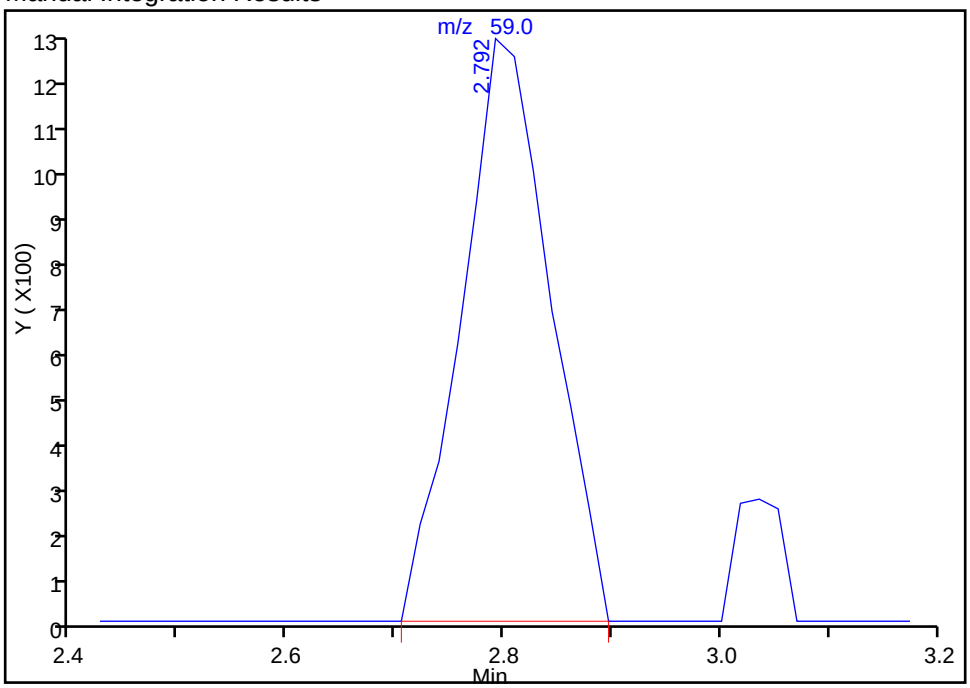
Processing Integration Results

RT: 3.54
Area: 3281
Amount: 1.090831
Amount Units: ug/l



Manual Integration Results

RT: 2.79
Area: 7198
Amount: 0.906981
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 11:38:41
Audit Action: Assigned Compound ID
Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

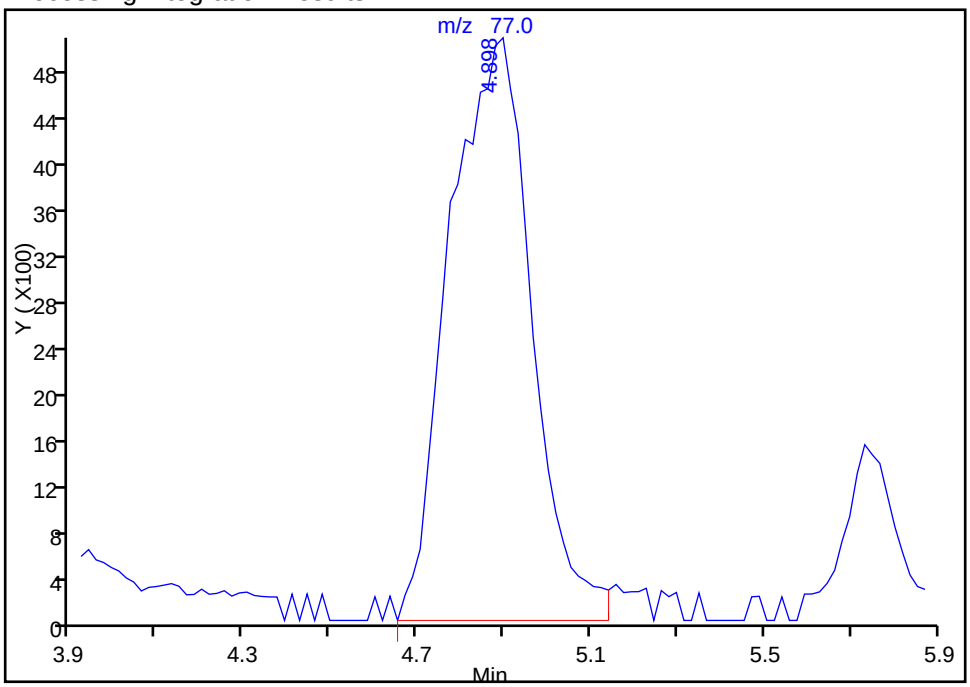
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7571.D				
Injection Date:	14-May-2015 08:42:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

66 2,2-Dichloropropane, CAS: 594-20-7

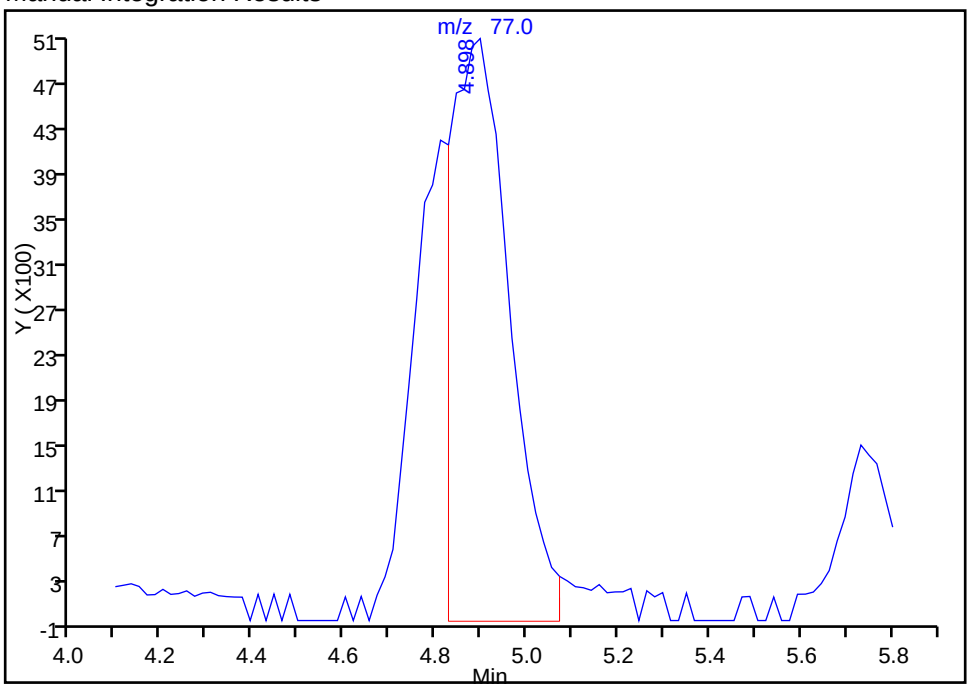
Processing Integration Results

RT: 4.90
Area: 65904
Amount: 1.002292
Amount Units: ug/l



Manual Integration Results

RT: 4.90
Area: 45174
Amount: 0.699411
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:43:20
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

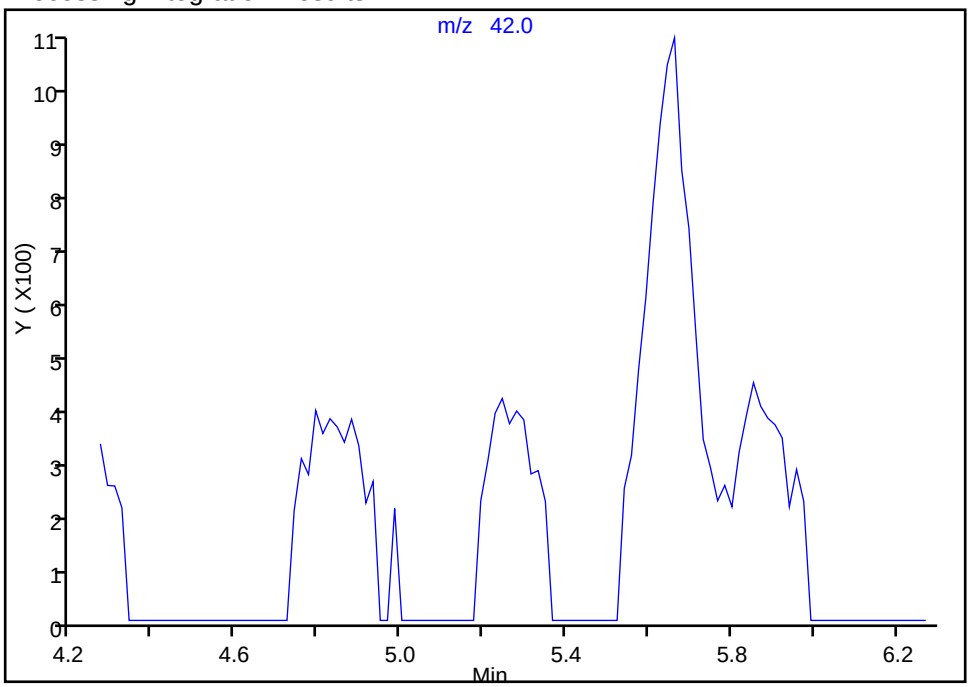
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7571.D				
Injection Date:	14-May-2015 08:42:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

72 Tetrahydrofuran, CAS: 109-99-9

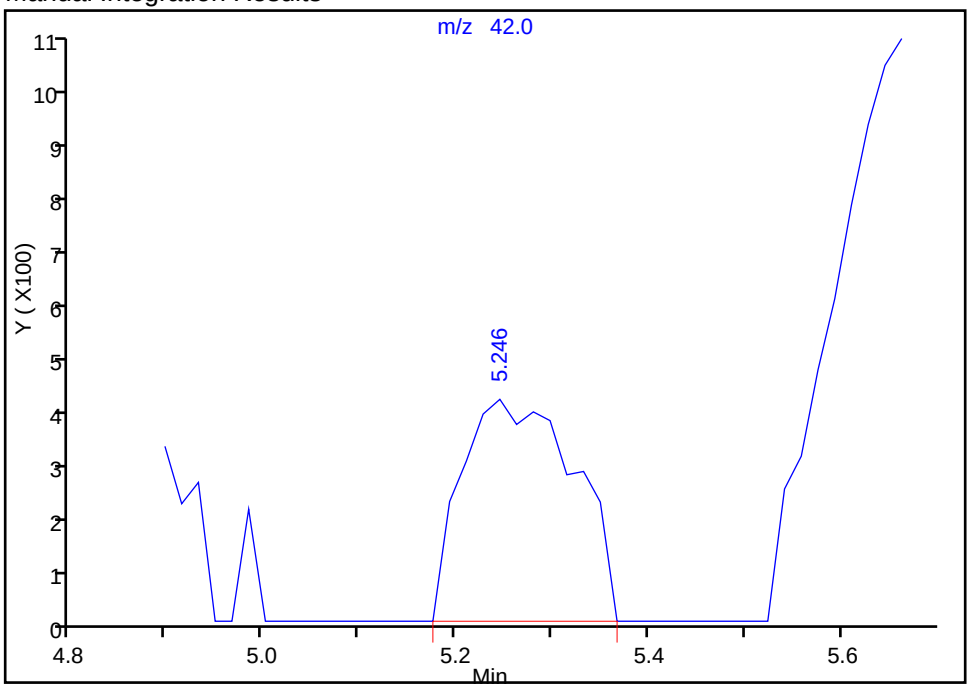
Processing Integration Results

Not Detected
Expected RT: 5.26



Manual Integration Results

RT: 5.25
Area: 3306
Amount: 2.306823
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 11:38:41
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

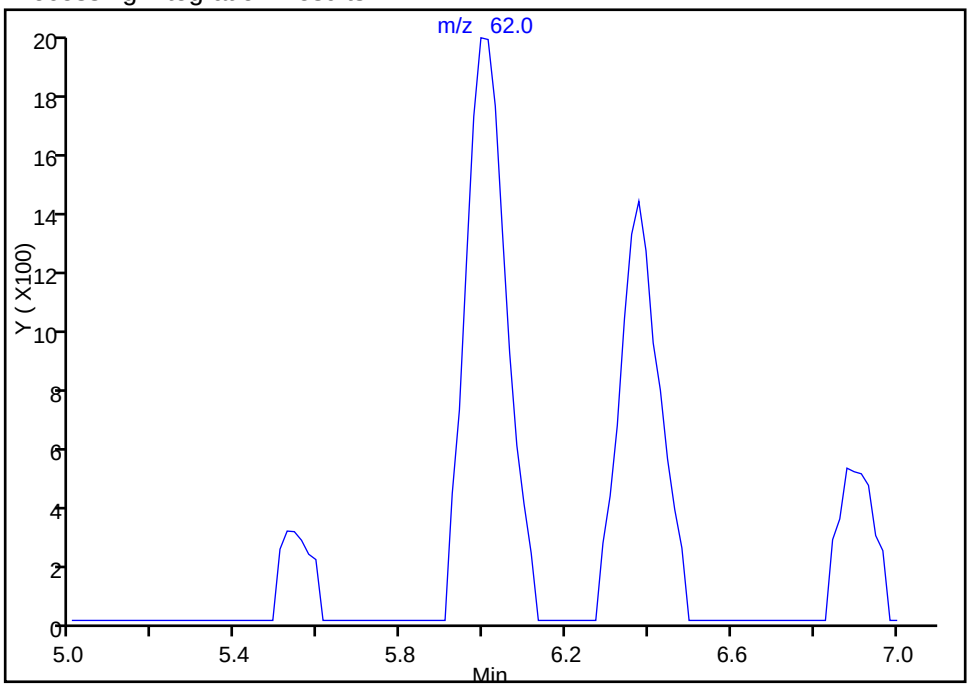
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7571.D				
Injection Date:	14-May-2015 08:42:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

82 1,2-Dichloroethane, CAS: 107-06-2

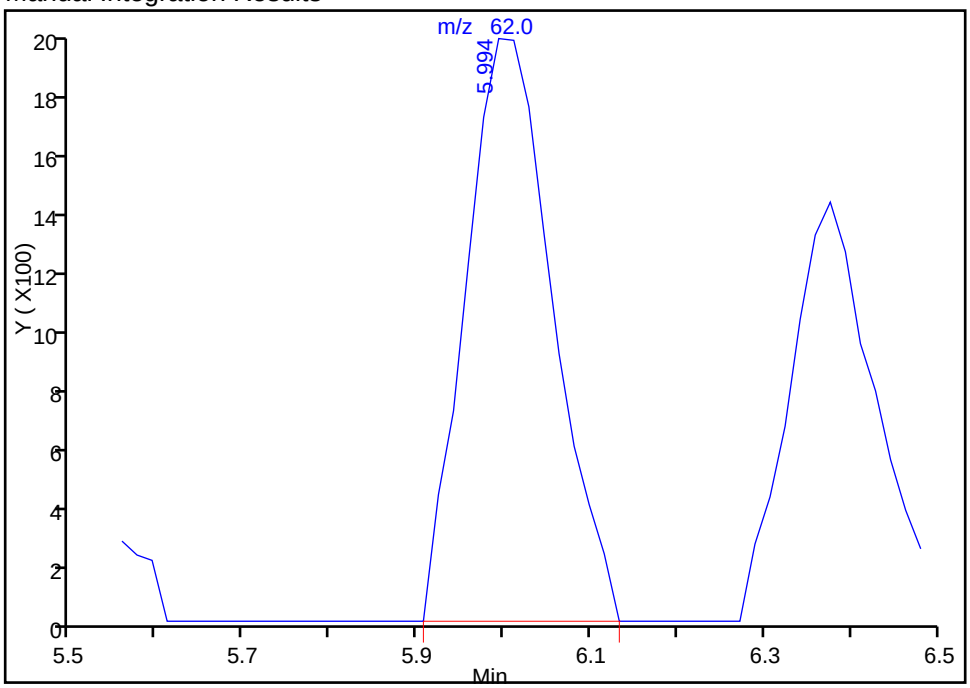
Not Detected
Expected RT: 5.99

Processing Integration Results



Manual Integration Results

RT: 5.99
Area: 13698
Amount: 0.943121
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 11:38:41
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

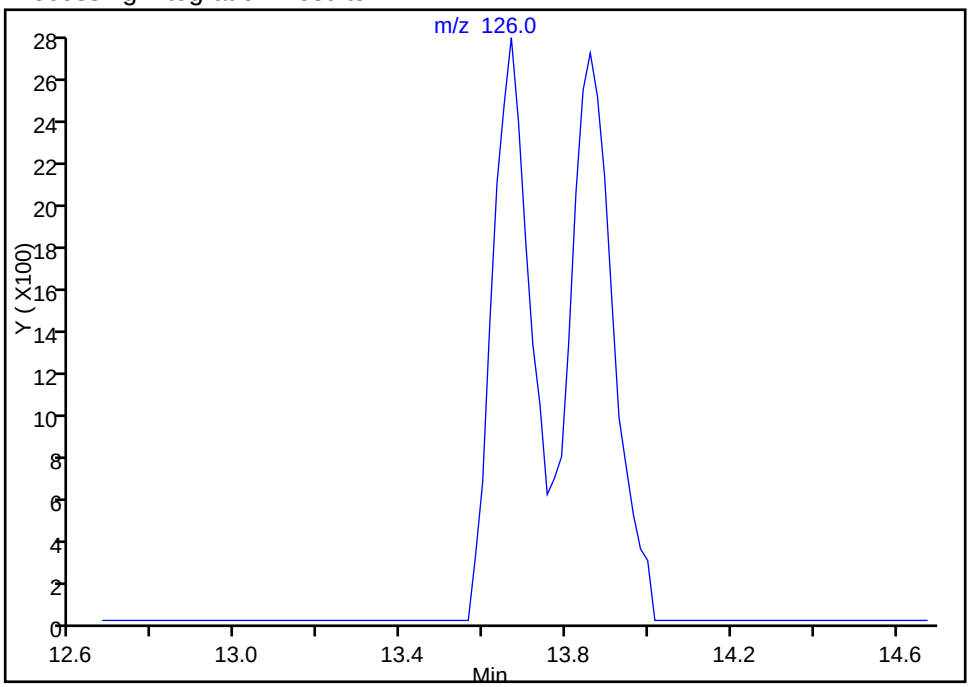
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7571.D				
Injection Date:	14-May-2015 08:42:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

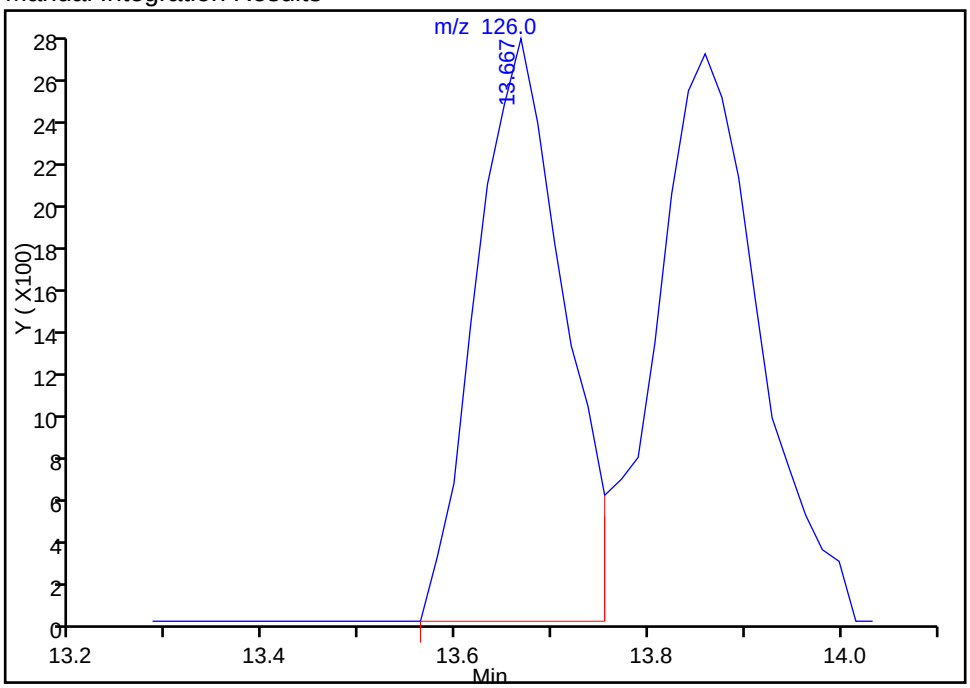
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT: 13.67
Area: 17668
Amount: 1.012830
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 11:38:41
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7572.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-May-2015 09:05:30 ALS Bottle#: 4 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:03 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 09:59:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.454	3.489	-0.035	72	141836	250.0	250.0	
* 2 Fluorobenzene	96	6.360	6.377	-0.017	97	738606	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.023	11.023	0.000	84	183625	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.112	15.112	0.000	96	308463	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.455	5.473	-0.017	51	80799	2.00	2.32	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.890	5.908	-0.018	87	35910	2.00	2.37	
$ 10 Toluene-d8 (Surr)	98	8.691	8.692	-0.001	89	136773	2.00	2.23	
$ 11 4-Bromofluorobenzene (Surr	95	13.059	13.059	0.000	80	79272	2.00	2.42	
27 Dichlorodifluoromethane	85	1.888	1.923	-0.035	76	41538	2.00	1.48	
30 Chloromethane	50	1.940	1.992	-0.052	88	29530	2.00	1.62	M
31 Butadiene	54	2.044	2.097	-0.053	68	19623	NC	NC	
32 Vinyl chloride	62	2.079	2.114	-0.035	85	29350	2.00	1.67	
35 Bromomethane	94	2.305	2.340	-0.035	78	34982	2.00	1.85	
36 Chloroethane	64	2.358	2.393	-0.035	65	22092	2.00	1.83	
37 Dichlorofluoromethane	67	2.514	2.549	-0.035	93	90320	2.00	1.87	
38 Trichlorofluoromethane	101	2.566	2.601	-0.035	94	75673	2.00	1.81	
40 Ethyl ether	59	2.758	2.810	-0.052	81	16778	2.00	2.10	
44 Acrolein	56	2.880	2.915	-0.035	52	10834	20.0	22.9	
48 Acetone	43	3.001	3.036	-0.035	13	5952	8.00	6.68	
45 1,1-Dichloroethene	96	3.001	3.036	-0.035	93	32796	2.00	1.68	
46 1,1,2-Trichloro-1,2,2-trif	151	3.071	3.089	-0.018	87	53342	2.00	1.82	
49 Iodomethane	142	3.158	3.193	-0.035	97	96279	2.00	1.89	
50 Carbon disulfide	76	3.245	3.280	-0.035	97	123871	2.00	1.87	
52 3-Chloro-1-propene	41	3.315	3.350	-0.035	78	56312	2.00	1.96	
51 Methyl acetate	43	3.315	3.350	-0.035	70	41155	10.0	10.3	
54 Methylene Chloride	84	3.436	3.471	-0.035	87	38072	2.00	2.29	
55 2-Methyl-2-propanol	59	3.541	3.558	-0.017	1	7306	20.0	3.27	M
58 Acrylonitrile	53	3.663	3.680	-0.017	84	27995	20.0	21.8	
57 trans-1,2-Dichloroethene	96	3.732	3.767	-0.035	94	41434	2.00	1.97	
56 Methyl tert-butyl ether	73	3.750	3.785	-0.035	1	62146	2.00	2.07	
59 Hexane	57	4.028	4.063	-0.035	89	57755	2.00	1.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.167	4.202	-0.035	75	71215	2.00	1.91	
61 Vinyl acetate	43	4.202	4.220	-0.018	86	73404	4.00	4.07	
67 2-Butanone (MEK)	43	4.846	4.881	-0.035	36	18255	8.00	8.41	
65 cis-1,2-Dichloroethene	96	4.863	4.881	-0.018	74	39997	2.00	1.93	
66 2,2-Dichloropropane	77	4.881	4.898	-0.017	66	93631	2.00	2.29	
70 sec-Butyl Alcohol	45	5.072	5.107	-0.035	49	24776	60.0	55.4	
71 Chlorobromomethane	128	5.159	5.177	-0.018	88	20151	2.00	2.02	
72 Tetrahydrofuran	42	5.263	5.264	-0.001	33	6737	4.00	4.67	
74 Chloroform	83	5.246	5.264	-0.018	74	73220	2.00	1.99	
75 1,1,1-Trichloroethane	97	5.542	5.542	0.000	56	69711	2.00	1.90	
76 Cyclohexane	56	5.629	5.647	-0.017	77	62176	2.00	1.85	
78 1,1-Dichloropropene	75	5.716	5.751	-0.035	81	57317	2.00	1.90	
77 Carbon tetrachloride	117	5.751	5.786	-0.035	76	68190	2.00	1.88	
80 Isobutyl alcohol	41	5.838	5.873	-0.035	1	5794	50.0	39.2	M
82 1,2-Dichloroethane	62	5.994	5.995	-0.001	29	30420	2.00	2.08	
81 Benzene	78	5.994	6.012	-0.018	61	112077	2.00	1.93	
84 n-Heptane	43	6.394	6.395	-0.001	42	63437	2.00	1.87	
85 Trichloroethene	95	6.882	6.899	-0.017	89	48225	2.00	1.91	
89 2-Pentanone	43	7.125	7.143	-0.018	84	38172	8.00	8.15	
90 1,2-Dichloropropane	63	7.195	7.195	0.000	72	39697	2.00	1.99	
87 Methylcyclohexane	55	7.212	7.213	-0.001	87	57060	2.00	1.99	
92 Dibromomethane	93	7.352	7.369	-0.017	82	23266	2.00	2.08	
94 Dichlorobromomethane	83	7.595	7.595	0.000	89	63600	2.00	2.01	
96 2-Chloroethyl vinyl ether	63	8.048	8.048	0.000	58	13325	2.00	2.11	
97 cis-1,3-Dichloropropene	75	8.256	8.274	-0.018	71	52250	2.00	1.99	
98 4-Methyl-2-pentanone (MIBK	43	8.517	8.518	-0.001	51	54452	8.00	8.27	
99 Toluene	91	8.796	8.796	0.000	87	121599	2.00	1.97	
100 trans-1,3-Dichloropropene	75	9.126	9.127	-0.001	61	36024	2.00	2.04	
101 Ethyl methacrylate	69	9.335	9.318	0.017	66	31137	2.00	2.11	
102 1,1,2-Trichloroethane	97	9.405	9.405	0.000	67	23441	2.00	2.11	
104 1,3-Dichloropropane	76	9.666	9.666	0.000	67	38421	2.00	2.03	
103 Tetrachloroethene	164	9.683	9.701	-0.018	95	43799	2.00	1.89	
105 2-Hexanone	43	9.857	9.840	0.017	71	36995	8.00	8.43	
107 Chlorodibromomethane	129	10.049	10.049	0.000	75	45052	2.00	1.98	
109 Ethylene Dibromide	107	10.223	10.223	0.000	80	30316	2.00	2.02	
111 Chlorobenzene	112	11.058	11.058	0.000	54	87867	2.00	1.95	
110 1-Chlorohexane	91	11.058	11.058	0.000	43	55880	2.00	1.89	
113 1,1,1,2-Tetrachloroethane	131	11.214	11.215	-0.001	56	43837	2.00	1.96	
112 Ethylbenzene	106	11.267	11.267	0.000	94	42609	2.00	1.92	
114 m-Xylene & p-Xylene	106	11.475	11.476	-0.001	97	58710	2.00	2.00	
115 o-Xylene	106	12.154	12.154	0.000	87	50672	2.00	1.99	
116 Styrene	104	12.172	12.172	0.000	84	80359	2.00	1.99	
117 Bromoform	173	12.467	12.450	0.017	77	22771	2.00	1.90	
118 Isopropylbenzene	105	12.815	12.816	-0.001	88	156342	2.00	1.95	
119 Cyclohexanone	55	12.955	12.937	0.018	63	19734	80.0	105.2	
121 Bromobenzene	156	13.303	13.303	0.000	84	41804	2.00	1.97	
122 1,1,2,2-Tetrachloroethane	83	13.320	13.320	0.000	31	29572	2.00	2.03	
124 1,2,3-Trichloropropane	110	13.372	13.372	0.000	29	7018	2.00	2.09	
125 trans-1,4-Dichloro-2-buten	53	13.407	13.425	-0.018	1	5321	2.00	2.05	
123 N-Propylbenzene	120	13.546	13.546	0.000	87	42948	2.00	2.00	
126 2-Chlorotoluene	126	13.668	13.668	0.000	30	37094	2.00	2.05	a
128 4-Chlorotoluene	126	13.859	13.860	-0.001	94	41338	2.00	2.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.877	13.877	0.000	87	123839	2.00	2.00	
129 tert-Butylbenzene	119	14.451	14.451	0.000	83	141668	2.00	1.96	
130 1,2,4-Trimethylbenzene	105	14.538	14.538	0.000	93	117017	2.00	1.95	
131 sec-Butylbenzene	134	14.851	14.851	0.000	64	38335	2.00	1.98	
132 1,3-Dichlorobenzene	146	14.990	15.008	-0.018	36	71904	2.00	1.99	
133 4-Isopropyltoluene	119	15.130	15.130	0.000	57	157566	2.00	1.93	
134 1,4-Dichlorobenzene	146	15.164	15.165	-0.001	52	89749	2.00	2.07	
138 1,2-Dichlorobenzene	146	15.808	15.808	0.000	80	65674	2.00	2.07	
137 n-Butylbenzene	91	15.843	15.843	0.000	92	139293	2.00	1.98	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.940	-0.001	18	4887	2.00	2.02	
141 1,2,4-Trichlorobenzene	180	17.862	17.862	0.000	83	46297	2.00	2.10	
142 Hexachlorobutadiene	225	18.070	18.071	-0.001	89	43774	2.00	2.04	
143 Naphthalene	128	18.105	18.088	0.017	77	44685	2.00	2.11	
144 1,2,3-Trichlorobenzene	180	18.349	18.349	0.000	51	37582	2.00	2.23	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		8.00	7.89	
S 150 Xylenes, Total (URS)	1				0		4.00	3.99	
S 151 Total BTEX	1				0			9.82	
S 148 1,3-Dichloropropene, Total	1				0		4.00	4.03	
S 145 1,2-Dichloroethene, Total	1				0		4.00	3.90	
S 146 Xylenes, Total	106				0		4.00	3.99	
S 147 1,2-Dichloroethene, Total	96				0		4.00	3.90	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.16	Units: uL

Report Date: 14-May-2015 14:33:03 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7572.D

Injection Date: 14-May-2015 09:05:30 Instrument ID: VMS_Z Operator ID: moanm

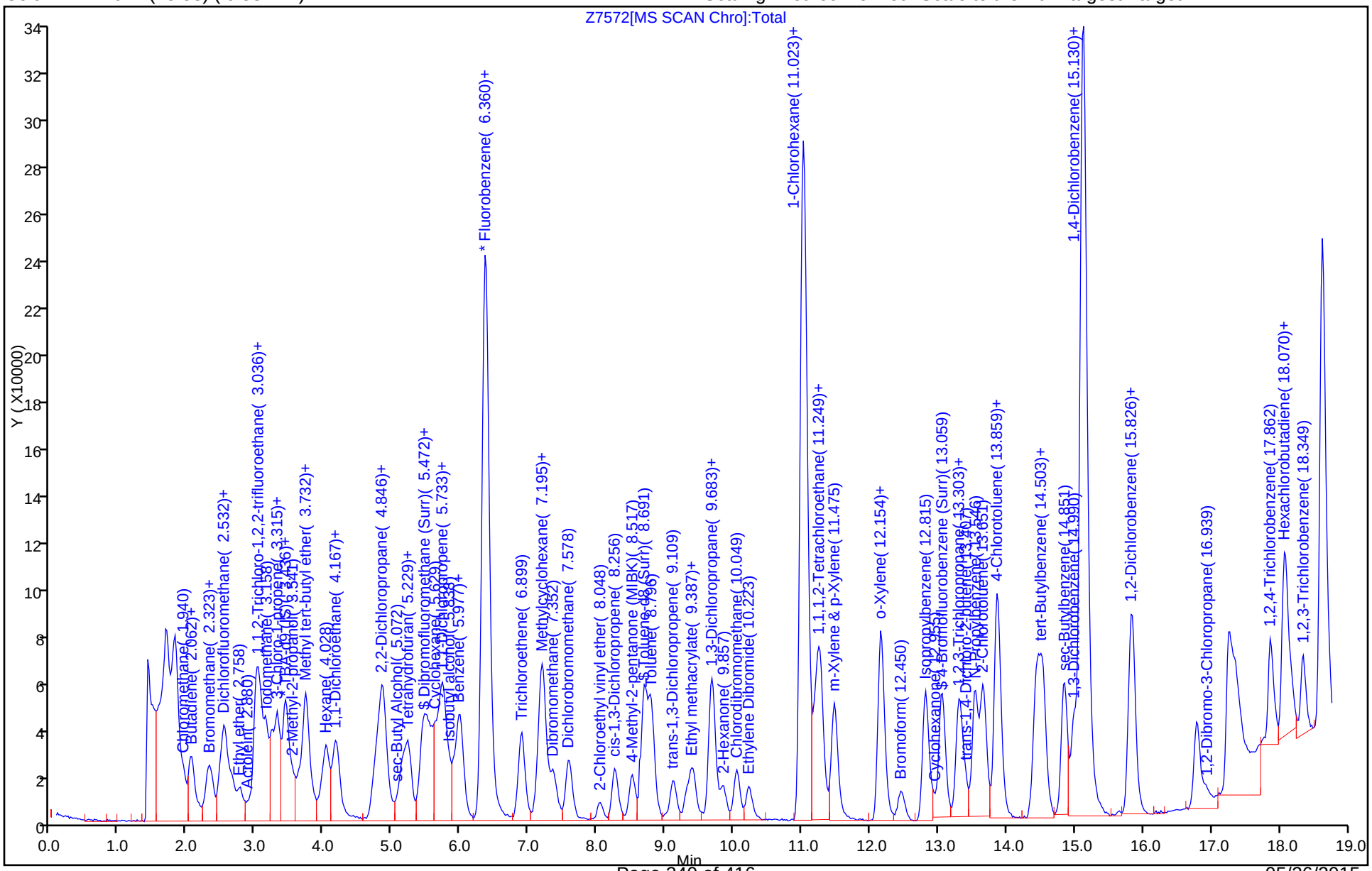
Lims ID: ic Worklist Smp#: 11

Client ID:

Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: AQ_VMSZ_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

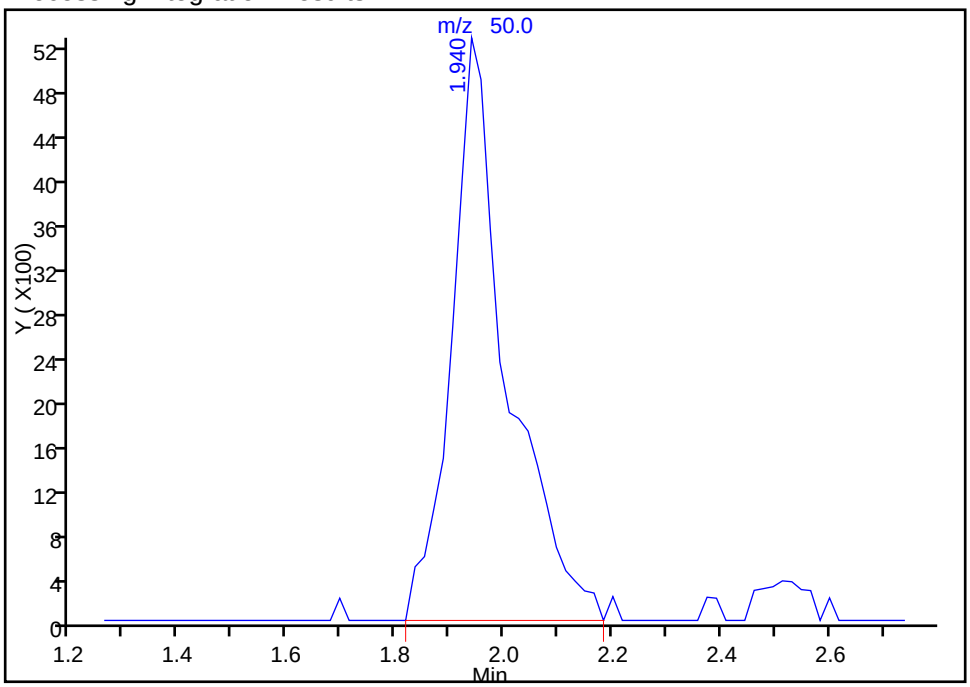
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7572.D				
Injection Date:	14-May-2015 09:05:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	4	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

30 Chloromethane, CAS: 74-87-3

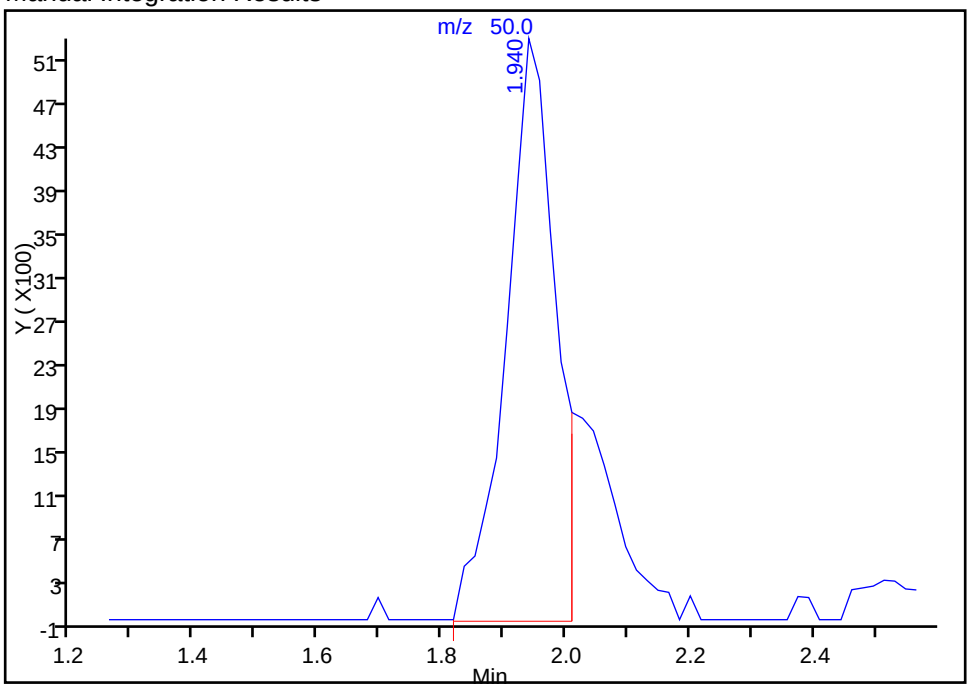
Processing Integration Results

RT: 1.94
Area: 37676
Amount: 2.003399
Amount Units: ug/l



Manual Integration Results

RT: 1.94
Area: 29530
Amount: 1.617605
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:47:23
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

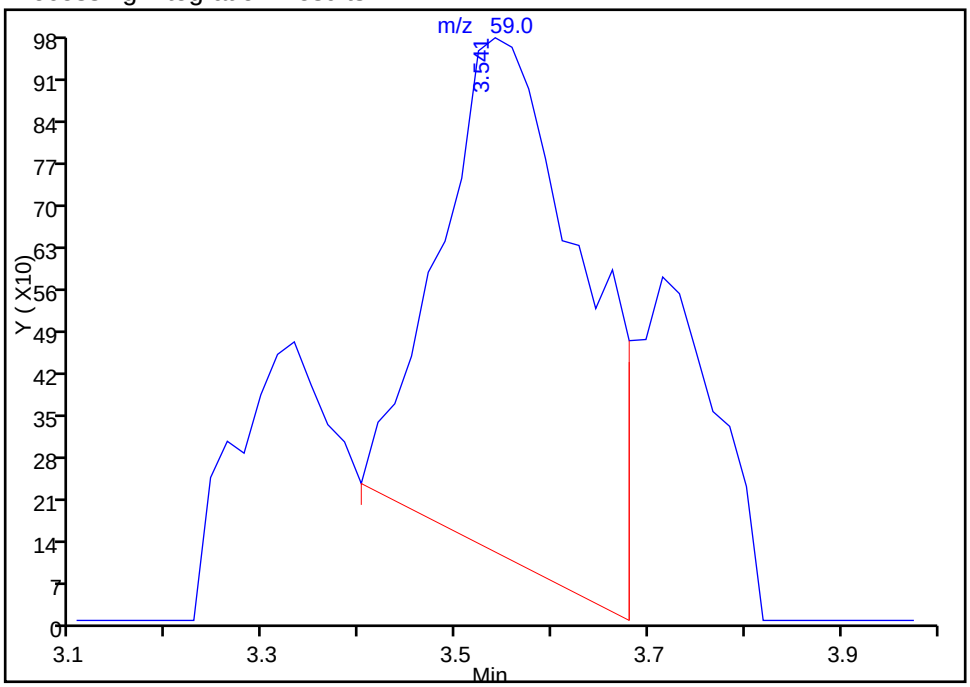
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7572.D				
Injection Date:	14-May-2015 09:05:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	4	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

55 2-Methyl-2-propanol, CAS: 75-65-0

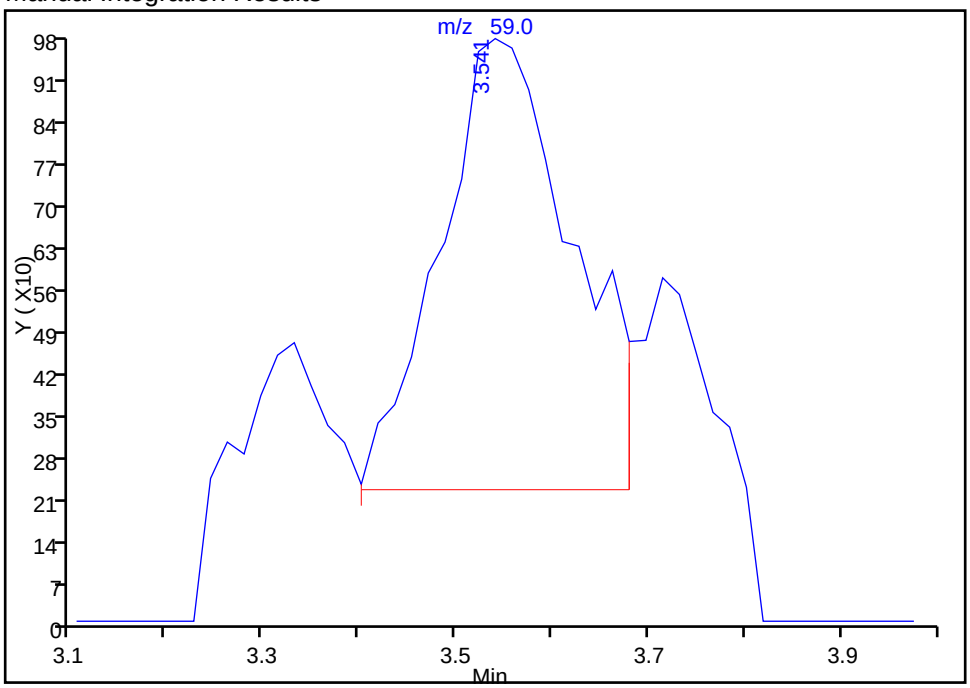
Processing Integration Results

RT: 3.54
Area: 9187
Amount: 24.167653
Amount Units: ug/l



Manual Integration Results

RT: 3.54
Area: 7306
Amount: 3.267444
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:47:23
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

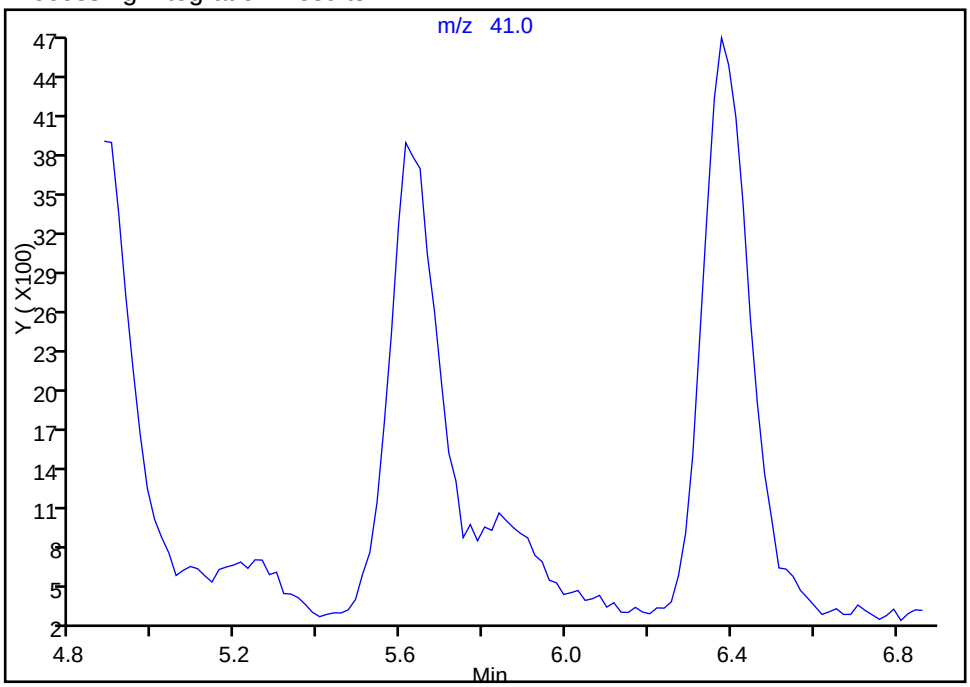
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7572.D				
Injection Date:	14-May-2015 09:05:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	4	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

80 Isobutyl alcohol, CAS: 78-83-1

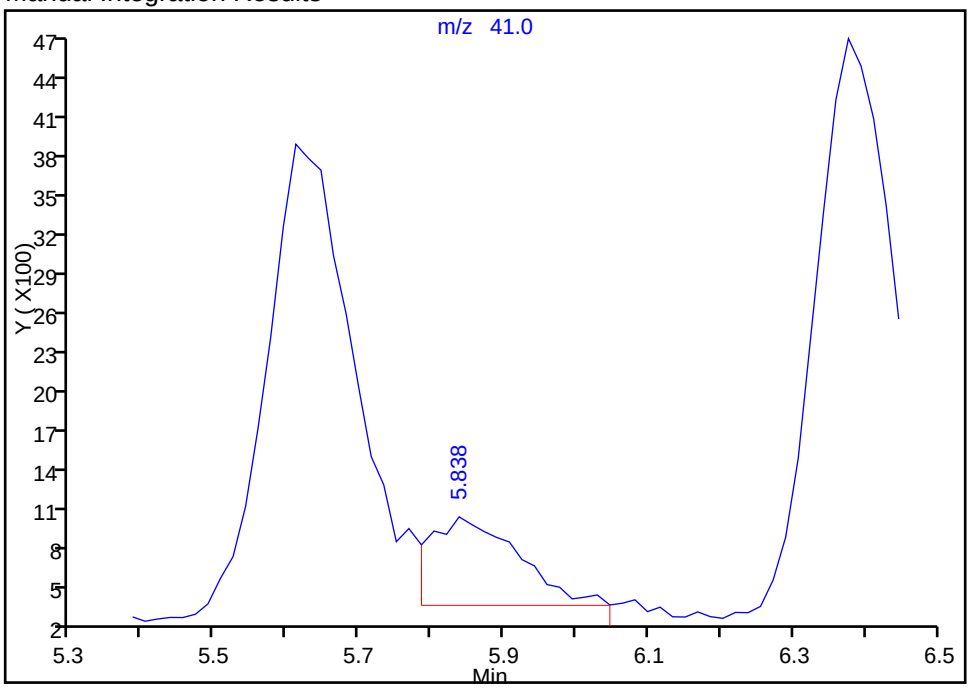
Not Detected
Expected RT: 5.87

Processing Integration Results



Manual Integration Results

RT: 5.84
Area: 5794
Amount: 39.186208
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:47:23
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

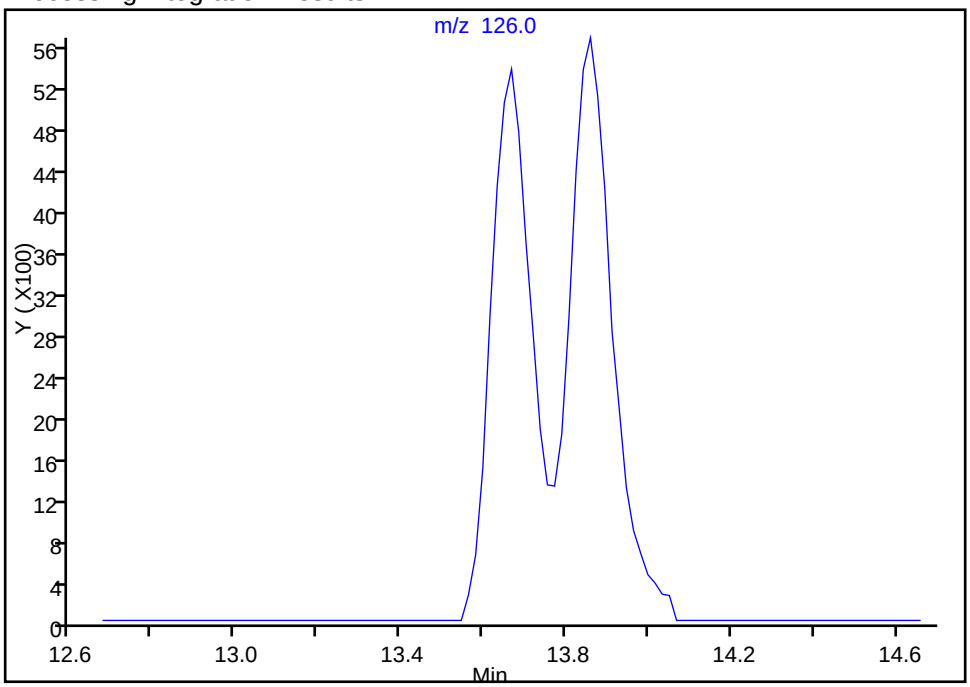
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7572.D				
Injection Date:	14-May-2015 09:05:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	4	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

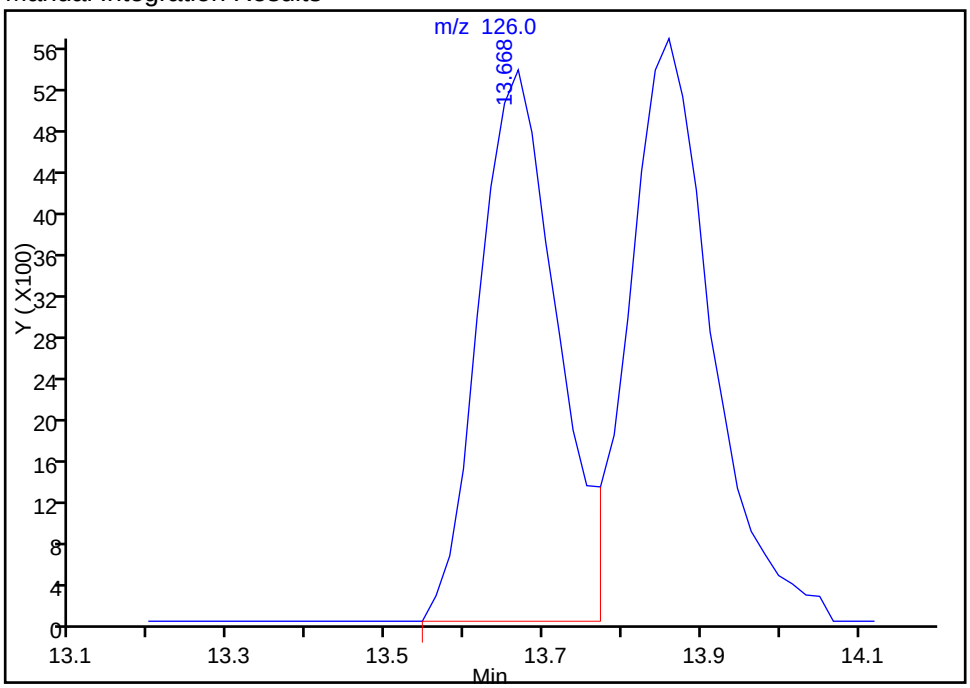
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT: 13.67
Area: 37094
Amount: 2.047650
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:47:23
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7573.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-May-2015 09:28:30 ALS Bottle#: 5 Worklist Smp#: 12
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:04 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 10:35:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.490	3.489	0.001	33	134366	250.0	250.0	
* 2 Fluorobenzene	96	6.379	6.377	0.002	95	728641	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.025	11.023	0.002	86	176856	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.114	15.112	0.002	96	300680	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.474	5.473	0.002	56	173606	5.00	5.05	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.909	5.908	0.001	96	74677	5.00	5.00	
$ 10 Toluene-d8 (Surr)	98	8.693	8.692	0.001	89	299508	5.00	5.06	
$ 11 4-Bromofluorobenzene (Surr	95	13.043	13.059	-0.016	82	162692	5.00	5.10	
27 Dichlorodifluoromethane	85	1.924	1.923	0.001	89	161778	5.00	5.84	
30 Chloromethane	50	1.994	1.992	0.002	99	98126	5.00	5.45	M
31 Butadiene	54	2.081	2.097	-0.016	81	61581	NC	NC	
32 Vinyl chloride	62	2.116	2.114	0.002	98	89754	5.00	5.16	
35 Bromomethane	94	2.342	2.340	0.002	89	95577	5.00	5.12	
36 Chloroethane	64	2.394	2.393	0.001	81	60875	5.00	5.11	
37 Dichlorofluoromethane	67	2.551	2.549	0.002	96	237948	5.00	4.98	
38 Trichlorofluoromethane	101	2.603	2.601	0.002	94	211012	5.00	5.13	
40 Ethyl ether	59	2.812	2.810	0.002	84	41975	5.00	5.33	
44 Acrolein	56	2.916	2.915	0.001	88	25315	50.0	54.2	
48 Acetone	43	3.055	3.036	0.019	11	19807	20.0	22.5	
45 1,1-Dichloroethene	96	3.038	3.036	0.002	97	97296	5.00	5.07	
46 1,1,2-Trichloro-1,2,2-trif	151	3.090	3.089	0.001	89	149448	5.00	5.17	
49 Iodomethane	142	3.194	3.193	0.001	99	252788	5.00	5.03	
50 Carbon disulfide	76	3.281	3.280	0.001	97	332090	5.00	5.08	
52 3-Chloro-1-propene	41	3.351	3.350	0.001	79	148067	5.00	5.23	
51 Methyl acetate	43	3.351	3.350	0.001	71	102167	25.0	26.0	
54 Methylene Chloride	84	3.473	3.471	0.002	88	84395	5.00	5.15	
55 2-Methyl-2-propanol	59	3.577	3.558	0.019	1	18755	50.0	40.9	
58 Acrylonitrile	53	3.682	3.680	0.002	97	66010	50.0	52.1	
57 trans-1,2-Dichloroethene	96	3.769	3.767	0.002	94	103443	5.00	4.98	
56 Methyl tert-butyl ether	73	3.786	3.785	0.001	62	151850	5.00	5.13	
59 Hexane	57	4.047	4.063	-0.016	91	147748	5.00	4.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.204	4.202	0.002	96	191302	5.00	5.20	
61 Vinyl acetate	43	4.221	4.220	0.001	52	190774	10.0	10.7	
67 2-Butanone (MEK)	43	4.882	4.881	0.001	31	45287	20.0	21.1	
65 cis-1,2-Dichloroethene	96	4.882	4.881	0.001	59	103578	5.00	5.06	
66 2,2-Dichloropropane	77	4.900	4.898	0.002	71	188189	5.00	5.51	
70 sec-Butyl Alcohol	45	5.108	5.107	0.001	51	65102	150.0	153.5	
71 Chlorobromomethane	128	5.178	5.177	0.001	93	51580	5.00	5.23	
72 Tetrahydrofuran	42	5.248	5.264	-0.016	30	13905	10.0	9.78	
74 Chloroform	83	5.265	5.264	0.001	91	185180	5.00	5.09	
75 1,1,1-Trichloroethane	97	5.543	5.542	0.001	63	181377	5.00	5.02	
76 Cyclohexane	56	5.648	5.647	0.002	82	167669	5.00	5.06	
78 1,1-Dichloropropene	75	5.735	5.751	-0.016	80	151758	5.00	5.10	
77 Carbon tetrachloride	117	5.787	5.786	0.001	80	183217	5.00	5.11	
80 Isobutyl alcohol	41	5.874	5.873	0.001	20	19117	125.0	136.5	
82 1,2-Dichloroethane	62	6.013	5.995	0.018	40	75267	5.00	5.22	
81 Benzene	78	6.013	6.012	0.001	92	289210	5.00	5.06	
84 n-Heptane	43	6.396	6.395	0.001	52	170807	5.00	5.11	
85 Trichloroethene	95	6.901	6.899	0.002	90	124898	5.00	5.01	
89 2-Pentanone	43	7.127	7.143	-0.016	88	92534	20.0	20.0	
90 1,2-Dichloropropane	63	7.197	7.195	0.002	81	102231	5.00	5.19	
87 Methylcyclohexane	55	7.214	7.213	0.001	89	138374	5.00	4.90	
92 Dibromomethane	93	7.371	7.369	0.002	84	57201	5.00	5.19	
94 Dichlorobromomethane	83	7.597	7.595	0.002	94	155573	5.00	5.00	
96 2-Chloroethyl vinyl ether	63	8.049	8.048	0.001	67	31796	5.00	5.10	
97 cis-1,3-Dichloropropene	75	8.275	8.274	0.001	84	131710	5.00	5.21	
98 4-Methyl-2-pentanone (MIBK	43	8.519	8.518	0.001	62	135962	20.0	20.9	
99 Toluene	91	8.797	8.796	0.001	95	308919	5.00	5.06	
100 trans-1,3-Dichloropropene	75	9.128	9.127	0.001	83	89947	5.00	5.15	
101 Ethyl methacrylate	69	9.319	9.318	0.001	68	73572	5.00	5.17	
102 1,1,2-Trichloroethane	97	9.406	9.405	0.001	68	57787	5.00	5.27	
104 1,3-Dichloropropane	76	9.667	9.666	0.001	76	95870	5.00	5.26	
103 Tetrachloroethene	164	9.685	9.701	-0.016	97	115570	5.00	5.18	
105 2-Hexanone	43	9.859	9.840	0.019	64	85284	20.0	20.2	
107 Chlorodibromomethane	129	10.050	10.049	0.001	83	110270	5.00	5.04	
109 Ethylene Dibromide	107	10.224	10.223	0.001	76	76908	5.00	5.32	
111 Chlorobenzene	112	11.059	11.058	0.001	79	225081	5.00	5.19	
110 1-Chlorohexane	91	11.059	11.058	0.001	64	142059	5.00	4.99	
113 1,1,1,2-Tetrachloroethane	131	11.216	11.215	0.001	68	112669	5.00	5.23	
112 Ethylbenzene	106	11.268	11.267	0.001	95	107737	5.00	5.05	
114 m-Xylene & p-Xylene	106	11.477	11.476	0.001	97	144634	5.00	5.12	
115 o-Xylene	106	12.156	12.154	0.002	87	129917	5.00	5.30	
116 Styrene	104	12.173	12.172	0.001	88	205608	5.00	5.30	
117 Bromoform	173	12.452	12.450	0.002	89	60072	5.00	5.21	
118 Isopropylbenzene	105	12.817	12.816	0.001	93	398151	5.00	5.10	
119 Cyclohexanone	55	12.939	12.937	0.002	68	36570	200.0	210.1	
121 Bromobenzene	156	13.304	13.303	0.001	87	108015	5.00	5.23	
122 1,1,2,2-Tetrachloroethane	83	13.304	13.320	-0.016	57	73781	5.00	5.19	
124 1,2,3-Trichloropropane	110	13.374	13.372	0.002	49	17413	5.00	5.33	
125 trans-1,4-Dichloro-2-buten	53	13.409	13.425	-0.016	1	13743	5.00	5.44	
123 N-Propylbenzene	120	13.548	13.546	0.002	94	107549	5.00	5.14	
126 2-Chlorotoluene	126	13.670	13.668	0.002	52	93257	5.00	5.28	a
128 4-Chlorotoluene	126	13.861	13.860	0.001	96	97639	5.00	4.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.878	13.877	0.001	91	306142	5.00	5.06	
129 tert-Butylbenzene	119	14.453	14.451	0.002	90	357618	5.00	5.09	
130 1,2,4-Trimethylbenzene	105	14.540	14.538	0.002	93	294769	5.00	5.04	
131 sec-Butylbenzene	134	14.853	14.851	0.002	75	98091	5.00	5.20	
132 1,3-Dichlorobenzene	146	14.992	15.008	-0.016	65	181894	5.00	5.15	
133 4-Isopropyltoluene	119	15.131	15.130	0.001	85	407342	5.00	5.11	
134 1,4-Dichlorobenzene	146	15.166	15.165	0.001	75	215153	5.00	5.08	
138 1,2-Dichlorobenzene	146	15.810	15.808	0.002	80	155661	5.00	5.04	
137 n-Butylbenzene	91	15.845	15.843	0.002	94	350270	5.00	5.11	
139 1,2-Dibromo-3-Chloropropan	157	16.923	16.940	-0.017	51	13167	5.00	5.57	
141 1,2,4-Trichlorobenzene	180	17.863	17.862	0.001	93	114634	5.00	5.33	
142 Hexachlorobutadiene	225	18.072	18.071	0.001	87	107998	5.00	5.17	
143 Naphthalene	128	18.089	18.088	0.001	95	109449	5.00	5.31	
144 1,2,3-Trichlorobenzene	180	18.350	18.349	0.001	61	86604	5.00	5.27	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		20.0	20.3	
S 150 Xylenes, Total (URS)	1				0		10.0	10.4	
S 151 Total BTEX	1				0			25.6	
S 148 1,3-Dichloropropene, Total	1				0		10.0	10.4	
S 145 1,2-Dichloroethene, Total	1				0		10.0	10.0	
S 146 Xylenes, Total	106				0		10.0	10.4	
S 147 1,2-Dichloroethene, Total	96				0		10.0	10.0	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

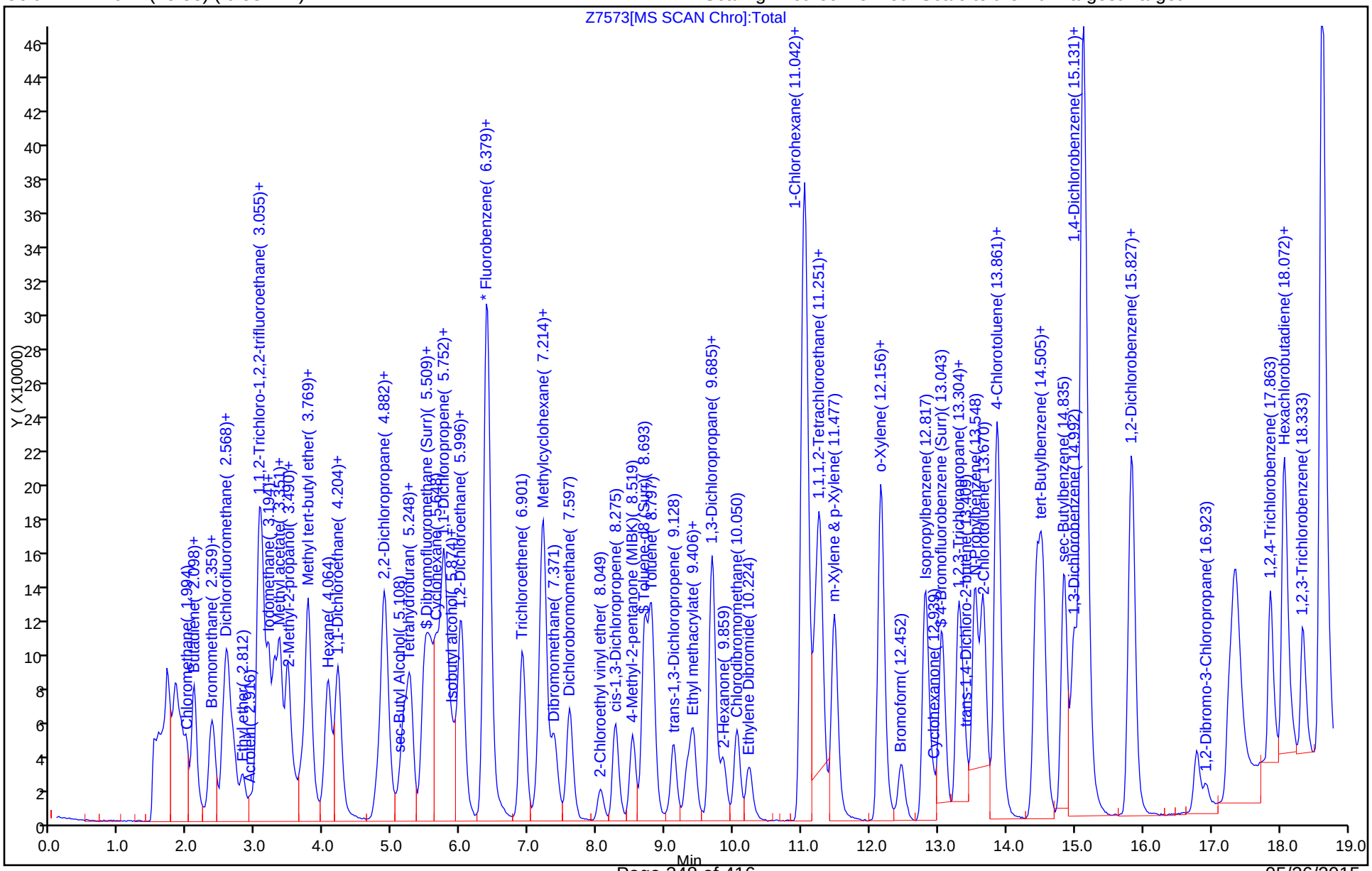
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	2.50	Units: uL
MV-Gas/Ket A_00032	Amount Added:	2.50	Units: uL
MV-2cleve+AVA_00009	Amount Added:	2.50	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.40	Units: uL

Report Date: 14-May-2015 14:33:04 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7573.D				
Injection Date:	14-May-2015 09:28:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	12
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

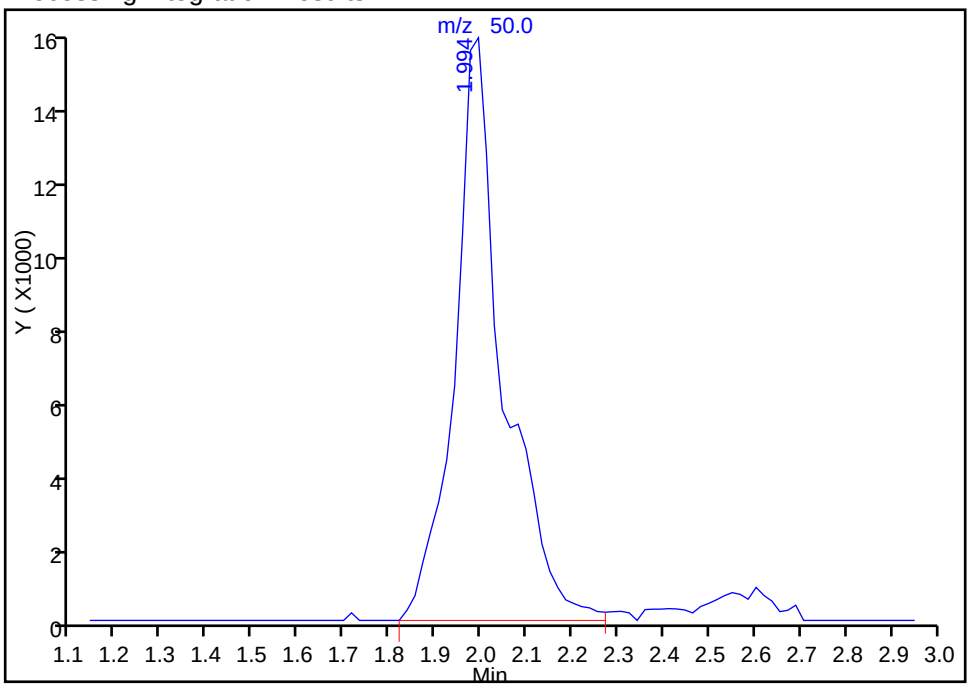
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7573.D				
Injection Date:	14-May-2015 09:28:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	5	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

30 Chloromethane, CAS: 74-87-3

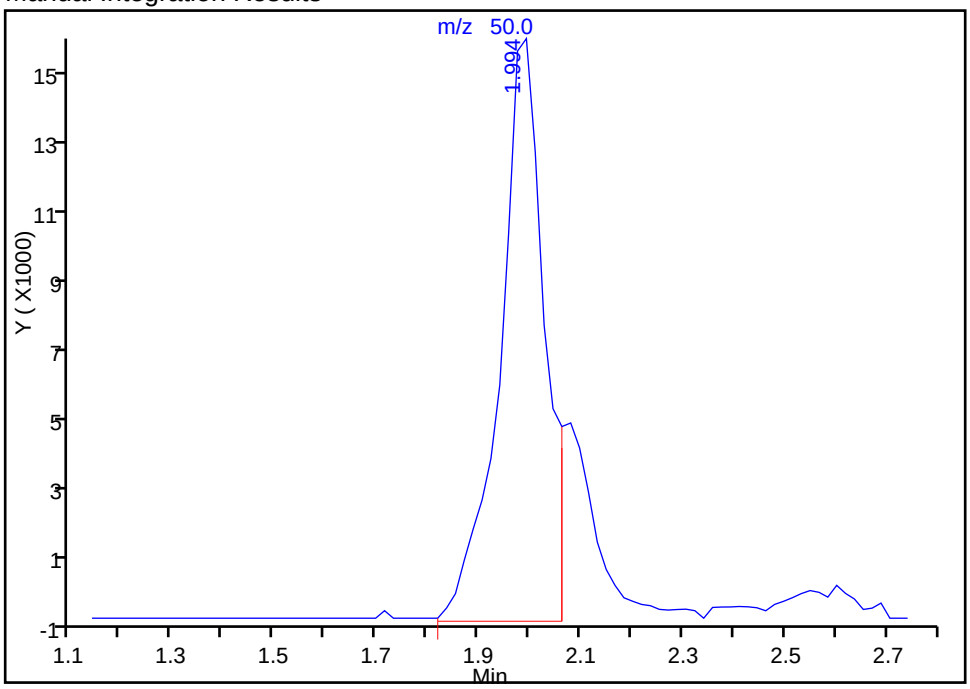
Processing Integration Results

RT: 1.99
Area: 117703
Amount: 6.301241
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 98126
Amount: 5.448692
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:49:25
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

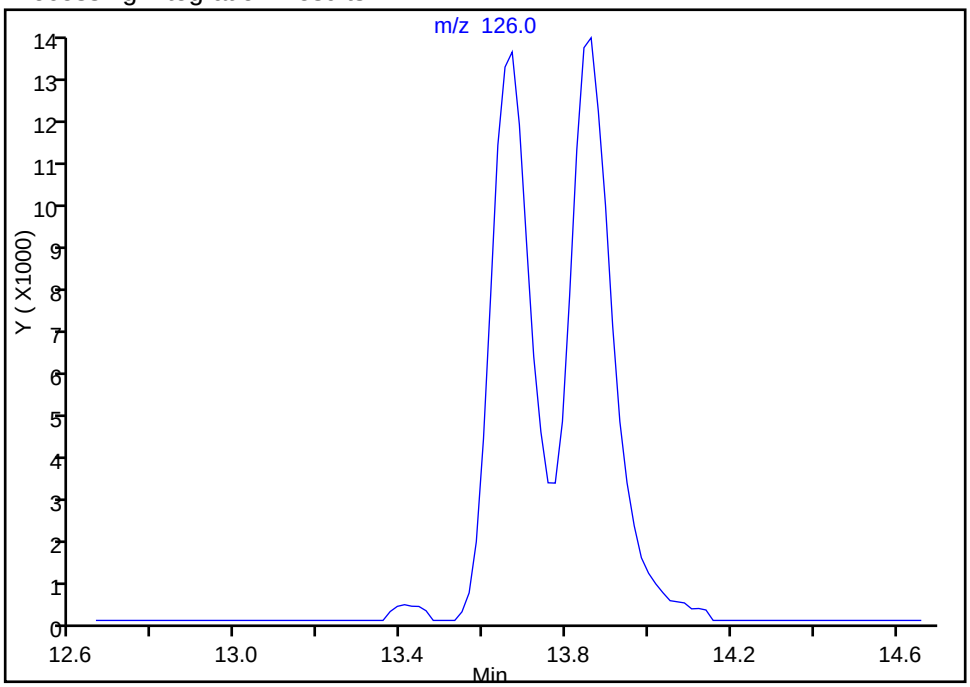
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7573.D				
Injection Date:	14-May-2015 09:28:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	5	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

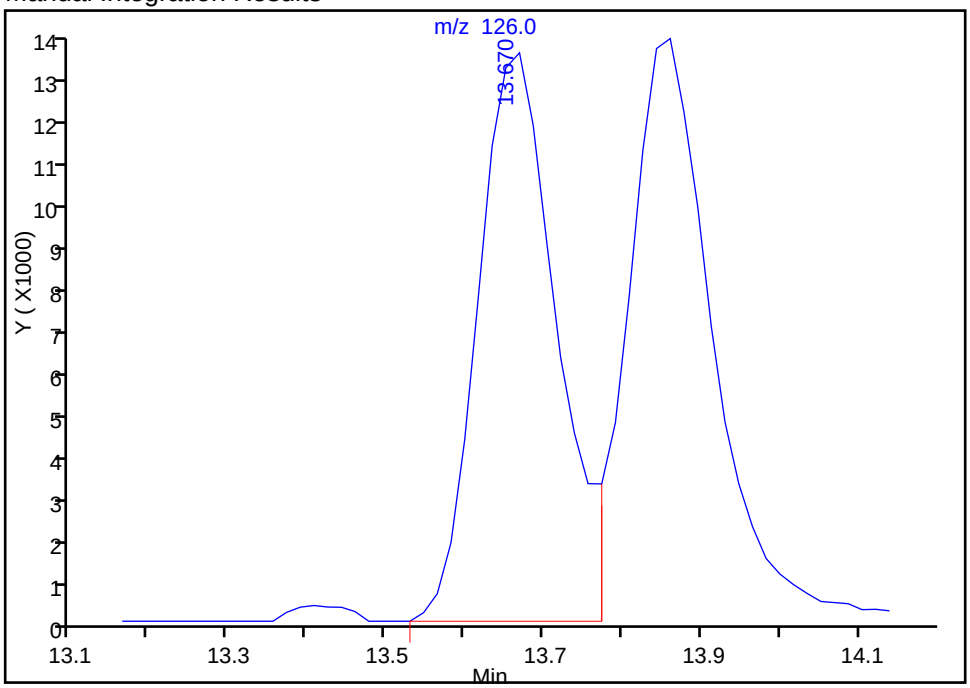
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT:	13.67
Area:	93257
Amount:	5.281193
Amount Units:	ug/l



Reviewer: moanm, 14-May-2015 12:49:25
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7574.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-May-2015 09:50:30 ALS Bottle#: 6 Worklist Smp#: 13
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:05 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 10:40:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.489	3.489	0.000	5	120241	250.0	250.0	
* 2 Fluorobenzene	96	6.377	6.377	0.000	94	748150	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.023	11.023	0.000	86	176321	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.112	15.112	0.000	76	310809	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.473	5.473	0.000	53	337011	10.0	9.54	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.908	5.908	0.000	90	137087	10.0	8.95	
$ 10 Toluene-d8 (Surr)	98	8.692	8.692	0.000	90	595203	10.0	10.1	
$ 11 4-Bromofluorobenzene (Surr	95	13.059	13.059	0.000	84	319481	10.0	9.68	
27 Dichlorodifluoromethane	85	1.923	1.923	0.000	97	297541	10.0	10.5	
30 Chloromethane	50	1.992	1.992	0.000	99	190881	10.0	10.3	M
31 Butadiene	54	2.097	2.097	0.000	81	120312	NC	NC	
32 Vinyl chloride	62	2.114	2.114	0.000	96	180758	10.0	10.1	
35 Bromomethane	94	2.340	2.340	0.000	84	193819	10.0	10.1	
36 Chloroethane	64	2.393	2.393	0.000	92	122778	10.0	10.0	
37 Dichlorofluoromethane	67	2.549	2.549	0.000	97	471397	10.0	9.61	
38 Trichlorofluoromethane	101	2.601	2.601	0.000	98	403249	10.0	9.55	
40 Ethyl ether	59	2.810	2.810	0.000	86	84038	10.0	10.4	
44 Acrolein	56	2.915	2.915	0.000	71	42858	100.0	89.4	
48 Acetone	43	3.036	3.036	0.000	10	36147	40.0	40.0	
45 1,1-Dichloroethene	96	3.036	3.036	0.000	88	186610	10.0	9.46	
46 1,1,2-Trichloro-1,2,2-trif	151	3.089	3.089	0.000	88	296052	10.0	9.98	
49 Iodomethane	142	3.193	3.193	0.000	98	517133	10.0	10.0	
50 Carbon disulfide	76	3.280	3.280	0.000	98	669232	10.0	9.96	
52 3-Chloro-1-propene	41	3.350	3.350	0.000	82	292800	10.0	10.1	
51 Methyl acetate	43	3.350	3.350	0.000	66	196230	50.0	48.6	
54 Methylene Chloride	84	3.471	3.471	0.000	90	164177	10.0	9.75	
55 2-Methyl-2-propanol	59	3.558	3.558	0.000	1	41806	100.0	129.7	
58 Acrylonitrile	53	3.680	3.680	0.000	93	126311	100.0	97.1	
57 trans-1,2-Dichloroethene	96	3.767	3.767	0.000	92	206494	10.0	9.69	
56 Methyl tert-butyl ether	73	3.785	3.785	0.000	60	288131	10.0	9.48	
59 Hexane	57	4.063	4.063	0.000	90	281865	10.0	9.49	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.202	4.202	0.000	95	378189	10.0	10.0	
61 Vinyl acetate	43	4.220	4.220	0.000	78	332133	20.0	18.2	
67 2-Butanone (MEK)	43	4.881	4.881	0.000	29	82420	40.0	37.5	
65 cis-1,2-Dichloroethene	96	4.881	4.881	0.000	84	208123	10.0	9.91	
66 2,2-Dichloropropane	77	4.898	4.898	0.000	74	351619	10.0	10.7	
70 sec-Butyl Alcohol	45	5.107	5.107	0.000	53	116342	300.0	306.6	
71 Chlorobromomethane	128	5.177	5.177	0.000	72	103892	10.0	10.3	
72 Tetrahydrofuran	42	5.264	5.264	0.000	31	26224	20.0	18.0	
74 Chloroform	83	5.264	5.264	0.000	91	370987	10.0	9.93	
75 1,1,1-Trichloroethane	97	5.542	5.542	0.000	90	359060	10.0	9.68	
76 Cyclohexane	56	5.647	5.647	0.000	82	321904	10.0	9.45	
78 1,1-Dichloropropene	75	5.751	5.751	0.000	82	297723	10.0	9.74	
77 Carbon tetrachloride	117	5.786	5.786	0.000	79	357743	10.0	9.72	
80 Isobutyl alcohol	41	5.873	5.873	0.000	18	32142	250.0	256.4	
82 1,2-Dichloroethane	62	5.995	5.995	0.000	45	148223	10.0	10.0	
81 Benzene	78	6.012	6.012	0.000	92	576941	10.0	9.83	
84 n-Heptane	43	6.395	6.395	0.000	66	333678	10.0	9.72	
85 Trichloroethene	95	6.899	6.899	0.000	85	251576	10.0	9.83	
89 2-Pentanone	43	7.143	7.143	0.000	87	176774	40.0	37.3	
90 1,2-Dichloropropane	63	7.195	7.195	0.000	81	205319	10.0	10.1	
87 Methylcyclohexane	55	7.213	7.213	0.000	88	273737	10.0	9.44	
92 Dibromomethane	93	7.369	7.369	0.000	84	111513	10.0	9.86	
94 Dichlorobromomethane	83	7.595	7.595	0.000	95	325173	10.0	10.2	
96 2-Chloroethyl vinyl ether	63	8.048	8.048	0.000	82	66069	10.0	10.3	
97 cis-1,3-Dichloropropene	75	8.274	8.274	0.000	80	265882	10.0	10.6	
98 4-Methyl-2-pentanone (MIBK	43	8.518	8.518	0.000	62	258950	40.0	38.8	
99 Toluene	91	8.796	8.796	0.000	95	627507	10.0	10.0	
100 trans-1,3-Dichloropropene	75	9.127	9.127	0.000	87	180932	10.0	10.1	
101 Ethyl methacrylate	69	9.318	9.318	0.000	70	140784	10.0	9.92	
102 1,1,2-Trichloroethane	97	9.405	9.405	0.000	76	112136	10.0	9.96	
104 1,3-Dichloropropane	76	9.666	9.666	0.000	75	190040	10.0	10.5	
103 Tetrachloroethene	164	9.701	9.701	0.000	96	237372	10.0	10.7	
105 2-Hexanone	43	9.840	9.840	0.000	67	160598	40.0	38.1	
107 Chlorodibromomethane	129	10.049	10.049	0.000	88	232979	10.0	10.7	
109 Ethylene Dibromide	107	10.223	10.223	0.000	78	151556	10.0	10.5	
111 Chlorobenzene	112	11.058	11.058	0.000	90	461840	10.0	10.7	
110 1-Chlorohexane	91	11.058	11.058	0.000	75	281001	10.0	9.90	
113 1,1,1,2-Tetrachloroethane	131	11.215	11.215	0.000	72	231738	10.0	10.8	
112 Ethylbenzene	106	11.267	11.267	0.000	96	224900	10.0	10.6	
114 m-Xylene & p-Xylene	106	11.476	11.476	0.000	98	291369	10.0	10.3	
115 o-Xylene	106	12.154	12.154	0.000	87	259365	10.0	10.6	
116 Styrene	104	12.172	12.172	0.000	88	418378	10.0	10.8	
117 Bromoform	173	12.450	12.450	0.000	88	122259	10.0	10.6	
118 Isopropylbenzene	105	12.816	12.816	0.000	94	801280	10.0	9.94	
119 Cyclohexanone	55	12.937	12.937	0.000	59	68866	400.0	404.2	
121 Bromobenzene	156	13.303	13.303	0.000	92	220808	10.0	10.3	
122 1,1,2,2-Tetrachloroethane	83	13.320	13.320	0.000	51	140712	10.0	9.57	
124 1,2,3-Trichloropropane	110	13.372	13.372	0.000	57	34376	10.0	10.2	
125 trans-1,4-Dichloro-2-buten	53	13.425	13.425	0.000	1	28676	10.0	11.0	
123 N-Propylbenzene	120	13.546	13.546	0.000	89	219095	10.0	10.1	
126 2-Chlorotoluene	126	13.668	13.668	0.000	65	189875	10.0	10.4	a
128 4-Chlorotoluene	126	13.860	13.860	0.000	93	213358	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.877	13.877	0.000	91	617458	10.0	9.88	
129 tert-Butylbenzene	119	14.451	14.451	0.000	89	724376	10.0	9.97	
130 1,2,4-Trimethylbenzene	105	14.538	14.538	0.000	94	606325	10.0	10.0	
131 sec-Butylbenzene	134	14.851	14.851	0.000	75	198353	10.0	10.2	
132 1,3-Dichlorobenzene	146	15.008	15.008	0.000	71	369530	10.0	10.1	
133 4-Isopropyltoluene	119	15.130	15.130	0.000	90	821824	10.0	9.97	
134 1,4-Dichlorobenzene	146	15.165	15.165	0.000	78	444050	10.0	10.1	
138 1,2-Dichlorobenzene	146	15.808	15.808	0.000	85	321636	10.0	10.1	
137 n-Butylbenzene	91	15.843	15.843	0.000	94	691937	10.0	9.77	
139 1,2-Dibromo-3-Chloropropan	157	16.940	16.940	0.000	66	24385	10.0	9.99	
141 1,2,4-Trichlorobenzene	180	17.862	17.862	0.000	94	223302	10.0	10.0	
142 Hexachlorobutadiene	225	18.071	18.071	0.000	87	205417	10.0	9.52	
143 Naphthalene	128	18.088	18.088	0.000	87	208430	10.0	9.78	
144 1,2,3-Trichlorobenzene	180	18.349	18.349	0.000	92	168572	10.0	9.93	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	41.4	
S 150 Xylenes, Total (URS)	1				0		20.0	21.0	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.7	
S 145 1,2-Dichloroethene, Total	1				0		20.0	19.6	
S 146 Xylenes, Total	106				0		20.0	21.0	
S 147 1,2-Dichloroethene, Total	96				0		20.0	19.6	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

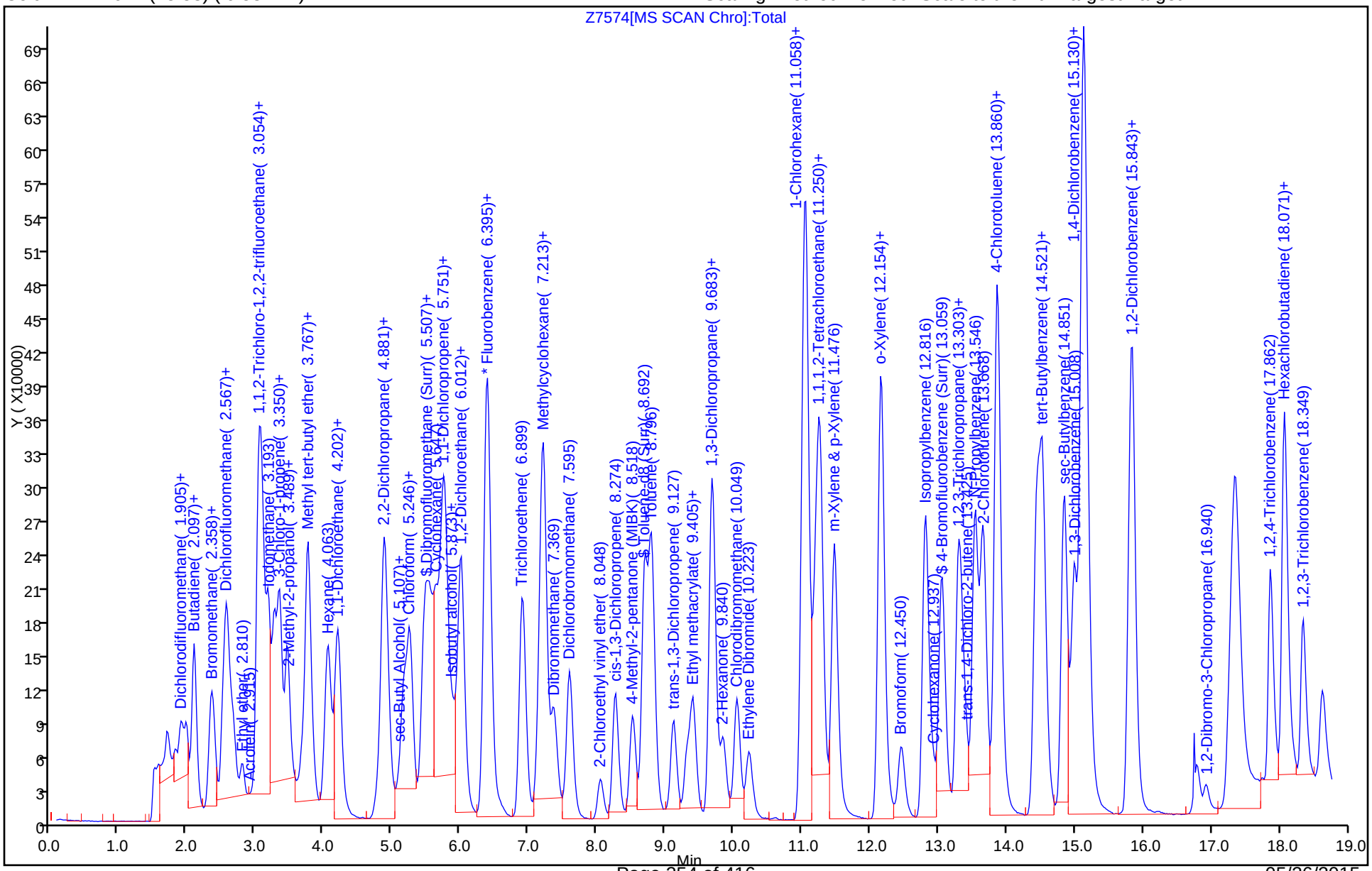
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 14-May-2015 14:33:05 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7574.D				
Injection Date:	14-May-2015 09:50:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	13
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

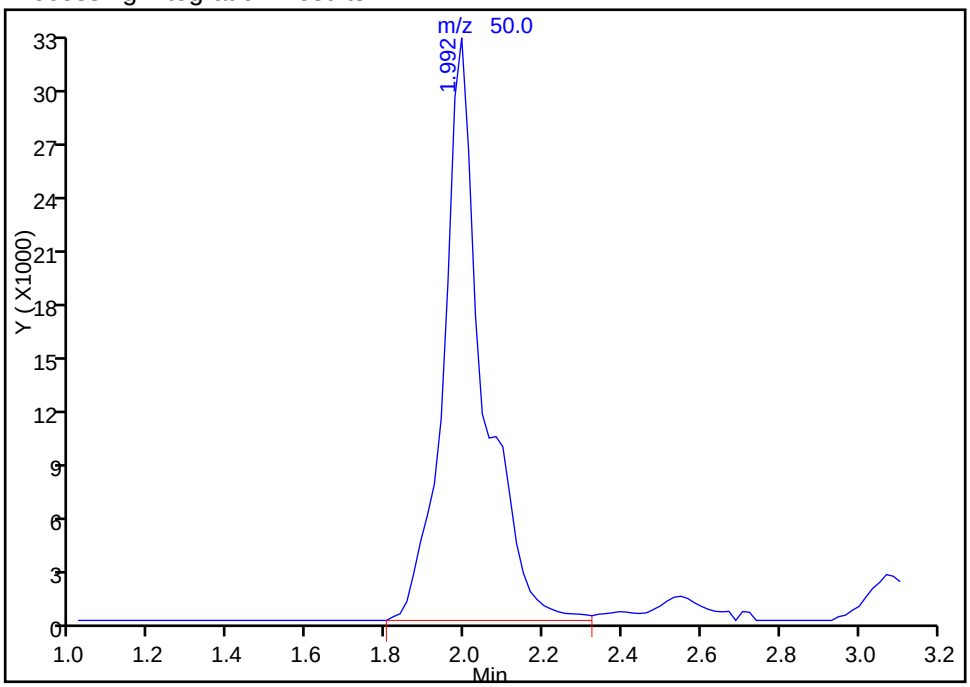
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7574.D				
Injection Date:	14-May-2015 09:50:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	6	Worklist Smp#:	13
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

30 Chloromethane, CAS: 74-87-3

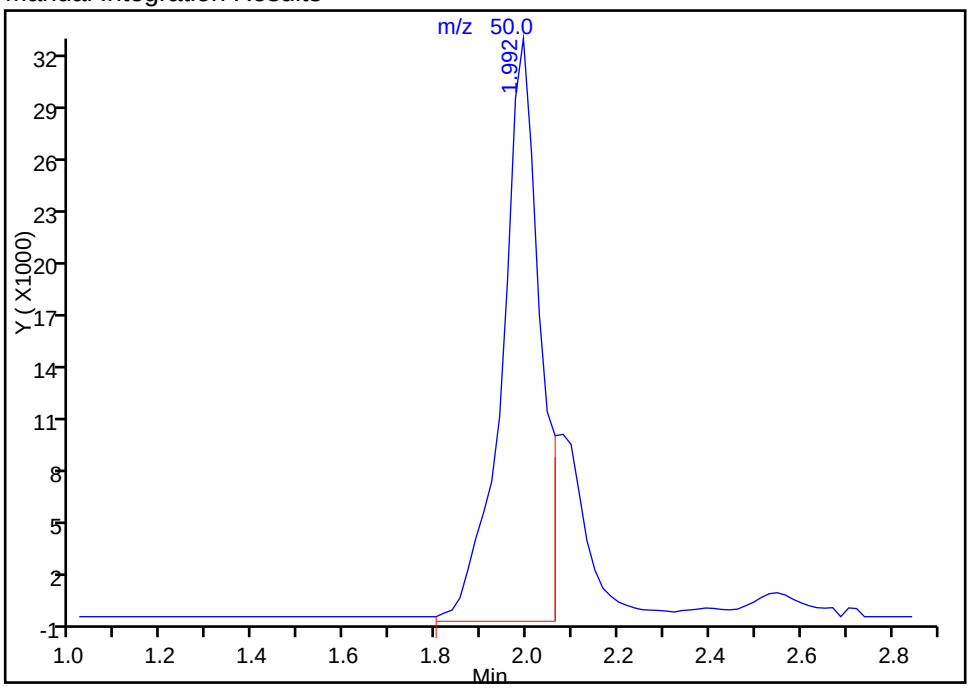
Processing Integration Results

RT: 1.99
Area: 228684
Amount: 11.983721
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 190881
Amount: 10.322759
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:50:53
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

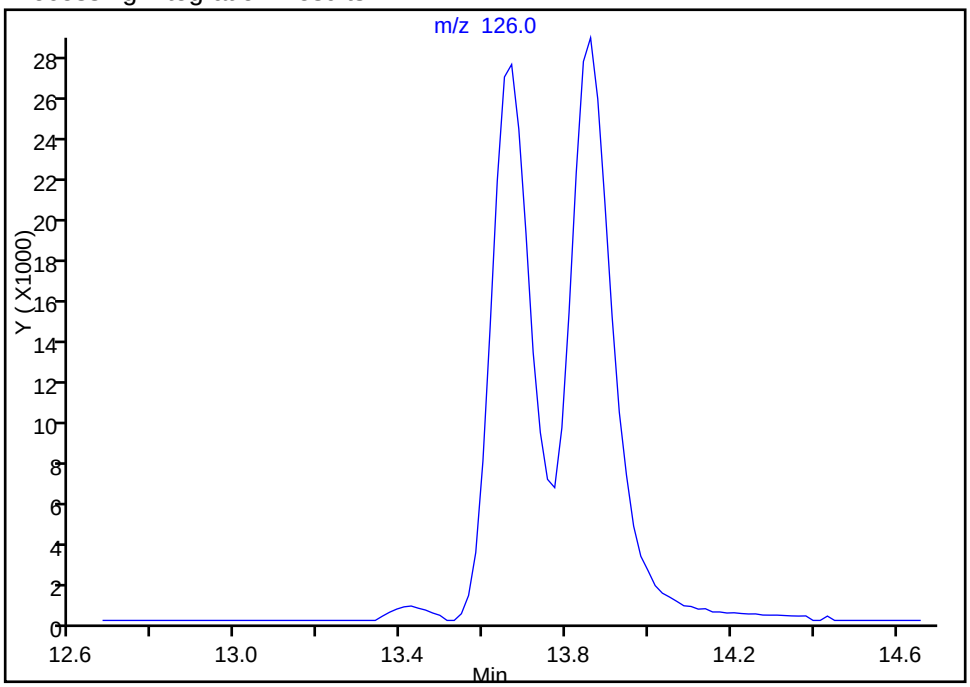
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7574.D				
Injection Date:	14-May-2015 09:50:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	6	Worklist Smp#:	13
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

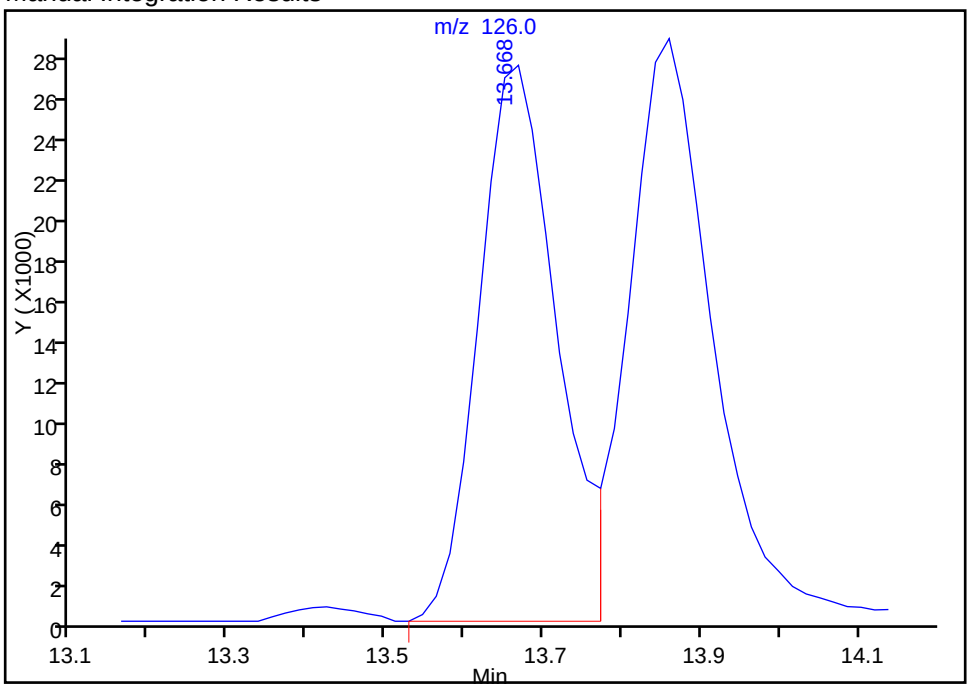
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT: 13.67
Area: 189875
Amount: 10.402300
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:50:53
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7575.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-May-2015 10:13:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:06 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 11:19:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.491	3.489	0.002	1	120069	250.0	250.0	
* 2 Fluorobenzene	96	6.379	6.377	0.002	80	732324	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.008	11.023	-0.015	82	177468	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.114	15.112	0.002	57	290371	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.457	5.473	-0.015	55	647480	20.0	18.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.892	5.908	-0.016	91	280255	20.0	18.7	
$ 10 Toluene-d8 (Surr)	98	8.694	8.692	0.002	90	1128395	20.0	19.0	
$ 11 4-Bromofluorobenzene (Surr	95	13.044	13.059	-0.015	81	567072	20.0	18.4	
27 Dichlorodifluoromethane	85	1.907	1.923	-0.016	98	890676	30.0	32.0	
30 Chloromethane	50	1.994	1.992	0.002	99	541882	30.0	29.9	M
31 Butadiene	54	2.081	2.097	-0.016	91	358592	NC	NC	
32 Vinyl chloride	62	2.099	2.114	-0.015	97	522229	30.0	29.9	
35 Bromomethane	94	2.342	2.340	0.002	88	544022	30.0	29.0	
36 Chloroethane	64	2.377	2.393	-0.016	97	340212	30.0	28.4	
37 Dichlorofluoromethane	67	2.534	2.549	-0.015	92	1340833	30.0	27.9	
38 Trichlorofluoromethane	101	2.586	2.601	-0.015	99	1151415	30.0	27.8	
40 Ethyl ether	59	2.795	2.810	-0.015	86	235569	30.0	29.8	
44 Acrolein	56	2.899	2.915	-0.016	78	129425	300.0	275.8	
48 Acetone	43	3.038	3.036	0.002	11	102876	120.0	116.4	
45 1,1-Dichloroethene	96	3.021	3.036	-0.015	92	540922	30.0	28.0	
46 1,1,2-Trichloro-1,2,2-trif	151	3.073	3.089	-0.016	96	849656	30.0	29.3	
49 Iodomethane	142	3.178	3.193	-0.015	98	1496329	30.0	29.6	
50 Carbon disulfide	76	3.265	3.280	-0.015	98	1944444	30.0	29.6	
52 3-Chloro-1-propene	41	3.334	3.350	-0.016	78	833192	30.0	29.3	
51 Methyl acetate	43	3.334	3.350	-0.016	68	569432	150.0	143.9	
54 Methylene Chloride	84	3.456	3.471	-0.015	90	456278	30.0	27.7	
55 2-Methyl-2-propanol	59	3.560	3.558	0.002	6	89496	300.0	299.5	
58 Acrylonitrile	53	3.682	3.680	0.002	93	365573	300.0	287.1	
57 trans-1,2-Dichloroethene	96	3.752	3.767	-0.015	77	575682	30.0	27.6	
56 Methyl tert-butyl ether	73	3.769	3.785	-0.016	81	816390	30.0	27.5	
59 Hexane	57	4.048	4.063	-0.015	92	810362	30.0	27.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.187	4.202	-0.015	96	1064910	30.0	28.8	
61 Vinyl acetate	43	4.222	4.220	0.002	88	1040408	60.0	58.2	
67 2-Butanone (MEK)	43	4.865	4.881	-0.016	39	235659	120.0	109.5	
65 cis-1,2-Dichloroethene	96	4.865	4.881	-0.016	83	580355	30.0	28.2	
66 2,2-Dichloropropane	77	4.900	4.898	0.002	55	930970	30.0	30.3	
70 sec-Butyl Alcohol	45	5.109	5.107	0.002	43	349073	900.0	921.4	
71 Chlorobromomethane	128	5.161	5.177	-0.016	90	302441	30.0	30.5	
72 Tetrahydrofuran	42	5.266	5.264	0.002	31	75392	60.0	52.7	
74 Chloroform	83	5.248	5.264	-0.016	87	1057680	30.0	28.9	
75 1,1,1-Trichloroethane	97	5.544	5.542	0.002	86	1019505	30.0	28.1	
76 Cyclohexane	56	5.648	5.647	0.002	89	926425	30.0	27.8	
78 1,1-Dichloropropene	75	5.735	5.751	-0.016	83	852975	30.0	28.5	
77 Carbon tetrachloride	117	5.770	5.786	-0.016	79	1051212	30.0	29.2	
80 Isobutyl alcohol	41	5.857	5.873	-0.016	37	97857	750.0	781.8	
82 1,2-Dichloroethane	62	5.996	5.995	0.001	44	423318	30.0	29.2	
81 Benzene	78	6.014	6.012	0.002	92	1659761	30.0	28.9	
84 n-Heptane	43	6.397	6.395	0.002	89	957039	30.0	28.5	
85 Trichloroethene	95	6.901	6.899	0.002	85	705908	30.0	28.2	
89 2-Pentanone	43	7.127	7.143	-0.016	92	524737	120.0	113.0	
90 1,2-Dichloropropane	63	7.197	7.195	0.002	80	590069	30.0	29.8	
87 Methylcyclohexane	55	7.214	7.213	0.001	90	787171	30.0	27.7	
92 Dibromomethane	93	7.371	7.369	0.002	84	323359	30.0	29.2	
94 Dichlorobromomethane	83	7.597	7.595	0.002	96	928115	30.0	29.7	
96 2-Chloroethyl vinyl ether	63	8.050	8.048	0.002	57	184483	30.0	29.4	
97 cis-1,3-Dichloropropene	75	8.259	8.274	-0.015	82	753925	30.0	29.7	
98 4-Methyl-2-pentanone (MIBK	43	8.520	8.518	0.002	62	746019	120.0	114.3	
99 Toluene	91	8.798	8.796	0.002	95	1763105	30.0	28.7	
100 trans-1,3-Dichloropropene	75	9.111	9.127	-0.016	91	510270	30.0	29.1	
101 Ethyl methacrylate	69	9.320	9.318	0.002	55	401380	30.0	28.1	
102 1,1,2-Trichloroethane	97	9.407	9.405	0.002	60	323489	30.0	29.4	
104 1,3-Dichloropropane	76	9.668	9.666	0.002	78	555578	30.0	30.4	
103 Tetrachloroethene	164	9.685	9.701	-0.016	97	668423	30.0	29.8	
105 2-Hexanone	43	9.842	9.840	0.002	68	482826	120.0	113.9	
107 Chlorodibromomethane	129	10.051	10.049	0.002	89	683003	30.0	31.1	
109 Ethylene Dibromide	107	10.225	10.223	0.002	76	445382	30.0	30.7	
111 Chlorobenzene	112	11.060	11.058	0.002	91	1308263	30.0	30.1	
110 1-Chlorohexane	91	11.060	11.058	0.002	74	785415	30.0	27.5	
113 1,1,1,2-Tetrachloroethane	131	11.217	11.215	0.002	84	668217	30.0	30.9	
112 Ethylbenzene	106	11.269	11.267	0.002	79	611541	30.0	28.6	
114 m-Xylene & p-Xylene	106	11.478	11.476	0.002	97	842517	30.0	29.7	
115 o-Xylene	106	12.156	12.154	0.002	88	719628	30.0	29.3	
116 Styrene	104	12.174	12.172	0.002	88	1173599	30.0	30.1	
117 Bromoform	173	12.452	12.450	0.002	96	357480	30.0	30.9	
118 Isopropylbenzene	105	12.818	12.816	0.002	95	2132432	30.0	28.3	
119 Cyclohexanone	55	12.939	12.937	0.002	74	190128	1200.0	1123.2	
121 Bromobenzene	156	13.305	13.303	0.002	91	606678	30.0	30.4	
122 1,1,2,2-Tetrachloroethane	83	13.305	13.320	-0.015	66	396358	30.0	28.9	
124 1,2,3-Trichloropropane	110	13.374	13.372	0.002	73	95965	30.0	30.4	
125 trans-1,4-Dichloro-2-buten	53	13.409	13.425	-0.016	13	76984	30.0	31.6	
123 N-Propylbenzene	120	13.548	13.546	0.002	87	570298	30.0	28.2	
126 2-Chlorotoluene	126	13.670	13.668	0.002	90	482729	30.0	28.3	a
128 4-Chlorotoluene	126	13.862	13.860	0.002	92	579357	30.0	29.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.879	13.877	0.002	90	1633843	30.0	28.0	
129 tert-Butylbenzene	119	14.453	14.451	0.002	90	1886898	30.0	27.8	
130 1,2,4-Trimethylbenzene	105	14.540	14.538	0.002	94	1574288	30.0	27.9	
131 sec-Butylbenzene	134	14.853	14.851	0.002	79	511917	30.0	28.1	
132 1,3-Dichlorobenzene	146	14.993	15.008	-0.015	78	995742	30.0	29.2	
133 4-Isopropyltoluene	119	15.132	15.130	0.002	94	2113180	30.0	27.5	
134 1,4-Dichlorobenzene	146	15.149	15.165	-0.016	74	1184410	30.0	29.0	
138 1,2-Dichlorobenzene	146	15.810	15.808	0.002	84	889863	30.0	29.9	
137 n-Butylbenzene	91	15.845	15.843	0.002	94	1782761	30.0	26.9	
139 1,2-Dibromo-3-Chloropropan	157	16.924	16.940	-0.016	82	73310	30.0	32.1	
141 1,2,4-Trichlorobenzene	180	17.864	17.862	0.002	94	601532	30.0	29.0	
142 Hexachlorobutadiene	225	18.073	18.071	0.001	95	555161	30.0	27.5	
143 Naphthalene	128	18.090	18.088	0.002	95	585486	30.0	29.4	
144 1,2,3-Trichlorobenzene	180	18.351	18.349	0.002	96	451729	30.0	28.5	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		120.0	120.6	
S 150 Xylenes, Total (URS)	1				0		60.0	59.0	
S 151 Total BTEX	1				0			145.2	
S 148 1,3-Dichloropropene, Total	1				0		60.0	58.8	
S 145 1,2-Dichloroethene, Total	1				0		60.0	55.8	
S 146 Xylenes, Total	106				0		60.0	59.0	
S 147 1,2-Dichloroethene, Total	96				0		60.0	55.8	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

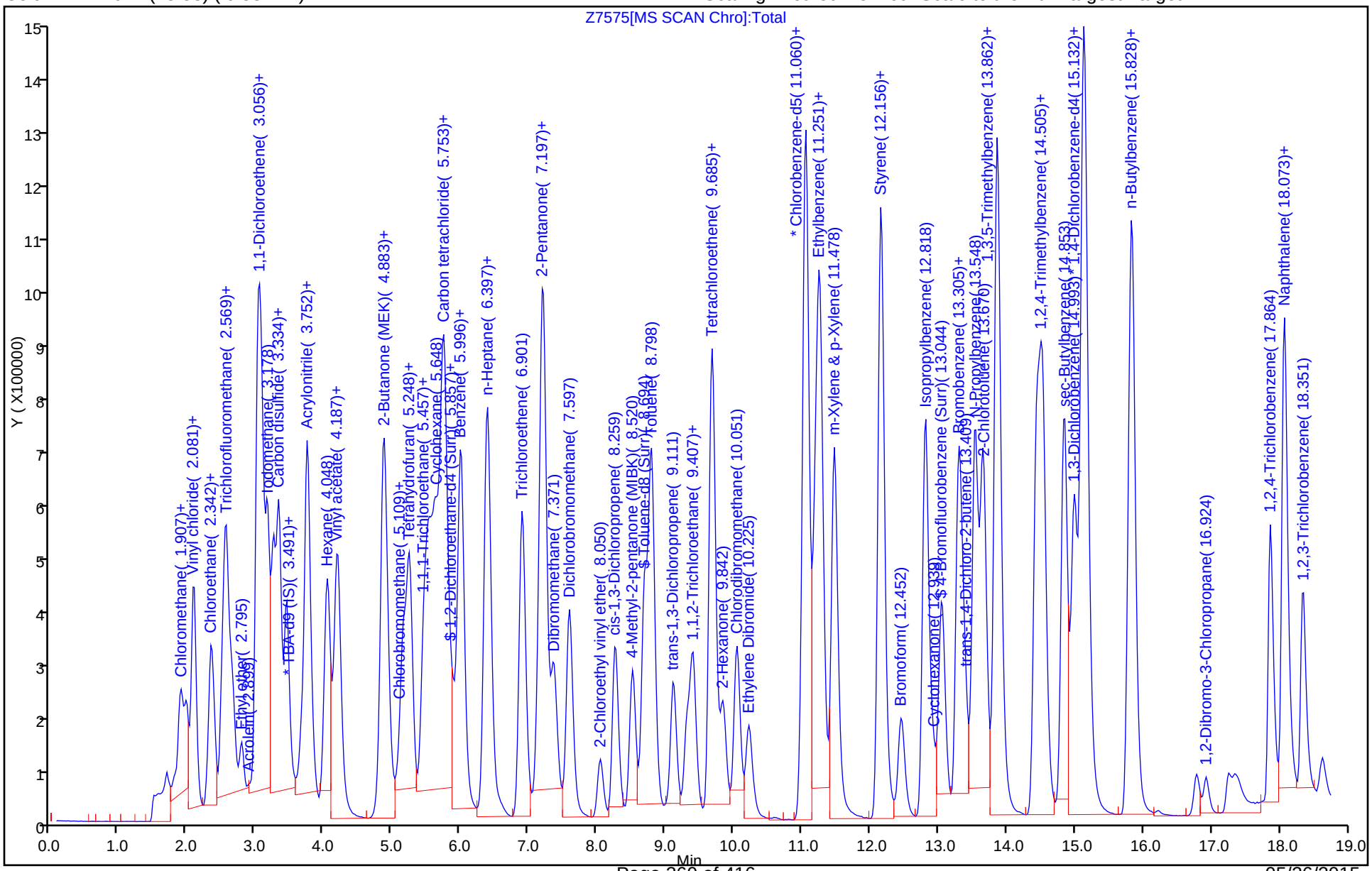
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 15.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 15.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 15.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 1.60	Units: uL

Report Date: 14-May-2015 14:33:06 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7575.D				
Injection Date:	14-May-2015 10:13:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	14
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

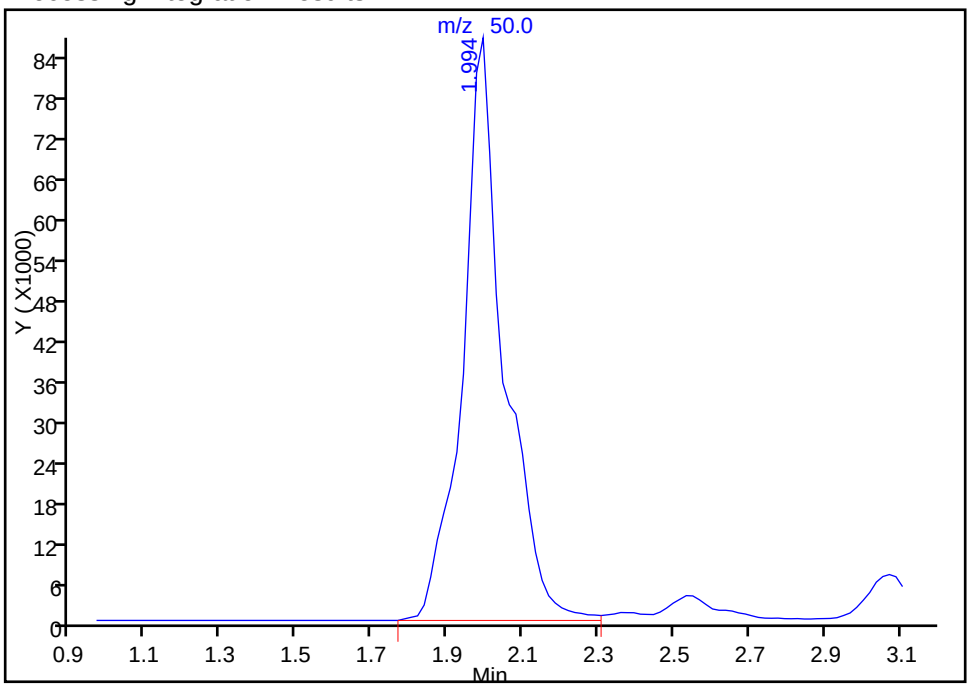
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7575.D				
Injection Date:	14-May-2015 10:13:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	7	Worklist Smp#:	14
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

30 Chloromethane, CAS: 74-87-3

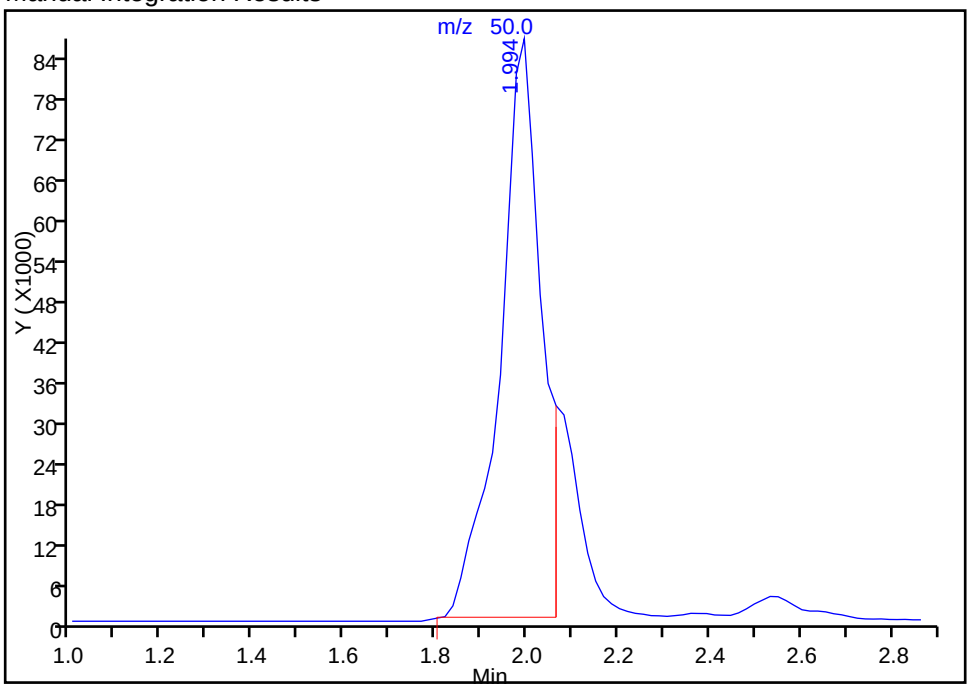
Processing Integration Results

RT: 1.99
Area: 657999
Amount: 35.347425
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 541882
Amount: 29.938031
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:52:21
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

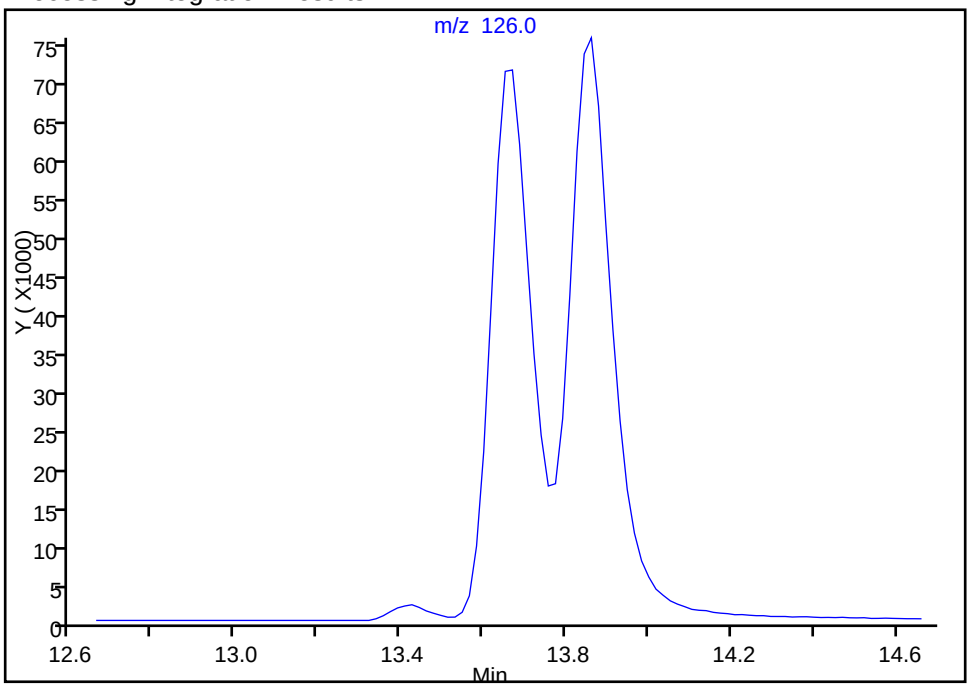
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7575.D				
Injection Date:	14-May-2015 10:13:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	7	Worklist Smp#:	14
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

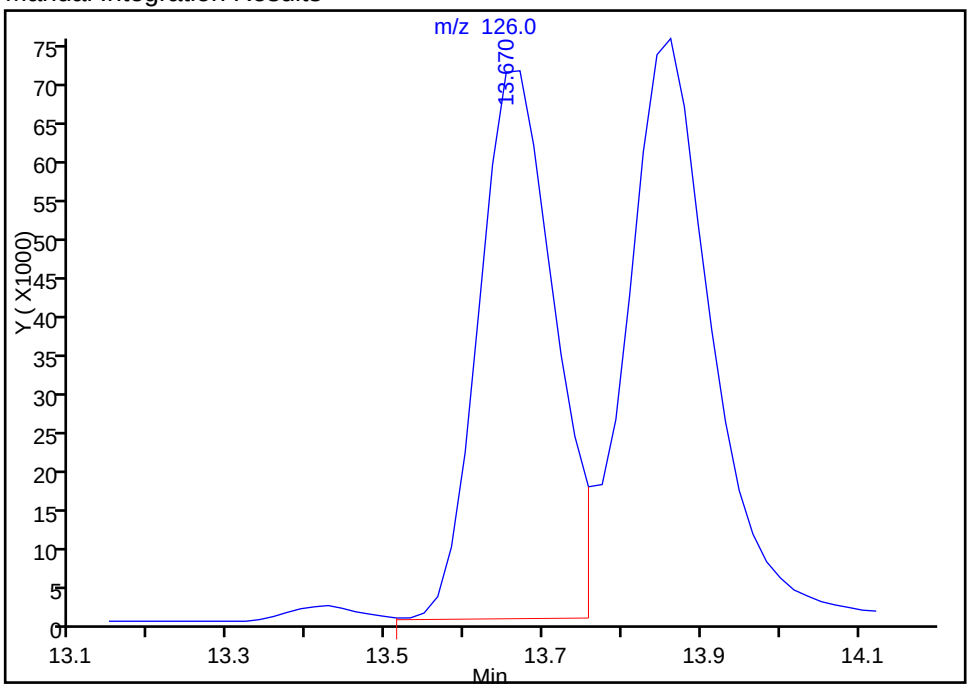
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT:	13.67
Area:	482729
Amount:	28.307749
Amount Units:	ug/l



Reviewer: moanm, 14-May-2015 12:52:21
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-May-2015 10:35:30 ALS Bottle#: 8 Worklist Smp#: 15
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:07 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 11:00:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.485	3.489	-0.004	1	131290	250.0	250.0	
* 2 Fluorobenzene	96	6.374	6.377	-0.003	59	715478	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.020	11.023	-0.003	62	175572	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.126	15.112	0.014	52	294548	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.469	5.473	-0.003	55	953464	30.0	28.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.904	5.908	-0.004	86	432312	30.0	29.5	
$ 10 Toluene-d8 (Surr)	98	8.706	8.692	0.014	87	1611831	30.0	27.4	
$ 11 4-Bromofluorobenzene (Surr	95	13.056	13.059	-0.003	73	827270	30.0	26.5	
27 Dichlorodifluoromethane	85	1.902	1.923	-0.021	92	1847006	60.0	67.9	
30 Chloromethane	50	1.989	1.992	-0.003	99	1155711	60.0	65.4	M
31 Butadiene	54	2.076	2.097	-0.021	93	752708	NC	NC	
32 Vinyl chloride	62	2.111	2.114	-0.003	97	1084568	60.0	63.6	
35 Bromomethane	94	2.337	2.340	-0.003	90	1099923	60.0	60.0	
36 Chloroethane	64	2.389	2.393	-0.004	96	687122	60.0	58.8	
37 Dichlorofluoromethane	67	2.546	2.549	-0.003	96	2693540	60.0	57.4	
38 Trichlorofluoromethane	101	2.580	2.601	-0.021	98	2355922	60.0	58.3	
40 Ethyl ether	59	2.789	2.810	-0.021	87	464773	60.0	60.1	
44 Acrolein	56	2.894	2.915	-0.021	61	263232	599.9	574.2	
48 Acetone	43	3.050	3.036	0.014	11	221062	240.0	256.1	
45 1,1-Dichloroethene	96	3.016	3.036	-0.020	92	1082932	60.0	57.4	
46 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.089	-0.004	88	1731781	60.0	61.0	
49 Iodomethane	142	3.172	3.193	-0.021	98	3024646	60.0	61.3	
50 Carbon disulfide	76	3.259	3.280	-0.021	98	3904398	60.0	60.8	
52 3-Chloro-1-propene	41	3.329	3.350	-0.021	77	1638267	60.0	59.0	
51 Methyl acetate	43	3.346	3.350	-0.004	74	1166999	300.0	302.0	
54 Methylene Chloride	84	3.451	3.471	-0.020	90	894658	60.0	55.6	
55 2-Methyl-2-propanol	59	3.590	3.558	0.032	7	189201	600.0	596.6	M
58 Acrylonitrile	53	3.677	3.680	-0.003	91	721582	600.0	580.1	
57 trans-1,2-Dichloroethene	96	3.746	3.767	-0.021	79	1115432	60.0	54.7	
56 Methyl tert-butyl ether	73	3.764	3.785	-0.021	82	1577984	60.0	54.3	
59 Hexane	57	4.042	4.063	-0.021	91	1558387	60.0	52.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.181	4.202	-0.021	96	2020412	60.0	55.9	
61 Vinyl acetate	43	4.216	4.220	-0.004	88	2018425	120.0	115.6	
67 2-Butanone (MEK)	43	4.877	4.881	-0.004	40	466192	240.0	221.7	
65 cis-1,2-Dichloroethene	96	4.860	4.881	-0.021	83	1119973	60.0	55.7	
66 2,2-Dichloropropane	77	4.895	4.898	-0.003	52	1738421	60.0	58.6	
70 sec-Butyl Alcohol	45	5.104	5.107	-0.003	49	728725	1800.0	1759.0	
71 Chlorobromomethane	128	5.156	5.177	-0.021	90	596946	60.0	61.7	
72 Tetrahydrofuran	42	5.260	5.264	-0.004	31	154878	120.0	110.9	
74 Chloroform	83	5.260	5.264	-0.004	91	2034517	60.0	56.9	
75 1,1,1-Trichloroethane	97	5.539	5.542	-0.003	93	2044728	60.0	57.6	
76 Cyclohexane	56	5.643	5.647	-0.003	89	1851103	60.0	56.8	
78 1,1-Dichloropropene	75	5.747	5.751	-0.004	84	1738117	60.0	59.4	
77 Carbon tetrachloride	117	5.782	5.786	-0.004	80	2135062	60.0	60.7	
80 Isobutyl alcohol	41	5.869	5.873	-0.004	43	216857	1500.0	1584.5	
82 1,2-Dichloroethane	62	5.991	5.995	-0.004	45	840077	60.0	59.4	
81 Benzene	78	6.008	6.012	-0.004	92	3295430	60.0	58.7	
84 n-Heptane	43	6.391	6.395	-0.004	90	1819880	60.0	55.4	
85 Trichloroethene	95	6.896	6.899	-0.003	84	1348734	60.0	55.1	
89 2-Pentanone	43	7.139	7.143	-0.004	86	1063528	240.0	234.4	
90 1,2-Dichloropropane	63	7.192	7.195	-0.003	81	1119022	60.0	57.8	
87 Methylcyclohexane	55	7.209	7.213	-0.004	89	1522306	60.0	54.9	
92 Dibromomethane	93	7.366	7.369	-0.003	83	628511	60.0	58.1	
94 Dichlorobromomethane	83	7.592	7.595	-0.003	96	1785739	60.0	58.4	
96 2-Chloroethyl vinyl ether	63	8.044	8.048	-0.004	76	358143	60.0	58.5	
97 cis-1,3-Dichloropropene	75	8.271	8.274	-0.004	85	1454781	60.0	58.0	
98 4-Methyl-2-pentanone (MIBK	43	8.514	8.518	-0.004	63	1473574	240.0	231.2	
99 Toluene	91	8.793	8.796	-0.003	96	3365323	60.0	56.2	
100 trans-1,3-Dichloropropene	75	9.123	9.127	-0.004	91	981386	60.0	57.3	
101 Ethyl methacrylate	69	9.315	9.318	-0.003	57	778778	60.0	55.1	
102 1,1,2-Trichloroethane	97	9.402	9.405	-0.003	65	622005	60.0	57.8	
104 1,3-Dichloropropane	76	9.680	9.666	0.014	72	1075440	60.0	59.4	
103 Tetrachloroethene	164	9.697	9.701	-0.004	97	1303187	60.0	58.8	
105 2-Hexanone	43	9.854	9.840	0.014	68	948098	240.0	226.1	
107 Chlorodibromomethane	129	10.045	10.049	-0.004	88	1366054	60.0	62.9	
109 Ethylene Dibromide	107	10.219	10.223	-0.004	68	874401	60.0	60.9	
111 Chlorobenzene	112	11.055	11.058	-0.003	91	2478055	60.0	57.6	
110 1-Chlorohexane	91	11.072	11.058	0.014	75	1477919	60.0	52.3	
113 1,1,1,2-Tetrachloroethane	131	11.211	11.215	-0.004	90	1292047	60.0	60.4	
112 Ethylbenzene	106	11.281	11.267	0.014	78	1175882	60.0	55.5	
114 m-Xylene & p-Xylene	106	11.472	11.476	-0.004	98	1552082	60.0	55.4	
115 o-Xylene	106	12.151	12.154	-0.003	88	1351146	60.0	55.5	
116 Styrene	104	12.168	12.172	-0.004	88	2225830	60.0	57.8	
117 Bromoform	173	12.464	12.450	0.014	96	744798	60.0	65.1	
118 Isopropylbenzene	105	12.812	12.816	-0.004	89	4111449	60.0	53.8	
119 Cyclohexanone	55	12.934	12.937	-0.003	68	405168	2400.0	2429.0	
121 Bromobenzene	156	13.299	13.303	-0.004	93	1195996	60.0	59.1	
122 1,1,2,2-Tetrachloroethane	83	13.317	13.320	-0.003	57	781606	60.0	56.1	
124 1,2,3-Trichloropropane	110	13.369	13.372	-0.003	75	193726	60.0	60.5	
125 trans-1,4-Dichloro-2-buten	53	13.421	13.425	-0.004	23	152726	60.0	61.7	
123 N-Propylbenzene	120	13.543	13.546	-0.003	86	1103334	60.0	53.8	
126 2-Chlorotoluene	126	13.665	13.668	-0.003	83	958270	60.0	55.4	a
128 4-Chlorotoluene	126	13.856	13.860	-0.004	98	1120394	60.0	57.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.874	13.877	-0.003	90	3110830	60.0	52.5	
129 tert-Butylbenzene	119	14.448	14.451	-0.003	90	3627084	60.0	52.7	
130 1,2,4-Trimethylbenzene	105	14.535	14.538	-0.003	94	3009752	60.0	52.5	
131 sec-Butylbenzene	134	14.848	14.851	-0.003	79	987928	60.0	53.4	
132 1,3-Dichlorobenzene	146	15.005	15.008	-0.003	82	1875299	60.0	54.2	
133 4-Isopropyltoluene	119	15.126	15.130	-0.004	94	4065641	60.0	52.1	
134 1,4-Dichlorobenzene	146	15.161	15.165	-0.004	78	2335706	60.0	56.3	
138 1,2-Dichlorobenzene	146	15.805	15.808	-0.003	91	1735474	60.0	57.4	
137 n-Butylbenzene	91	15.840	15.843	-0.003	94	3396741	60.0	50.6	
139 1,2-Dibromo-3-Chloropropan	157	16.936	16.940	-0.004	88	147715	60.0	63.8	
141 1,2,4-Trichlorobenzene	180	17.876	17.862	0.014	94	1133094	60.0	53.8	
142 Hexachlorobutadiene	225	18.067	18.071	-0.004	93	1045839	60.0	51.1	
143 Naphthalene	128	18.102	18.088	0.014	95	1137483	60.0	56.3	
144 1,2,3-Trichlorobenzene	180	18.345	18.349	-0.004	96	854203	60.0	53.1	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		240.0	243.4	
S 150 Xylenes, Total (URS)	1				0		120.0	110.9	
S 151 Total BTEX	1				0			281.3	
S 148 1,3-Dichloropropene, Total	1				0		120.0	115.3	
S 145 1,2-Dichloroethene, Total	1				0		120.0	110.5	
S 146 Xylenes, Total	106				0		120.0	110.9	
S 147 1,2-Dichloroethene, Total	96				0		120.0	110.5	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

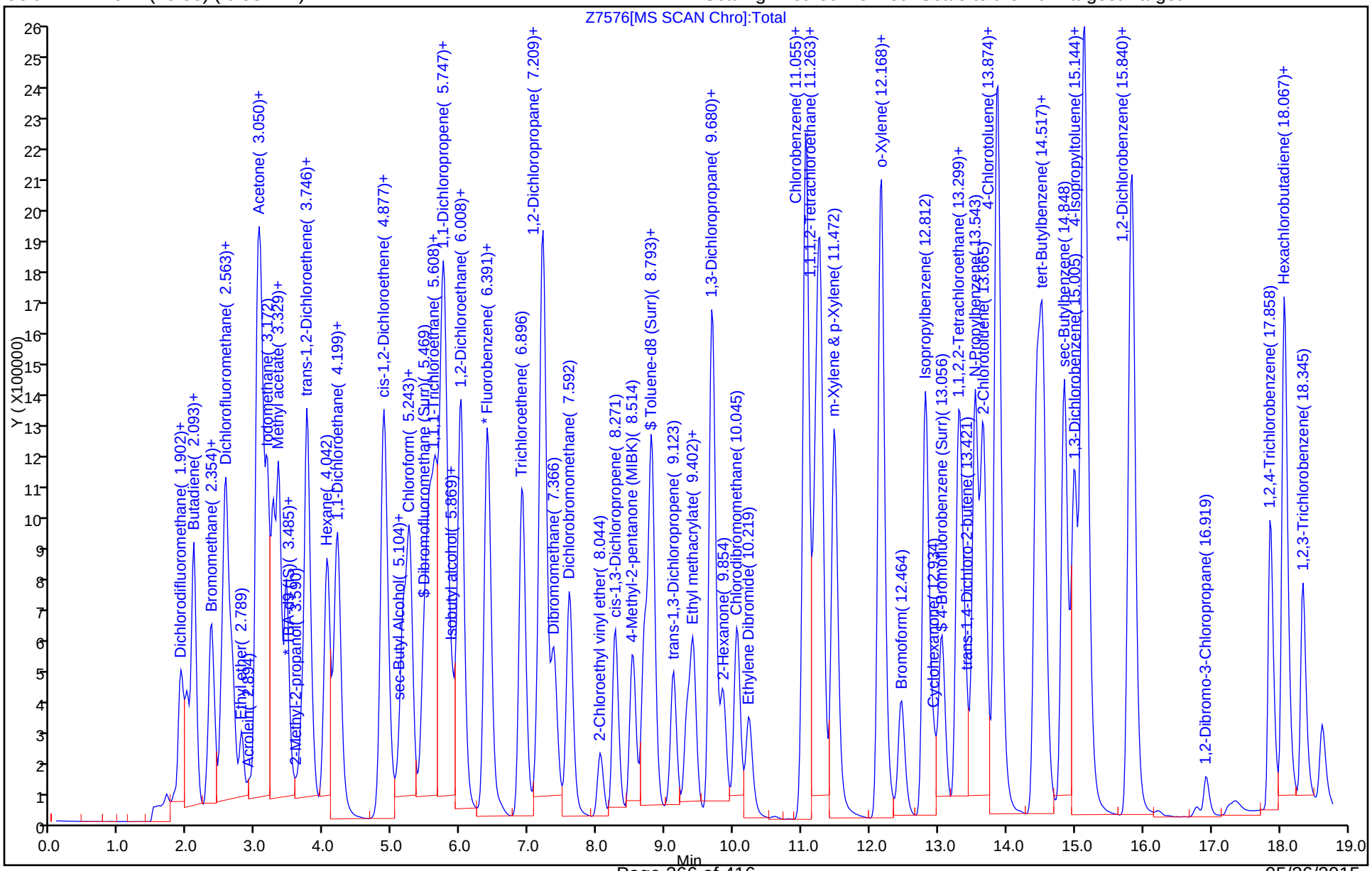
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-Main A_00022	Amount Added: 30.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 30.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 30.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 2.40	Units: uL

Report Date: 14-May-2015 14:33:07 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D				
Injection Date:	14-May-2015 10:35:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			Worklist Smp#:	15
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

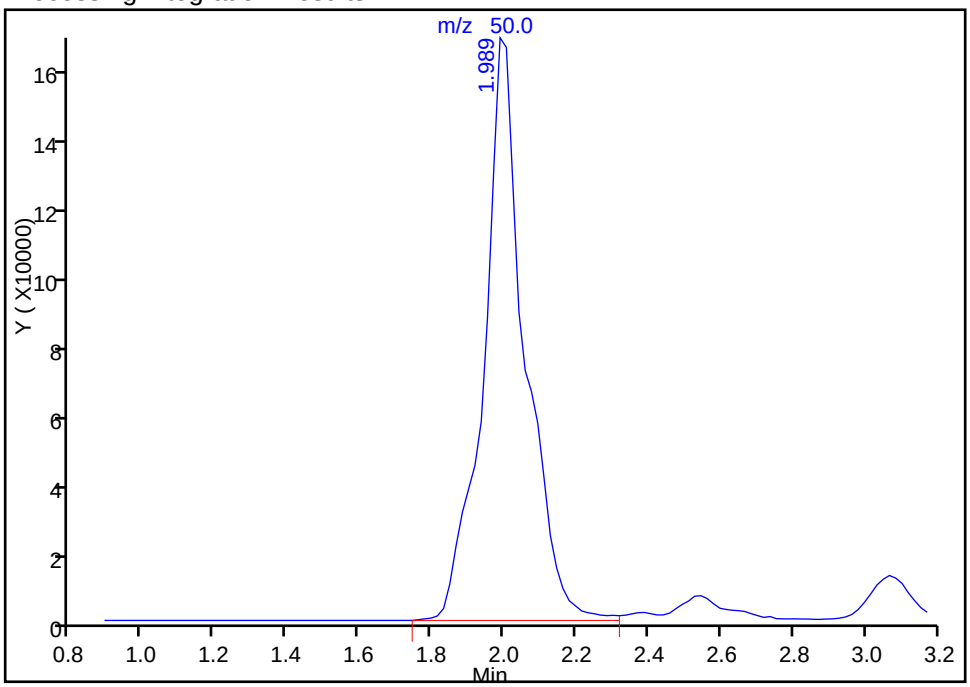
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D				
Injection Date:	14-May-2015 10:35:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

30 Chloromethane, CAS: 74-87-3

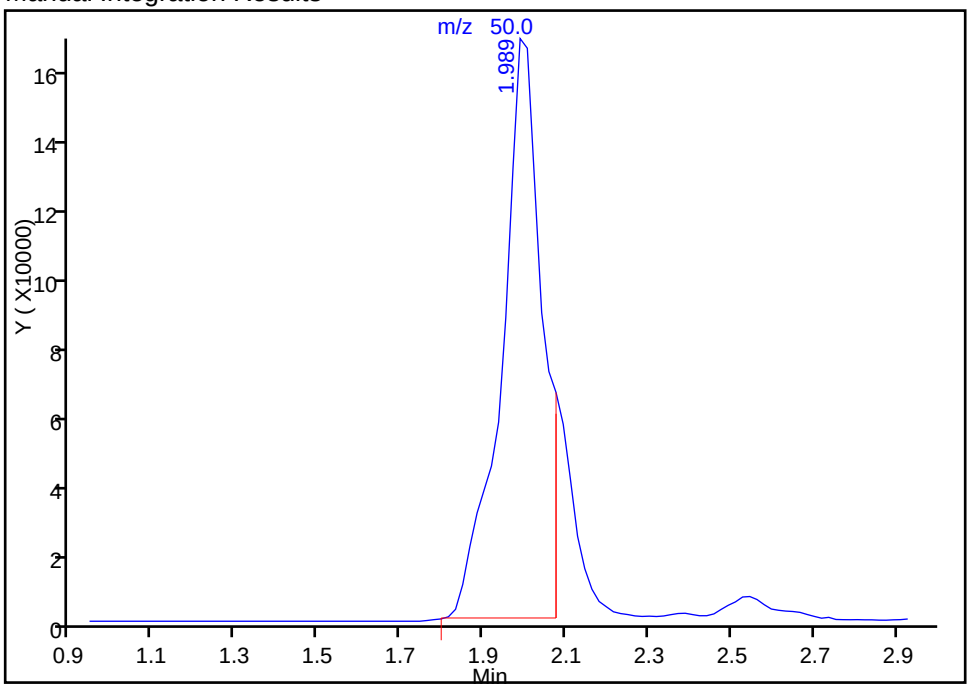
Processing Integration Results

RT: 1.99
Area: 1351330
Amount: 74.138337
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 1155711
Amount: 65.354386
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:54:02
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

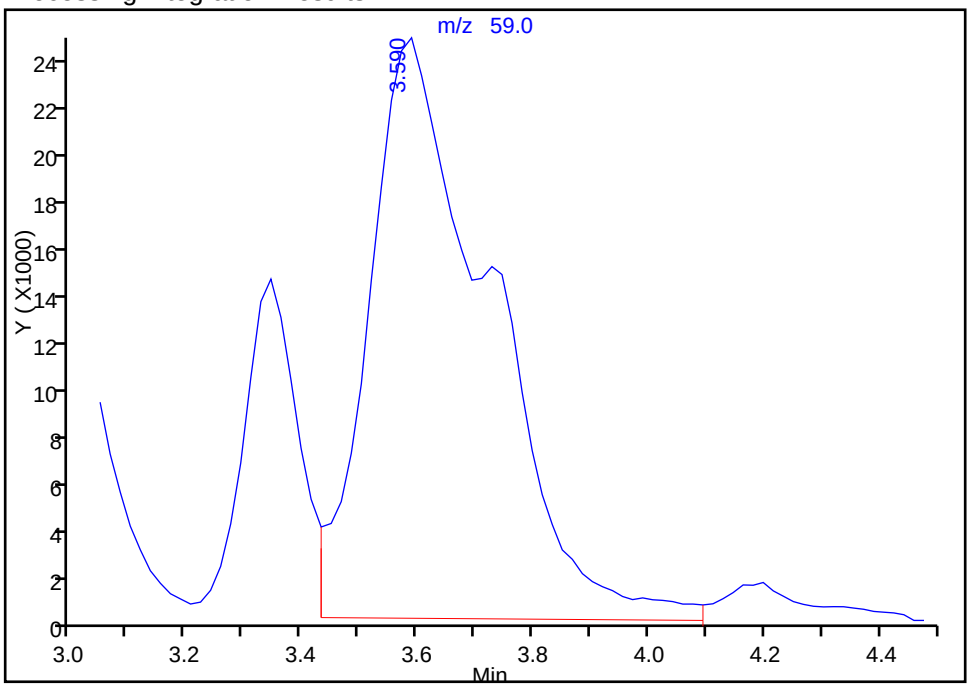
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D				
Injection Date:	14-May-2015 10:35:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

55 2-Methyl-2-propanol, CAS: 75-65-0

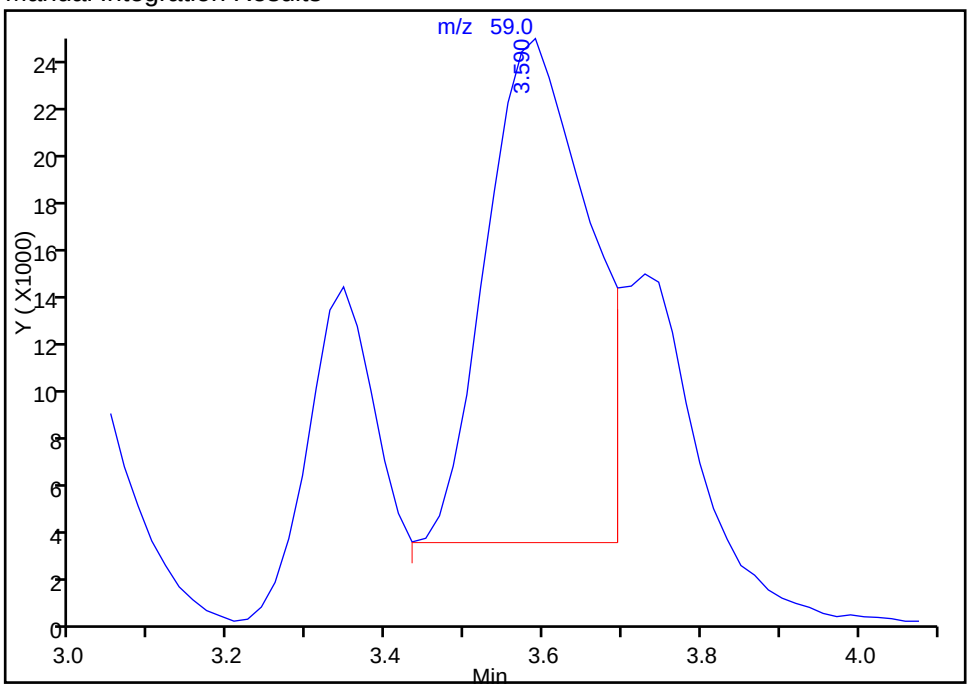
Processing Integration Results

RT: 3.59
Area: 359019
Amount: 601.4263
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 189201
Amount: 596.5961
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:54:02
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

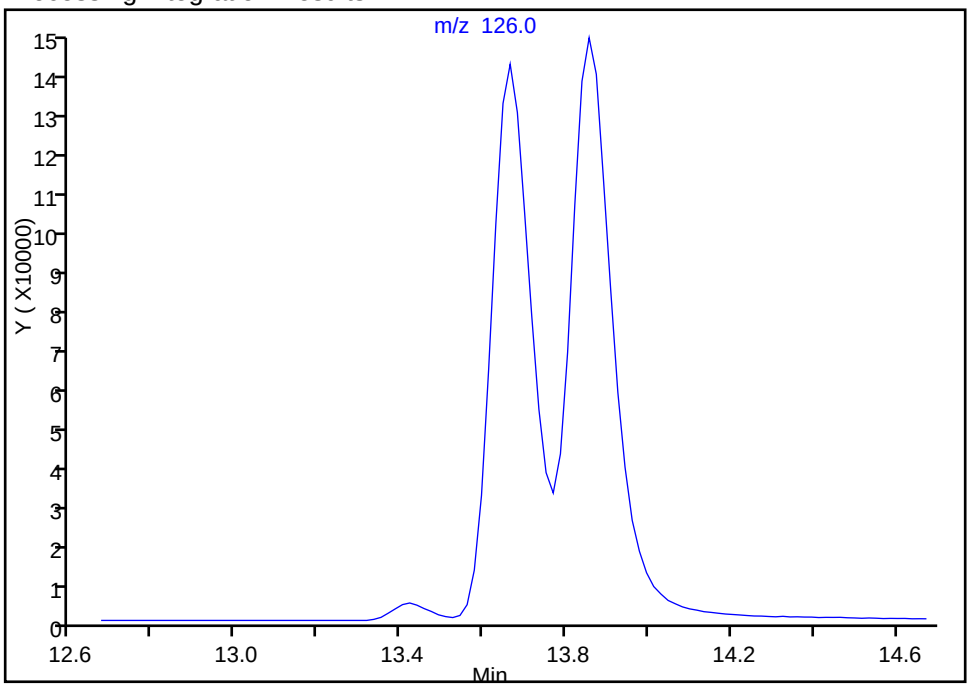
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D				
Injection Date:	14-May-2015 10:35:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

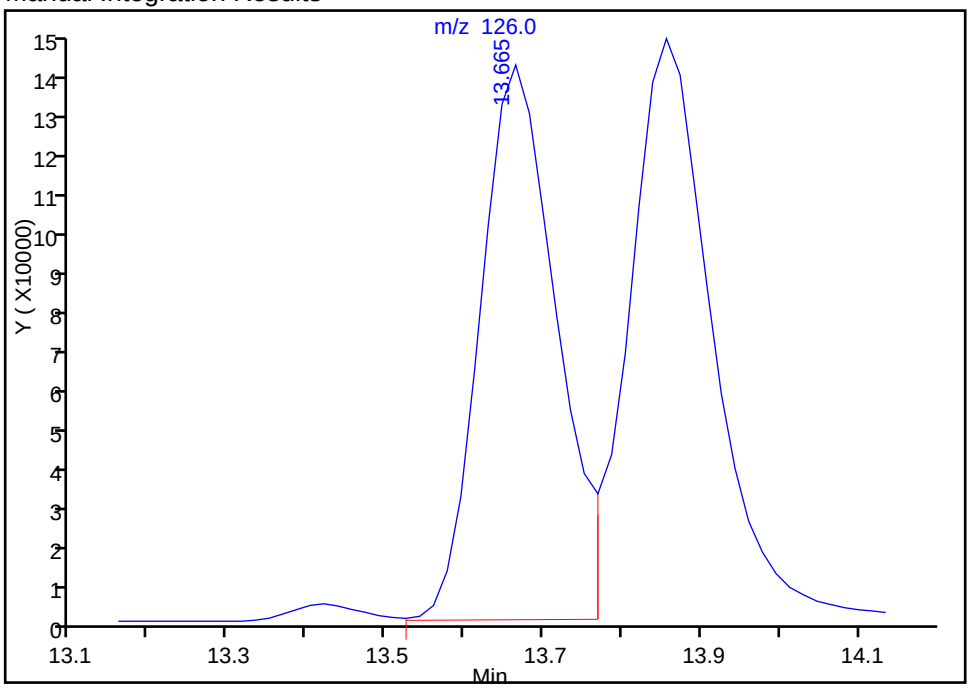
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT:	13.66
Area:	958270
Amount:	55.397095
Amount Units:	ug/l



Reviewer: moanm, 14-May-2015 12:54:02
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-274898/23 Calibration Date: 04/28/2015 18:14

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 16:19

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 17:55

Lab File ID: G2_3699.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Ave	0.0009	0.0010		565	500	13.0	20.0
Isopropyl alcohol	Ave	0.0050	0.0053		105	100	4.5	20.0
Acetonitrile	Ave	0.0087	0.0092		105	100	5.5	20.0
Isopropyl ether	Ave	0.1786	0.1960		11.0	10.0	9.7	20.0
2-Chloro-1,3-butadiene	Ave	0.4359	0.4554		10.4	10.0	4.5	20.0
Tert-butyl ethyl ether	Ave	0.5286	0.5686		10.8	10.0	7.6	20.0
Ethyl acetate	Ave	0.0590	0.0323		11.0	20.0	-45.2*	20.0
Propionitrile	Ave	0.0100	0.0109		108	100	8.4	20.0
Methacrylonitrile	Ave	0.0499	0.0539		108	100	8.0	20.0
Tert-amyl methyl ether	Ave	0.4143	0.4471		10.8	10.0	7.9	20.0
n-Butanol	Lin2		0.0032		269	250	7.6	20.0
Methyl methacrylate	Ave	0.0275	0.0303		22.1	20.0	10.3	20.0
2-Nitropropane	Ave	0.0183	0.0188		20.5	20.0	2.3	20.0
cis-1,4-Dichloro-2-butene	Ave	0.1111	0.1138		10.2	10.0	2.4	20.0
1,2,3-Trimethylbenzene	Ave	3.222	3.128		9.71	10.0	-2.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2166	0.2198		10.2	10.0	1.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1806	0.1870		10.4	10.0	3.5	20.0
Toluene-d8 (Surr)	Ave	5.193	5.247		10.1	10.0	1.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.176	1.142		9.70	10.0	-3.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3699.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 28-Apr-2015 18:14:30 ALS Bottle#: 24 Worklist Smp#: 23
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist:

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:44:20 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: contrerase Date: 28-Apr-2015 19:04:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	184517	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1646174	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	344955	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	94	442019	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	289492	10.0	10.2	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	246236	10.0	10.4	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1447960	10.0	10.1	
$ 9 4-Bromofluorobenzene (Surr	95	10.651	10.659	-0.008	90	403728	10.0	9.70	
18 Ethylene oxide	43	4.523	4.524	-0.001	100	1436079	2000.0	2179.6	
23 Ethanol	45	4.915	4.915	-0.001	98	64071	500.0	565.0	
27 Propene oxide	58	5.152	5.152	0.000	96	1183636	500.0	517.8	
30 Isopropyl alcohol	45	5.306	5.306	0.000	98	69218	100.0	104.5	
33 Acetonitrile	41	5.515	5.515	0.000	99	121411	100.0	105.5	
45 Isopropyl ether	87	6.182	6.183	-0.001	94	258080	10.0	11.0	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	91	599735	10.0	10.4	
48 Tert-butyl ethyl ether	59	6.454	6.461	-0.007	98	748820	10.0	10.8	
49 Ethyl acetate	43	6.583	6.576	0.007	99	85156	20.0	11.0	
51 Propionitrile	54	6.633	6.633	0.000	98	143064	100.0	108.4	
55 Methacrylonitrile	41	6.761	6.762	-0.001	92	710216	100.0	108.0	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	588795	10.0	10.8	
68 n-Butanol	56	7.548	7.548	0.000	35	105048	250.0	268.9	
71 Methyl methacrylate	100	7.948	7.949	-0.001	93	79771	20.0	22.1	
77 2-Nitropropane	41	8.306	8.299	0.007	99	49439	20.0	20.5	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	92	82164	10.0	9.60	
100 cis-1,4-Dichloro-2-butene	53	10.522	10.523	-0.001	94	40239	10.0	10.2	
115 1,2,3-Trimethylbenzene	105	11.631	11.638	-0.007	98	1106190	10.0	9.71	
120 1,3,5-Trichlorobenzene	180	12.925	12.932	-0.007	98	440593	10.0	9.83	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

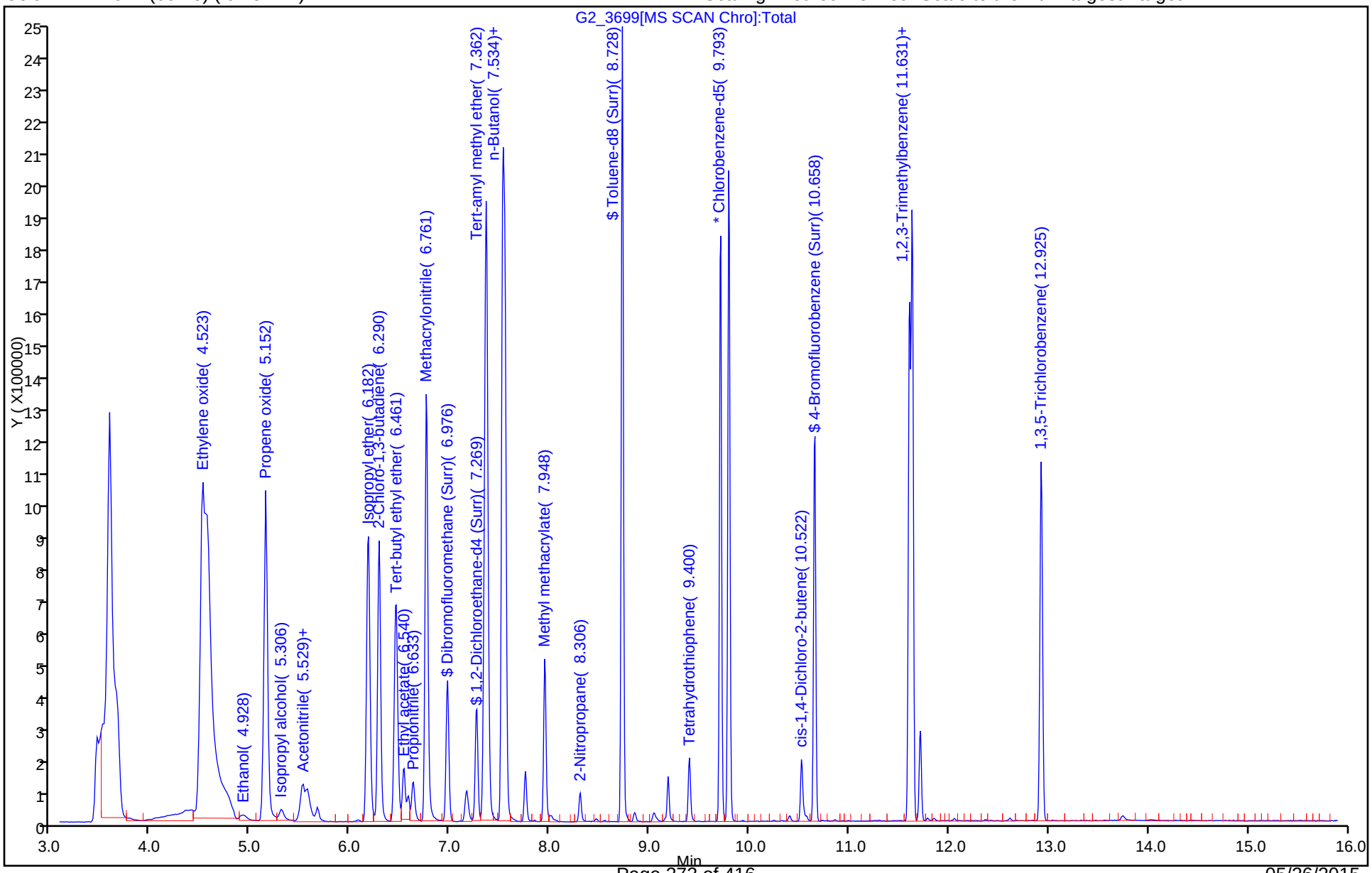
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL

Report Date: 28-Apr-2015 23:44:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3699.D				
Injection Date:	28-Apr-2015 18:14:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	icv			Worklist Smp#:	23
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-276788/16 Calibration Date: 05/11/2015 10:51

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4161.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4156	0.4257		5.12	5.00	2.4	20.0
Chloromethane	Ave	0.3758	0.3829	0.1000	5.09	5.00	1.9	20.0
Vinyl chloride	Ave	0.3683	0.4111		5.58	5.00	11.6	20.0
Bromomethane	Ave	0.2826	0.2855		5.05	5.00	1.0	20.0
Chloroethane	Ave	0.2725	0.2850		5.23	5.00	4.6	20.0
Dichlorofluoromethane	Ave	0.6885	0.6544		4.75	5.00	-5.0	20.0
Trichlorofluoromethane	Ave	0.5865	0.5485		4.68	5.00	-6.5	20.0
Ethyl ether	Ave	0.1361	0.1313		4.83	5.00	-3.5	20.0
Acrolein	Ave	0.0109	0.0111		51.0	50.0	1.9	20.0
Acetone	Ave	0.0294	0.0263		17.9	20.0	-10.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3053	0.2612		4.28	5.00	-14.4	20.0
1,1-Dichloroethene	Ave	0.3288	0.3089		4.70	5.00	-6.1	20.0
Iodomethane	Ave	0.5218	0.4902		4.70	5.00	-6.1	20.0
Methyl acetate	Ave	0.0642	0.0567		22.1	25.0	-11.6	20.0
3-Chloro-1-propene	Ave	0.5431	0.4934		4.54	5.00	-9.1	20.0
Carbon disulfide	Ave	1.414	1.320		4.67	5.00	-6.7	20.0
tert-Butyl alcohol	Ave	0.0076	0.0068		44.4	50.0	-11.1	20.0
Methylene Chloride	Lin2		0.2921		4.19	5.00	-16.2	20.0
Acrylonitrile	Ave	0.0322	0.0302		46.9	50.0	-6.3	20.0
Methyl tert-butyl ether	Ave	0.4287	0.3901		4.55	5.00	-9.0	20.0
trans-1,2-Dichloroethene	Ave	0.3587	0.3468		4.83	5.00	-3.3	20.0
Hexane	Ave	2.419	2.525		5.22	5.00	4.4	20.0
Vinyl acetate	Ave	0.2127	0.2124		9.99	10.0	-0.1	20.0
1,1-Dichloroethane	Ave	0.6102	0.5667	0.1000	4.64	5.00	-7.1	20.0
2-Butanone (MEK)	Ave	0.0475	0.0444		18.7	20.0	-6.7	20.0
sec-Butyl Alcohol	Lin		0.0042		155	150	3.4	20.0
cis-1,2-Dichloroethene	Ave	0.3301	0.3117		4.72	5.00	-5.6	20.0
2,2-Dichloropropane	Ave	0.5136	0.4634		4.51	5.00	-9.8	20.0
Bromochloromethane	Ave	0.1131	0.0981		4.34	5.00	-13.2	20.0
Chloroform	Ave	0.5027	0.4704		4.68	5.00	-6.4	20.0
Tetrahydrofuran	Ave	0.0216	0.0202		9.33	10.0	-6.7	20.0
Isobutyl alcohol	Ave	0.0020	0.0018		115	125	-8.3	20.0
1,1,1-Trichloroethane	Ave	0.5310	0.4580		4.31	5.00	-13.7	20.0
Cyclohexane	Ave	0.6448	0.6371		4.94	5.00	-1.2	20.0
1,1-Dichloropropene	Ave	0.4844	0.4869		5.02	5.00	0.5	20.0
Carbon tetrachloride	Lin2		0.3832		4.44	5.00	-11.2	20.0
1,2-Dichloroethane	Lin1		0.2348		4.47	5.00	-10.7	20.0
Benzene	Lin1		1.251		5.00	5.00	0.0	20.0
Trichloroethene	Ave	0.3511	0.3297		4.69	5.00	-6.1	20.0
2-Pentanone	Ave	0.0725	0.0543		15.0	20.0	-25.1*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-276788/16 Calibration Date: 05/11/2015 10:51

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4161.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2883	0.2691		4.67	5.00	-6.6	20.0
Methylcyclohexane	Ave	0.5313	0.5061		4.76	5.00	-4.8	20.0
1,4-Dioxane	Ave	0.0008	0.0008		95.4	100	-4.6	20.0
Dibromomethane	Ave	0.1001	0.0898		4.48	5.00	-10.3	20.0
Bromodichloromethane	Lin2		0.2686		4.25	5.00	-15.0	20.0
2-Chloroethyl vinyl ether	Lin		0.0145		5.49	5.00	9.8	20.0
cis-1,3-Dichloropropene	Lin2		1.522		4.95	5.00	-1.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0814	0.0799		19.6	20.0	-1.9	20.0
Toluene	Ave	1.421	1.375		4.84	5.00	-3.3	20.0
Ethyl methacrylate	Lin1		0.5868		4.69	5.00	-6.1	20.0
trans-1,3-Dichloropropene	Ave	0.2606	0.2581		4.95	5.00	-0.9	20.0
1,1,2-Trichloroethane	Ave	0.1451	0.1292		4.45	5.00	-11.0	20.0
2-Hexanone	Ave	0.2287	0.2324		20.3	20.0	1.6	20.0
1,3-Dichloropropane	Lin1		1.091		4.77	5.00	-4.6	20.0
Tetrachloroethene	Ave	1.425	1.341		4.70	5.00	-6.0	20.0
Chlorodibromomethane	Lin2		0.6160		4.40	5.00	-11.9	20.0
1,2-Dibromoethane	Ave	0.5529	0.5109		4.62	5.00	-7.6	20.0
1-Chlorohexane	Ave	2.139	2.272		5.31	5.00	6.2	20.0
Chlorobenzene	Lin1		3.587	0.3000	4.90	5.00	-2.0	20.0
1,1,1,2-Tetrachloroethane	Lin2		0.9670		4.56	5.00	-8.8	20.0
Ethylbenzene	Ave	2.319	2.209		4.76	5.00	-4.7	20.0
m-Xylene & p-Xylene	Ave	2.778	2.701		4.86	5.00	-2.8	20.0
o-Xylene	Ave	2.525	2.435		4.82	5.00	-3.6	20.0
Styrene	Ave	3.561	3.327		4.67	5.00	-6.6	20.0
Bromoform	Lin1		0.2578	0.1000	4.09	5.00	-18.2	20.0
Isopropylbenzene	Ave	4.678	5.118		5.47	5.00	9.4	20.0
Cyclohexanone	Ave	0.0104	0.0098		188	200	-6.2	20.0
1,1,2,2-Tetrachloroethane	Lin1		0.3981	0.3000	5.01	5.00	0.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0953	0.0919		4.82	5.00	-3.5	20.0
1,2,3-Trichloropropane	Ave	0.1108	0.1116		5.04	5.00	0.7	20.0
Bromobenzene	Ave	0.9492	0.9317		4.91	5.00	-1.9	20.0
N-Propylbenzene	Ave	1.360	1.431		5.26	5.00	5.2	20.0
1,3,5-Trimethylbenzene	Ave	3.746	3.906		5.21	5.00	4.3	20.0
2-Chlorotoluene	Ave	1.111	1.126		5.07	5.00	1.3	20.0
4-Chlorotoluene	Ave	1.082	1.092		5.05	5.00	0.9	20.0
tert-Butylbenzene	Ave	3.916	4.141		5.29	5.00	5.7	20.0
1,2,4-Trimethylbenzene	Ave	3.766	3.755		4.99	5.00	-0.3	20.0
sec-Butylbenzene	Ave	1.096	1.150		5.25	5.00	5.0	20.0
p-Isopropyltoluene	Ave	4.346	4.539		5.22	5.00	4.4	20.0
1,3-Dichlorobenzene	Ave	1.980	1.916		4.84	5.00	-3.2	20.0
1,4-Dichlorobenzene	Ave	1.801	1.840		5.11	5.00	2.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-276788/16 Calibration Date: 05/11/2015 10:51

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4161.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.910	4.022		5.14	5.00	2.9	20.0
1,2-Dichlorobenzene	Ave	1.543	1.479		4.79	5.00	-4.1	20.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0444		4.53	5.00	-9.5	20.0
1,2,4-Trichlorobenzene	Ave	0.9447	0.9155		4.85	5.00	-3.1	20.0
Hexachlorobutadiene	Lin1		0.7976		4.93	5.00	-1.3	20.0
Naphthalene	Lin1		0.8444		4.48	5.00	-10.3	20.0
1,2,3-Trichlorobenzene	Lin2		0.6546		4.67	5.00	-6.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2387		8.87	10.0	-11.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2369	0.1912		8.07	10.0	-19.3	20.0
Toluene-d8 (Surr)	Ave	5.207	5.133		9.86	10.0	-1.4	20.0
4-Bromofluorobenzene (Surr)	Ave	1.118	1.109		9.92	10.0	-0.8	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4161.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 11-May-2015 10:51:30 ALS Bottle#: 22 Worklist Smp#: 16
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist:

Method: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 11-May-2015 12:19:30 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: dukesa Date: 11-May-2015 16:38:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	220959	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	2074335	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	85	474189	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	94	641380	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	396104	10.0	8.87	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.269	-0.007	99	317228	10.0	8.07	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1947323	10.0	9.86	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.659	-0.001	92	569231	10.0	9.92	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	353210	5.00	5.12	
14 Chloromethane	50	4.091	4.105	-0.014	99	317688	5.00	5.09	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	341086	5.00	5.58	
138 Butadiene	54	4.258	4.258	0.000	0	298405	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	90	236922	5.00	5.05	
20 Chloroethane	64	4.663	4.663	0.000	100	236490	5.00	5.23	
21 Dichlorofluoromethane	67	4.803	4.817	-0.014	97	542939	5.00	4.75	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	455077	5.00	4.68	
25 Ethyl ether	59	5.068	5.068	0.000	92	108975	5.00	4.83	
28 Acrolein	56	5.194	5.194	0.000	99	91896	50.0	51.0	
29 Acetone	43	5.292	5.292	0.000	100	87241	20.0	17.9	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	256286	5.00	4.70	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.334	-0.014	94	216751	5.00	4.28	
34 Iodomethane	142	5.501	5.515	-0.014	97	406771	5.00	4.70	
35 Methyl acetate	43	5.529	5.529	0.000	97	235413	25.0	22.1	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	82	409420	5.00	4.54	
37 Carbon disulfide	76	5.613	5.613	0.000	99	1095392	5.00	4.67	
38 2-Methyl-2-propanol	59	5.627	5.641	-0.014	92	56285	50.0	44.4	
39 Methylene Chloride	84	5.669	5.683	-0.014	92	242350	5.00	4.19	
40 Acrylonitrile	53	5.808	5.809	-0.001	99	250380	50.0	46.9	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	323646	5.00	4.55	
42 trans-1,2-Dichloroethene	96	5.892	5.906	-0.014	98	287716	5.00	4.83	
43 Hexane	57	6.082	6.082	0.000	91	478894	5.00	5.22	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	352495	10.0	9.99	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	470223	5.00	4.64	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	147224	20.0	18.7	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	94	104667	150.0	155.1	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	80	258584	5.00	4.72	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	90	384476	5.00	4.51	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	81390	5.00	4.34	
57 Chloroform	83	6.847	6.848	-0.001	94	390310	5.00	4.68	
58 Tetrahydrofuran	42	6.883	6.876	0.007	86	33476	10.0	9.33	
59 Isobutyl alcohol	41	7.048	7.048	0.000	94	37817	125.0	114.7	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	380046	5.00	4.31	
61 Cyclohexane	56	7.155	7.162	-0.007	89	528652	5.00	4.94	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	403953	5.00	5.02	
63 Carbon tetrachloride	117	7.219	7.219	0.000	96	317927	5.00	4.44	
64 1,2-Dichloroethane	62	7.326	7.327	-0.001	97	194845	5.00	4.47	
66 Benzene	78	7.355	7.355	0.000	96	1037702	5.00	5.00	
67 n-Heptane	43	7.448	7.448	0.000	91	493156	5.00	5.12	
69 Trichloroethene	95	7.820	7.820	0.000	97	273543	5.00	4.69	
70 2-Pentanone	43	7.848	7.849	-0.001	99	180102	20.0	15.0	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	96	223313	5.00	4.67	
73 Methylcyclohexane	55	8.020	8.027	-0.007	92	419884	5.00	4.76	
74 1,4-Dioxane	88	8.049	8.056	-0.007	94	13447	100.0	95.4	
75 Dibromomethane	93	8.099	8.099	0.000	96	74504	5.00	4.48	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	222848	5.00	4.25	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	91	12015	5.00	5.49	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	96	288690	5.00	4.95	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	265178	20.0	19.6	
81 Toluene	91	8.778	8.778	0.000	98	1140588	5.00	4.84	
82 Ethyl methacrylate	69	8.857	8.864	-0.007	90	111303	5.00	4.69	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	214189	5.00	4.95	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	91	107202	5.00	4.45	
85 2-Hexanone	43	9.143	9.143	0.000	97	176343	20.0	20.3	
86 1,3-Dichloropropane	76	9.157	9.164	-0.007	96	206865	5.00	4.77	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	254277	5.00	4.70	
88 Chlorodibromomethane	129	9.350	9.350	0.000	90	116835	5.00	4.40	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	96898	5.00	4.62	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	430948	5.00	5.31	
92 Chlorobenzene	112	9.822	9.822	0.000	95	680320	5.00	4.90	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.851	-0.001	95	183422	5.00	4.56	
94 Ethylbenzene	106	9.858	9.858	0.000	98	419070	5.00	4.76	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	512223	5.00	4.86	
97 o-Xylene	106	10.251	10.251	0.000	89	461820	5.00	4.82	
96 Styrene	104	10.251	10.251	0.000	86	631059	5.00	4.67	
98 Bromoform	173	10.444	10.444	0.000	97	48890	5.00	4.09	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	1312970	5.00	5.47	
101 Cyclohexanone	55	10.623	10.623	0.000	93	74032	200.0	187.5	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	93	102131	5.00	5.01	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	84	23584	5.00	4.82	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	28632	5.00	5.04	
105 Bromobenzene	156	10.823	10.823	0.000	96	239017	5.00	4.91	
106 N-Propylbenzene	120	10.823	10.830	-0.007	99	367173	5.00	5.26	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	1002055	5.00	5.21	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.944	10.945	-0.001	96	288774	5.00	5.07	
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	280104	5.00	5.05	
110 tert-Butylbenzene	119	11.230	11.231	-0.001	92	1062299	5.00	5.29	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	97	963377	5.00	4.99	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	295119	5.00	5.25	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	1164530	5.00	5.22	
114 1,3-Dichlorobenzene	146	11.559	11.567	-0.008	98	491590	5.00	4.84	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	96	472065	5.00	5.11	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	1031947	5.00	5.14	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	379475	5.00	4.79	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.704	-0.001	80	11387	5.00	4.53	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	234881	5.00	4.85	
122 Hexachlorobutadiene	225	13.805	13.798	0.007	97	204633	5.00	4.93	
123 Naphthalene	128	13.998	13.998	0.000	97	216631	5.00	4.48	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	167925	5.00	4.67	
S 149 1,2-Dichloroethene, Total	96				0		10.0	9.55	
S 153 1,3-Dichloropropene, Total	1				0		10.0	9.90	
S 154 1,2-Dichloroethene, Total	1				0		10.0	9.55	
S 155 Xylenes, Total	106				0		10.0	9.68	
S 150 Trihalomethanes, Total	1				0		20.0	17.4	
S 151 Xylenes, Total (URS)	1				0		10.0	9.68	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

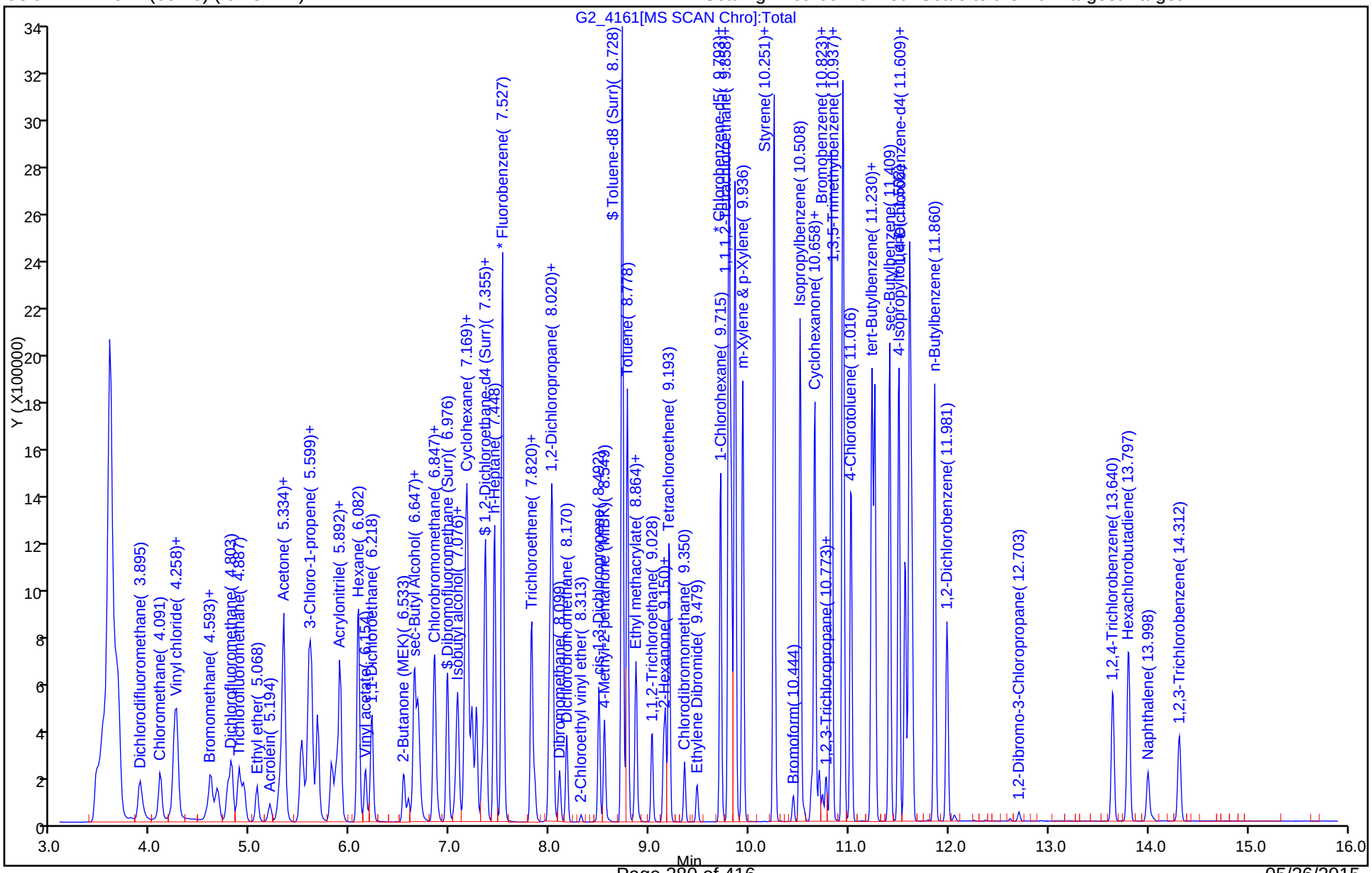
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL
MV-SS 2-Cleve_00020	Amount Added:	2.50	Units: uL
MV-Main B_00009	Amount Added:	2.50	Units: uL
MV-Gas/Ket B_00017	Amount Added:	2.50	Units: uL

Report Date: 11-May-2015 16:38:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4161.D				
Injection Date:	11-May-2015 10:51:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	icv			Worklist Smp#:	16
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCV 280-277119/2 Calibration Date: 05/12/2015 18:12

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4243.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4156	0.3753		9.03	10.0	-9.7	20.0
Chloromethane	Ave	0.3758	0.3061	0.1000	8.15	10.0	-18.5	20.0
Vinyl chloride	Ave	0.3683	0.3202		8.69	10.0	-13.1	20.0
Bromomethane	Ave	0.2826	0.2422		8.57	10.0	-14.3	20.0
Chloroethane	Ave	0.2725	0.2376		8.72	10.0	-12.8	20.0
Dichlorofluoromethane	Ave	0.6885	0.6212		9.02	10.0	-9.8	20.0
Trichlorofluoromethane	Ave	0.5865	0.5366		9.15	10.0	-8.5	20.0
Ethyl ether	Ave	0.1361	0.1260		9.26	10.0	-7.4	20.0
Acrolein	Ave	0.0109	0.0118		109	100	8.7	20.0
Acetone	Ave	0.0294	0.0283		38.5	40.0	-3.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3053	0.2875		9.42	10.0	-5.8	20.0
1,1-Dichloroethene	Ave	0.3288	0.3126		9.51	10.0	-4.9	20.0
Iodomethane	Ave	0.5218	0.4959		9.50	10.0	-5.0	20.0
Methyl acetate	Ave	0.0642	0.0609		47.4	50.0	-5.2	20.0
3-Chloro-1-propene	Ave	0.5431	0.5225		9.62	10.0	-3.8	20.0
Carbon disulfide	Ave	1.414	1.336		9.45	10.0	-5.5	20.0
tert-Butyl alcohol	Ave	0.0076	0.0077		100	100	0.5	20.0
Methylene Chloride	Lin2		0.2897		9.67	10.0	-3.3	20.0
Acrylonitrile	Ave	0.0322	0.0307		95.2	100	-4.8	20.0
Methyl tert-butyl ether	Ave	0.4287	0.4198		9.79	10.0	-2.1	20.0
trans-1,2-Dichloroethene	Ave	0.3587	0.3457		9.64	10.0	-3.6	20.0
Hexane	Ave	2.419	2.133		8.82	10.0	-11.8	20.0
Vinyl acetate	Ave	0.2127	0.2208		20.8	20.0	3.8	20.0
1,1-Dichloroethane	Ave	0.6102	0.5754	0.1000	9.43	10.0	-5.7	20.0
2-Butanone (MEK)	Ave	0.0475	0.0428		36.0	40.0	-10.0	20.0
sec-Butyl Alcohol	Lin		0.0044		270	300	-10.1	20.0
cis-1,2-Dichloroethene	Ave	0.3301	0.3144		9.52	10.0	-4.8	20.0
2,2-Dichloropropane	Ave	0.5136	0.5198		10.1	10.0	1.2	20.0
Bromochloromethane	Ave	0.1131	0.1076		9.51	10.0	-4.9	20.0
Chloroform	Ave	0.5027	0.5217		10.4	10.0	3.8	20.0
Tetrahydrofuran	Ave	0.0216	0.0204		18.9	20.0	-5.4	20.0
Isobutyl alcohol	Ave	0.0020	0.0022		270	250	8.0	20.0
1,1,1-Trichloroethane	Ave	0.5310	0.5278		9.94	10.0	-0.6	20.0
Cyclohexane	Ave	0.6448	0.6037		9.36	10.0	-6.4	20.0
1,1-Dichloropropene	Ave	0.4844	0.4631		9.56	10.0	-4.4	20.0
Carbon tetrachloride	Lin2		0.4468		10.2	10.0	1.8	20.0
1,2-Dichloroethane	Lin1		0.2768		10.5	10.0	5.4	20.0
Benzene	Lin1		1.249		9.97	10.0	-0.3	20.0
Trichloroethene	Ave	0.3511	0.3343		9.52	10.0	-4.8	20.0
2-Pentanone	Ave	0.0725	0.0791		43.7	40.0	9.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCV 280-277119/2 Calibration Date: 05/12/2015 18:12

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4243.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2883	0.2691		9.33	10.0	-6.7	20.0
Methylcyclohexane	Ave	0.5313	0.5076		9.56	10.0	-4.4	20.0
1,4-Dioxane	Ave	0.0008	0.0009		207	200	3.6	20.0
Dibromomethane	Ave	0.1001	0.0976		9.75	10.0	-2.5	20.0
Bromodichloromethane	Lin2		0.3145		9.78	10.0	-2.2	20.0
2-Chloroethyl vinyl ether	Lin		0.0151		7.54	10.0	-24.6*	20.0
cis-1,3-Dichloropropene	Lin2		1.413		9.05	10.0	-9.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0814	0.0767		37.7	40.0	-5.8	20.0
Toluene	Ave	1.421	1.398		9.84	10.0	-1.6	20.0
Ethyl methacrylate	Lin1		0.5637		8.49	10.0	-15.1	20.0
trans-1,3-Dichloropropene	Ave	0.2606	0.2636		10.1	10.0	1.2	20.0
1,1,2-Trichloroethane	Ave	0.1451	0.1407		9.70	10.0	-3.0	20.0
2-Hexanone	Ave	0.2287	0.2076		36.3	40.0	-9.2	20.0
1,3-Dichloropropane	Lin1		1.093		9.50	10.0	-5.0	20.0
Tetrachloroethene	Ave	1.425	1.300		9.12	10.0	-8.8	20.0
Chlorodibromomethane	Lin2		0.6716		9.40	10.0	-6.0	20.0
1,2-Dibromoethane	Ave	0.5529	0.5118		9.26	10.0	-7.4	20.0
1-Chlorohexane	Ave	2.139	2.042		9.55	10.0	-4.5	20.0
Chlorobenzene	Lin1		3.571	0.3000	9.75	10.0	-2.5	20.0
1,1,1,2-Tetrachloroethane	Lin2		1.052		9.75	10.0	-2.5	20.0
Ethylbenzene	Ave	2.319	2.139		9.22	10.0	-7.8	20.0
m-Xylene & p-Xylene	Ave	2.778	2.641		9.51	10.0	-4.9	20.0
o-Xylene	Ave	2.525	2.439		9.66	10.0	-3.4	20.0
Styrene	Ave	3.561	3.566		10.0	10.0	0.1	20.0
Bromoform	Lin1		0.3006	0.1000	8.79	10.0	-12.1	20.0
Isopropylbenzene	Ave	4.678	4.513		9.65	10.0	-3.5	20.0
Cyclohexanone	Ave	0.0104	0.0098		376	400	-6.0	20.0
1,1,2,2-Tetrachloroethane	Lin1		0.3675	0.3000	9.18	10.0	-8.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0953	0.0903		9.48	10.0	-5.2	20.0
1,2,3-Trichloropropane	Ave	0.1108	0.1026		9.26	10.0	-7.4	20.0
Bromobenzene	Ave	0.9492	0.8847		9.32	10.0	-6.8	20.0
N-Propylbenzene	Ave	1.360	1.314		9.66	10.0	-3.4	20.0
1,3,5-Trimethylbenzene	Ave	3.746	3.674		9.81	10.0	-1.9	20.0
2-Chlorotoluene	Ave	1.111	1.029		9.27	10.0	-7.3	20.0
4-Chlorotoluene	Ave	1.082	1.024		9.46	10.0	-5.4	20.0
tert-Butylbenzene	Ave	3.916	3.754		9.59	10.0	-4.1	20.0
1,2,4-Trimethylbenzene	Ave	3.766	3.674		9.76	10.0	-2.4	20.0
sec-Butylbenzene	Ave	1.096	1.057		9.65	10.0	-3.5	20.0
p-Isopropyltoluene	Ave	4.346	4.316		9.93	10.0	-0.7	20.0
1,3-Dichlorobenzene	Ave	1.980	1.855		9.37	10.0	-6.3	20.0
1,4-Dichlorobenzene	Ave	1.801	1.749		9.71	10.0	-2.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCV 280-277119/2 Calibration Date: 05/12/2015 18:12

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4243.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.910	3.873		9.91	10.0	-0.9	20.0
1,2-Dichlorobenzene	Ave	1.543	1.438		9.32	10.0	-6.8	20.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0451		8.55	10.0	-14.5	20.0
1,2,4-Trichlorobenzene	Ave	0.9447	0.9111		9.64	10.0	-3.6	20.0
Hexachlorobutadiene	Lin1		0.8199		10.1	10.0	1.4	20.0
Naphthalene	Lin1		0.8544		8.45	10.0	-15.5	20.0
1,2,3-Trichlorobenzene	Lin2		0.6577		9.36	10.0	-6.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2599		9.65	10.0	-3.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2369	0.2360		9.96	10.0	-0.4	20.0
Toluene-d8 (Surr)	Ave	5.207	4.945		9.50	10.0	-5.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.118	1.069		9.56	10.0	-4.4	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4243.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-May-2015 18:12:30 ALS Bottle#: 10 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-May-2015 16:10:10 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 12-May-2015 18:43:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	156342	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	1459672	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.800	0.000	86	357998	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	94	550051	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	303525	10.0	9.65	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	97	275602	10.0	9.96	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1416262	10.0	9.50	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	91	470307	10.0	9.56	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	438271	10.0	9.03	
14 Chloromethane	50	4.091	4.091	0.000	99	357486	10.0	8.15	
16 Vinyl chloride	62	4.230	4.230	0.000	98	373888	10.0	8.69	
138 Butadiene	54	4.258	4.258	0.000	0	310338	NC	NC	
19 Bromomethane	94	4.593	4.593	0.000	91	282816	10.0	8.57	
20 Chloroethane	64	4.663	4.663	0.000	100	277491	10.0	8.72	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	725387	10.0	9.02	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	99	626599	10.0	9.15	
25 Ethyl ether	59	5.068	5.068	0.000	91	147073	10.0	9.26	
28 Acrolein	56	5.194	5.194	0.000	98	137893	100.0	108.7	
29 Acetone	43	5.292	5.292	0.000	99	132165	40.0	38.5	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	94	335763	10.0	9.42	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	97	365062	10.0	9.51	
34 Iodomethane	142	5.501	5.501	0.000	99	579059	10.0	9.50	
35 Methyl acetate	43	5.529	5.529	0.000	97	355275	50.0	47.4	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	81	610096	10.0	9.62	
37 Carbon disulfide	76	5.613	5.613	0.000	99	1560515	10.0	9.45	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	92	89523	100.0	100.5	
39 Methylene Chloride	84	5.669	5.669	0.000	93	338296	10.0	9.67	
40 Acrylonitrile	53	5.808	5.808	0.000	98	357955	100.0	95.2	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	97	490165	10.0	9.79	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	97	403660	10.0	9.64	
43 Hexane	57	6.082	6.082	0.000	93	610984	10.0	8.82	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	97	515706	20.0	20.8	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	671965	10.0	9.43	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	199953	40.0	36.0	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	95	154501	300.0	269.7	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	80	367125	10.0	9.52	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	89	606959	10.0	10.1	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	125614	10.0	9.51	
57 Chloroform	83	6.847	6.847	0.000	95	609193	10.0	10.4	
58 Tetrahydrofuran	42	6.876	6.876	0.000	85	47738	20.0	18.9	
59 Isobutyl alcohol	41	7.048	7.048	0.000	90	62652	250.0	269.9	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	616378	10.0	9.94	
61 Cyclohexane	56	7.155	7.155	0.000	91	704942	10.0	9.36	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	95	540809	10.0	9.56	
63 Carbon tetrachloride	117	7.219	7.219	0.000	96	521774	10.0	10.2	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	98	323202	10.0	10.5	
66 Benzene	78	7.355	7.355	0.000	96	1458957	10.0	9.97	
67 n-Heptane	43	7.448	7.448	0.000	91	647372	10.0	9.54	
69 Trichloroethene	95	7.820	7.820	0.000	97	390386	10.0	9.52	
70 2-Pentanone	43	7.848	7.848	0.000	99	369662	40.0	43.7	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	92	314180	10.0	9.33	
73 Methylcyclohexane	55	8.020	8.020	0.000	92	592791	10.0	9.56	
74 1,4-Dioxane	88	8.056	8.056	0.000	92	20553	200.0	207.1	
75 Dibromomethane	93	8.099	8.099	0.000	95	113957	10.0	9.75	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	367294	10.0	9.78	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	92	17634	10.0	7.54	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	94	404568	10.0	9.05	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	358359	40.0	37.7	
81 Toluene	91	8.778	8.778	0.000	98	1632390	10.0	9.84	
82 Ethyl methacrylate	69	8.864	8.864	0.000	91	161428	10.0	8.49	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	307832	10.0	10.1	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	93	164290	10.0	9.70	
85 2-Hexanone	43	9.143	9.143	0.000	96	237833	40.0	36.3	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	97	312938	10.0	9.50	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	372338	10.0	9.12	
88 Chlorodibromomethane	129	9.357	9.357	0.000	90	192344	10.0	9.40	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	146579	10.0	9.26	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	584959	10.0	9.55	
92 Chlorobenzene	112	9.822	9.822	0.000	95	1022616	10.0	9.75	
93 1,1,1,2-Tetrachloroethane	131	9.858	9.858	0.000	92	301326	10.0	9.75	
94 Ethylbenzene	106	9.865	9.865	0.000	98	612718	10.0	9.22	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	99	756316	10.0	9.51	
97 o-Xylene	106	10.251	10.251	0.000	88	698388	10.0	9.66	
96 Styrene	104	10.251	10.251	0.000	86	1021222	10.0	10.0	
98 Bromoform	173	10.444	10.444	0.000	96	86101	10.0	8.79	
99 Isopropylbenzene	105	10.515	10.515	0.000	96	1985843	10.0	9.65	
101 Cyclohexanone	55	10.630	10.630	0.000	94	112130	400.0	376.2	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	161710	10.0	9.18	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	85	39753	10.0	9.48	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	45150	10.0	9.26	
106 N-Propylbenzene	120	10.830	10.830	0.000	98	578288	10.0	9.66	
105 Bromobenzene	156	10.823	10.823	0.000	97	389290	10.0	9.32	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	1616579	10.0	9.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.952	10.952	0.000	96	452906	10.0	9.27	
109 4-Chlorotoluene	126	11.023	11.023	0.000	98	450383	10.0	9.46	
110 tert-Butylbenzene	119	11.230	11.230	0.000	93	1651748	10.0	9.59	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	98	1616882	10.0	9.76	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	465115	10.0	9.65	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	1899237	10.0	9.93	
114 1,3-Dichlorobenzene	146	11.567	11.567	0.000	97	816148	10.0	9.37	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	94	769673	10.0	9.71	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	1704057	10.0	9.91	
118 1,2-Dichlorobenzene	146	11.988	11.988	0.000	98	632706	10.0	9.32	
119 1,2-Dibromo-3-Chloropropan	157	12.711	12.711	0.000	80	19823	10.0	8.55	
121 1,2,4-Trichlorobenzene	180	13.647	13.647	0.000	94	400905	10.0	9.64	
122 Hexachlorobutadiene	225	13.812	13.812	0.000	96	360799	10.0	10.1	
123 Naphthalene	128	14.005	14.005	0.000	97	375952	10.0	8.45	
124 1,2,3-Trichlorobenzene	180	14.319	14.319	0.000	95	289414	10.0	9.36	
S 149 1,2-Dichloroethene, Total	96				0		20.0	19.2	
S 150 Trihalomethanes, Total	1				0		40.0	38.4	
S 151 Xylenes, Total (URS)	1				0		20.0	19.2	
S 153 1,3-Dichloropropene, Total	1				0		20.0	19.2	
S 154 1,2-Dichloroethene, Total	1				0		20.0	19.2	
S 155 Xylenes, Total	106				0		20.0	19.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

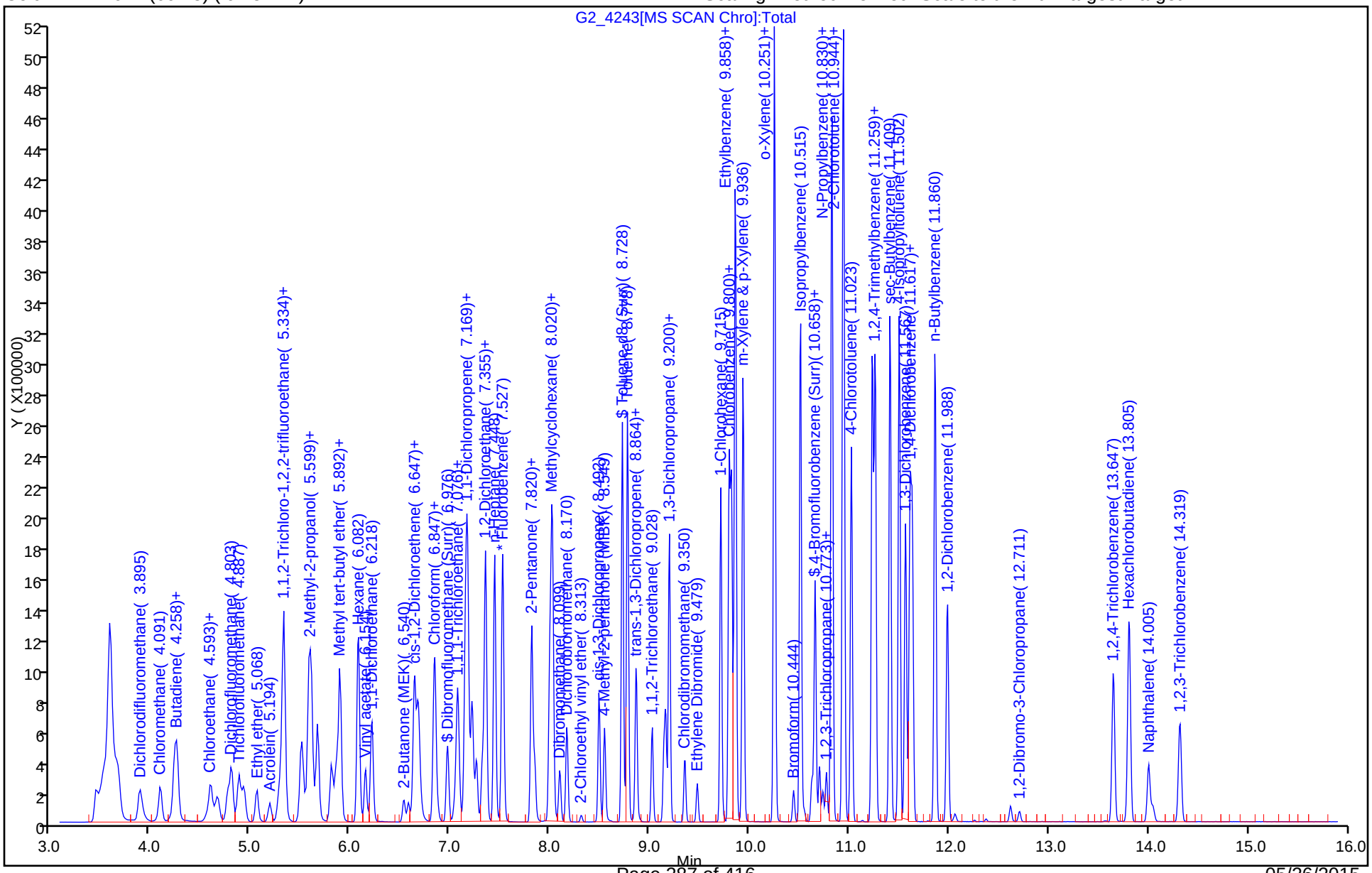
MV-2cleve+AVA_00009	Amount Added: 5.00	Units: uL	
MV-Main A_00022	Amount Added: 5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added: 5.00	Units: uL	
MV-567649-D_00001	Amount Added: 1.00	Units: uL	
MV-ARCH SS A_00043	Amount Added: 0.80	Units: uL	Run Reagent

Report Date: 13-May-2015 16:10:11 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4243.D				
Injection Date:	12-May-2015 18:12:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCVC 280-277119/40 Calibration Date: 05/13/2015 04:49

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4276.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4156	0.3575		8.60	10.0	-14.0	50.0
Chloromethane	Ave	0.3758	0.3390	0.1000	9.02	10.0	-9.8	50.0
Vinyl chloride	Ave	0.3683	0.3386		9.19	10.0	-8.1	50.0
Bromomethane	Ave	0.2826	0.2732		9.67	10.0	-3.3	50.0
Chloroethane	Ave	0.2725	0.2592		9.51	10.0	-4.9	50.0
Dichlorofluoromethane	Ave	0.6885	0.6953		10.1	10.0	1.0	50.0
Trichlorofluoromethane	Ave	0.5865	0.5491		9.36	10.0	-6.4	50.0
Ethyl ether	Ave	0.1361	0.1248		9.17	10.0	-8.3	50.0
Acrolein	Ave	0.0109	0.0110		101	100	1.3	50.0
Acetone	Ave	0.0294	0.0288		39.2	40.0	-2.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3053	0.2847		9.32	10.0	-6.8	50.0
1,1-Dichloroethene	Ave	0.3288	0.3018		9.18	10.0	-8.2	50.0
Iodomethane	Ave	0.5218	0.5067		9.71	10.0	-2.9	50.0
Methyl acetate	Ave	0.0642	0.0597		46.5	50.0	-6.9	50.0
3-Chloro-1-propene	Ave	0.5431	0.5214		9.60	10.0	-4.0	50.0
Carbon disulfide	Ave	1.414	1.321		9.34	10.0	-6.6	50.0
tert-Butyl alcohol	Ave	0.0076	0.0071		92.6	100	-7.4	50.0
Methylene Chloride	Lin2		0.2991		10.0	10.0	0.3	50.0
Acrylonitrile	Ave	0.0322	0.0307		95.2	100	-4.8	50.0
Methyl tert-butyl ether	Ave	0.4287	0.4150		9.68	10.0	-3.2	50.0
trans-1,2-Dichloroethene	Ave	0.3587	0.3447		9.61	10.0	-3.9	50.0
Hexane	Ave	2.419	2.089		8.63	10.0	-13.7	50.0
Vinyl acetate	Ave	0.2127	0.2229		21.0	20.0	4.8	50.0
1,1-Dichloroethane	Ave	0.6102	0.6079	0.1000	9.96	10.0	-0.4	50.0
2-Butanone (MEK)	Ave	0.0475	0.0450		37.8	40.0	-5.4	50.0
sec-Butyl Alcohol	Lin		0.0042		260	300	-13.2	50.0
cis-1,2-Dichloroethene	Ave	0.3301	0.3246		9.83	10.0	-1.7	50.0
2,2-Dichloropropane	Ave	0.5136	0.4422		8.61	10.0	-13.9	50.0
Bromochloromethane	Ave	0.1131	0.1135		10.0	10.0	0.3	50.0
Chloroform	Ave	0.5027	0.5456		10.9	10.0	8.5	50.0
Tetrahydrofuran	Ave	0.0216	0.0192		17.8	20.0	-11.1	50.0
Isobutyl alcohol	Ave	0.0020	0.0021		260	250	4.2	50.0
1,1,1-Trichloroethane	Ave	0.5310	0.5415		10.2	10.0	2.0	50.0
Cyclohexane	Ave	0.6448	0.5763		8.94	10.0	-10.6	50.0
1,1-Dichloropropene	Ave	0.4844	0.4711		9.72	10.0	-2.8	50.0
Carbon tetrachloride	Lin2		0.4560		10.4	10.0	3.9	50.0
1,2-Dichloroethane	Lin1		0.2956		11.3	10.0	12.5	50.0
Benzene	Lin1		1.318		10.5	10.0	5.1	50.0
Trichloroethene	Ave	0.3511	0.3478		9.91	10.0	-0.9	50.0
2-Pentanone	Ave	0.0725	0.0590		32.6	40.0	-18.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCVC 280-277119/40 Calibration Date: 05/13/2015 04:49

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4276.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2883	0.2824		9.80	10.0	-2.0	50.0
Methylcyclohexane	Ave	0.5313	0.4873		9.17	10.0	-8.3	50.0
1,4-Dioxane	Ave	0.0008	0.0008		193	200	-3.7	50.0
Dibromomethane	Ave	0.1001	0.1015		10.1	10.0	1.4	50.0
Bromodichloromethane	Lin2		0.3381		10.5	10.0	5.0	50.0
2-Chloroethyl vinyl ether	Lin		0.0151		7.53	10.0	-24.7	50.0
cis-1,3-Dichloropropene	Lin2		1.460		9.35	10.0	-6.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0814	0.0829		40.7	40.0	1.8	50.0
Toluene	Ave	1.421	1.452		10.2	10.0	2.2	50.0
Ethyl methacrylate	Lin1		0.5713		8.59	10.0	-14.1	50.0
trans-1,3-Dichloropropene	Ave	0.2606	0.2671		10.3	10.0	2.5	50.0
1,1,2-Trichloroethane	Ave	0.1451	0.1444		9.95	10.0	-0.5	50.0
2-Hexanone	Ave	0.2287	0.2188		38.3	40.0	-4.4	50.0
1,3-Dichloropropane	Lin1		1.155		10.0	10.0	0.4	50.0
Tetrachloroethene	Ave	1.425	1.365		9.58	10.0	-4.2	50.0
Chlorodibromomethane	Lin2		0.7264		10.2	10.0	1.6	50.0
1,2-Dibromoethane	Ave	0.5529	0.5435		9.83	10.0	-1.7	50.0
1-Chlorohexane	Ave	2.139	1.992		9.31	10.0	-6.9	50.0
Chlorobenzene	Lin1		3.786	0.3000	10.3	10.0	3.3	50.0
1,1,1,2-Tetrachloroethane	Lin2		1.143		10.6	10.0	5.7	50.0
Ethylbenzene	Ave	2.319	2.266		9.77	10.0	-2.3	50.0
m-Xylene & p-Xylene	Ave	2.778	2.746		9.88	10.0	-1.2	50.0
o-Xylene	Ave	2.525	2.565		10.2	10.0	1.6	50.0
Styrene	Ave	3.561	3.720		10.4	10.0	4.5	50.0
Bromoform	Lin1		0.3290	0.1000	9.57	10.0	-4.3	50.0
Isopropylbenzene	Ave	4.678	4.627		9.89	10.0	-1.1	50.0
Cyclohexanone	Ave	0.0104	0.0103		396	400	-1.0	50.0
1,1,2,2-Tetrachloroethane	Lin1		0.3760	0.3000	9.39	10.0	-6.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.0953	0.0862		9.05	10.0	-9.5	50.0
1,2,3-Trichloropropane	Ave	0.1108	0.1107		10.0	10.0	-0.0	50.0
Bromobenzene	Ave	0.9492	0.9316		9.81	10.0	-1.9	50.0
N-Propylbenzene	Ave	1.360	1.325		9.75	10.0	-2.5	50.0
1,3,5-Trimethylbenzene	Ave	3.746	3.753		10.0	10.0	0.2	50.0
2-Chlorotoluene	Ave	1.111	1.095		9.86	10.0	-1.4	50.0
4-Chlorotoluene	Ave	1.082	1.064		9.84	10.0	-1.6	50.0
tert-Butylbenzene	Ave	3.916	3.927		10.0	10.0	0.3	50.0
1,2,4-Trimethylbenzene	Ave	3.766	3.782		10.0	10.0	0.4	50.0
sec-Butylbenzene	Ave	1.096	1.060		9.68	10.0	-3.2	50.0
p-Isopropyltoluene	Ave	4.346	4.312		9.92	10.0	-0.8	50.0
1,3-Dichlorobenzene	Ave	1.980	1.931		9.75	10.0	-2.5	50.0
1,4-Dichlorobenzene	Ave	1.801	1.834		10.2	10.0	1.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCVC 280-277119/40 Calibration Date: 05/13/2015 04:49

Instrument ID: VMS_G2 Calib Start Date: 05/11/2015 07:45

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/11/2015 09:39

Lab File ID: G2_4276.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.910	3.782		9.67	10.0	-3.3	50.0
1,2-Dichlorobenzene	Ave	1.543	1.495		9.69	10.0	-3.1	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0454		8.61	10.0	-13.9	50.0
1,2,4-Trichlorobenzene	Ave	0.9447	0.8581		9.08	10.0	-9.2	50.0
Hexachlorobutadiene	Lin1		0.7989		9.88	10.0	-1.2	50.0
Naphthalene	Lin1		0.8078		8.02	10.0	-19.8	50.0
1,2,3-Trichlorobenzene	Lin2		0.6444		9.17	10.0	-8.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2754		10.2	10.0	2.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2369	0.2467		10.4	10.0	4.1	50.0
Toluene-d8 (Surr)	Ave	5.207	5.159		9.91	10.0	-0.9	50.0
4-Bromofluorobenzene (Surr)	Ave	1.118	1.106		9.89	10.0	-1.1	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4276.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 13-May-2015 04:49:30 ALS Bottle#: 43 Worklist Smp#: 40
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-May-2015 16:10:36 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	112720	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	1289347	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	305917	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	95	471272	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	93	284091	10.0	10.2	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	96	254484	10.0	10.4	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	94	1262459	10.0	9.91	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	92	417059	10.0	9.89	
13 Dichlorodifluoromethane	85	3.881	3.881	0.000	99	368743	10.0	8.60	
14 Chloromethane	50	4.091	4.091	0.000	99	349699	10.0	9.02	
16 Vinyl chloride	62	4.230	4.230	0.000	98	349228	10.0	9.19	
138 Butadiene	54	4.258	4.258	0.000	0	264608	NC	NC	
19 Bromomethane	94	4.593	4.593	0.000	92	281799	10.0	9.67	
20 Chloroethane	64	4.663	4.663	0.000	100	267322	10.0	9.51	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	717146	10.0	10.1	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	566379	10.0	9.36	
25 Ethyl ether	59	5.054	5.054	0.000	91	128698	10.0	9.17	
28 Acrolein	56	5.194	5.194	0.000	99	113581	100.0	101.3	
29 Acetone	43	5.292	5.292	0.000	99	118892	40.0	39.2	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.320	0.000	93	293612	10.0	9.32	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	96	311345	10.0	9.18	
34 Iodomethane	142	5.501	5.501	0.000	99	522677	10.0	9.71	
35 Methyl acetate	43	5.529	5.529	0.000	97	308091	50.0	46.5	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	79	537826	10.0	9.60	
37 Carbon disulfide	76	5.599	5.599	0.000	99	1362258	10.0	9.34	
38 2-Methyl-2-propanol	59	5.627	5.627	0.000	92	72883	100.0	92.6	
39 Methylene Chloride	84	5.669	5.669	0.000	93	308537	10.0	10.0	
40 Acrylonitrile	53	5.808	5.808	0.000	98	316237	100.0	95.2	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	97	428065	10.0	9.68	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	97	355559	10.0	9.61	
43 Hexane	57	6.082	6.082	0.000	93	511156	10.0	8.63	
44 Vinyl acetate	43	6.154	6.154	0.000	98	459895	20.0	21.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
46 1,1-Dichloroethane	63	6.211	6.211	0.000	97	627078	10.0	9.96	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	185485	40.0	37.8	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	95	130627	300.0	260.3	
53 cis-1,2-Dichloroethene	96	6.640	6.640	0.000	81	334793	10.0	9.83	
54 2,2-Dichloropropane	77	6.676	6.676	0.000	91	456092	10.0	8.61	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	117025	10.0	10.0	
57 Chloroform	83	6.847	6.847	0.000	94	562753	10.0	10.9	
58 Tetrahydrofuran	42	6.876	6.876	0.000	83	39634	20.0	17.8	
59 Isobutyl alcohol	41	7.048	7.048	0.000	89	53399	250.0	260.5	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	558569	10.0	10.2	
61 Cyclohexane	56	7.155	7.155	0.000	91	594412	10.0	8.94	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	485905	10.0	9.72	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	470387	10.0	10.4	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	98	304851	10.0	11.3	
66 Benzene	78	7.355	7.355	0.000	96	1358983	10.0	10.5	
67 n-Heptane	43	7.448	7.448	0.000	90	536238	10.0	8.95	
69 Trichloroethene	95	7.820	7.820	0.000	97	358764	10.0	9.91	
70 2-Pentanone	43	7.848	7.848	0.000	99	243362	40.0	32.6	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	91	291270	10.0	9.80	
73 Methylcyclohexane	55	8.020	8.020	0.000	92	502635	10.0	9.17	
74 1,4-Dioxane	88	8.056	8.056	0.000	80	16887	200.0	192.7	
75 Dibromomethane	93	8.099	8.099	0.000	96	104709	10.0	10.1	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	348696	10.0	10.5	
78 2-Chloroethyl vinyl ether	63	8.320	8.320	0.000	93	15537	10.0	7.53	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	94	357195	10.0	9.35	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	342179	40.0	40.7	
81 Toluene	91	8.778	8.778	0.000	98	1497979	10.0	10.2	
82 Ethyl methacrylate	69	8.864	8.864	0.000	89	139816	10.0	8.59	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	275543	10.0	10.3	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	93	148950	10.0	9.95	
85 2-Hexanone	43	9.143	9.143	0.000	97	214158	40.0	38.3	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	96	282786	10.0	10.0	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	334090	10.0	9.58	
88 Chlorodibromomethane	129	9.350	9.350	0.000	91	177771	10.0	10.2	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	133001	10.0	9.83	
91 1-Chlorohexane	91	9.715	9.715	0.000	97	487431	10.0	9.31	
92 Chlorobenzene	112	9.822	9.822	0.000	95	926438	10.0	10.3	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.850	0.000	94	279700	10.0	10.6	
94 Ethylbenzene	106	9.858	9.858	0.000	98	554605	10.0	9.77	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	99	671980	10.0	9.88	
97 o-Xylene	106	10.251	10.251	0.000	89	627752	10.0	10.2	
96 Styrene	104	10.251	10.251	0.000	86	910304	10.0	10.4	
98 Bromoform	173	10.444	10.444	0.000	97	80510	10.0	9.57	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	1744410	10.0	9.89	
101 Cyclohexanone	55	10.623	10.623	0.000	93	100886	400.0	396.1	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	95	141764	10.0	9.39	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	87	32515	10.0	9.05	
104 1,2,3-Trichloropropane	110	10.766	10.766	0.000	85	41749	10.0	10.0	
105 Bromobenzene	156	10.823	10.823	0.000	97	351224	10.0	9.81	
106 N-Propylbenzene	120	10.823	10.823	0.000	98	499691	10.0	9.75	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	1415081	10.0	10.0	
108 2-Chlorotoluene	126	10.944	10.944	0.000	97	412886	10.0	9.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	401295	10.0	9.84	
110 tert-Butylbenzene	119	11.230	11.230	0.000	92	1480652	10.0	10.0	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	98	1425865	10.0	10.0	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	399687	10.0	9.68	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	97	1625695	10.0	9.92	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	97	728177	10.0	9.75	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	691493	10.0	10.2	
117 n-Butylbenzene	91	11.853	11.853	0.000	98	1426059	10.0	9.67	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	563511	10.0	9.69	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.703	0.000	78	17099	10.0	8.61	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	323523	10.0	9.08	
122 Hexachlorobutadiene	225	13.797	13.797	0.000	97	301196	10.0	9.88	
123 Naphthalene	128	13.998	13.998	0.000	97	304564	10.0	8.02	
124 1,2,3-Trichlorobenzene	180	14.305	14.305	0.000	95	242941	10.0	9.17	
S 149 1,2-Dichloroethene, Total	96				0		20.0	19.4	
S 150 Trihalomethanes, Total	1				0		40.0	41.1	
S 151 Xylenes, Total (URS)	1				0		20.0	20.0	
S 153 1,3-Dichloropropene, Total	1				0		20.0	19.6	
S 154 1,2-Dichloroethene, Total	1				0		20.0	19.4	
S 155 Xylenes, Total	106				0		20.0	20.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

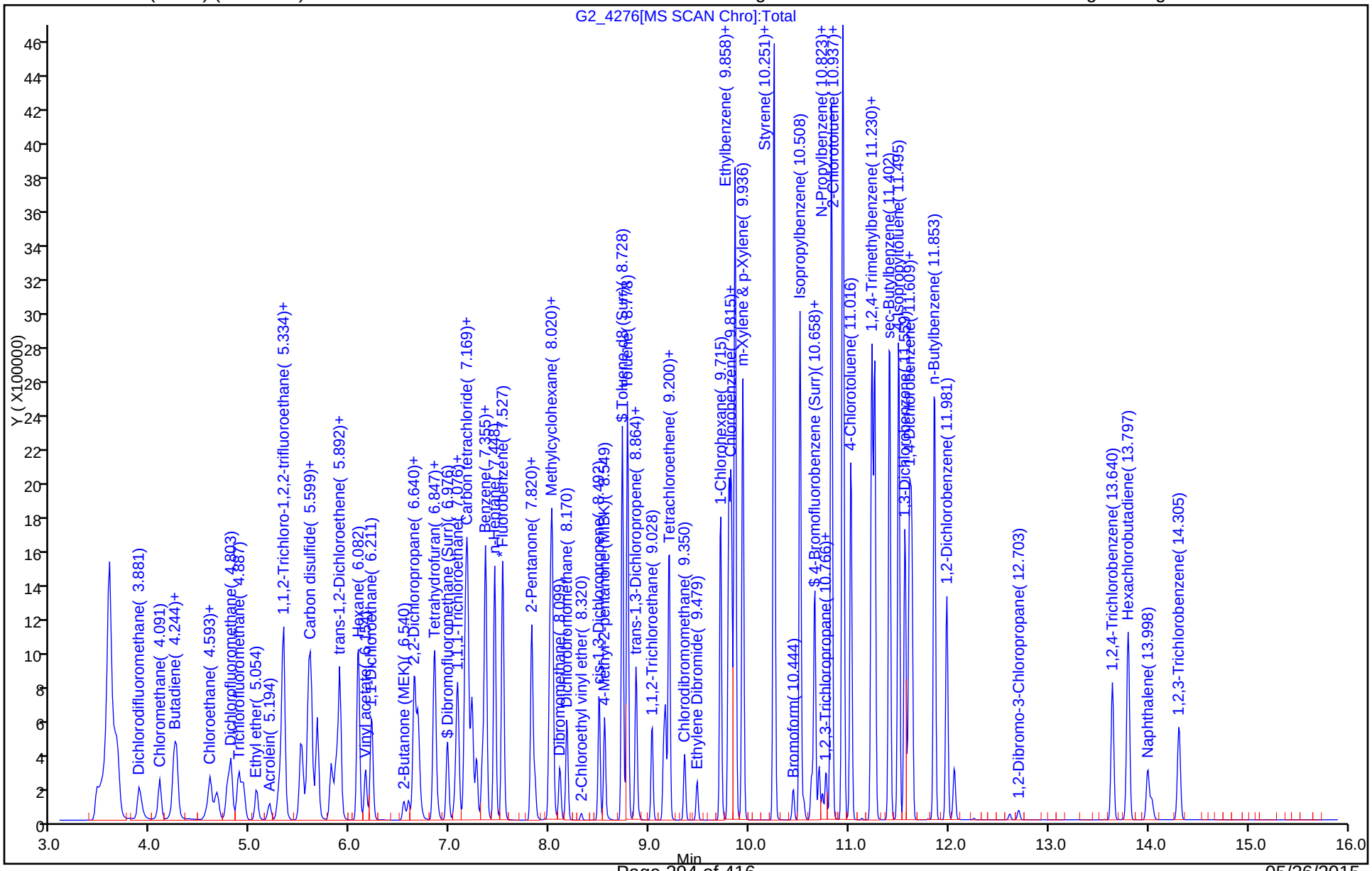
MV-SS 2-Cleve_00020	Amount Added:	5.00	Units: uL	
MV-Main B_00009	Amount Added:	5.00	Units: uL	
MV-Gas/Ket B_00017	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 13-May-2015 16:10:37 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4276.D				
Injection Date:	13-May-2015 04:49:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	40
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-274661/24 Calibration Date: 04/27/2015 14:12

Instrument ID: VMS_Z Calib Start Date: 11/05/2014 00:47

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 11/05/2014 02:43

Lab File ID: Z6780.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Ave	0.0003	0.0003			500	-2.3	20.0

FORM VII 8260B

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6780.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 27-Apr-2015 14:12:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: moanm Instrument ID: VMS_Z
Sublist:

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:23 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 14:37:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.468	3.485	-0.017	71	125414	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.375	0.000	86	744177	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.005	11.005	0.000	87	174677	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.113	15.113	0.000	94	309431	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.452	5.469	-0.017	58	312930	10.0	9.30	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.887	5.905	-0.018	62	130785	10.0	9.63	
$ 10 Toluene-d8 (Surr)	98	8.690	8.690	0.000	93	583403	10.0	9.26	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.042	0.000	86	323617	10.0	9.30	
34 Ethylene oxide	43	2.284	2.301	-0.017	99	508570	2000.0	1840.3	
39 Ethanol	45	2.702	2.684	0.018	46	10081	NC	NC	
42 Propene oxide	58	2.859	2.876	-0.017	96	492668	500.0	433.6	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.294	3.276	0.018	66	24872	100.0	83.3	
60 Isopropyl ether	87	4.286	4.303	-0.017	97	147699	10.0	10.3	
63 2-Chloro-1,3-butadiene	53	4.303	4.303	0.000	71	274686	10.0	9.85	
64 Tert-butyl ethyl ether	59	4.721	4.738	-0.017	98	463095	10.0	9.79	
69 Propionitrile	54	4.913	4.912	0.001	75	48586	100.0	100.9	
68 Ethyl acetate	43	4.947	4.947	0.000	70	51979	20.0	9.94	
73 Methacrylonitrile	41	5.104	5.121	-0.017	93	296987	100.0	96.5	
83 Tert-amyl methyl ether	73	6.183	6.183	0.000	56	392418	10.0	9.66	M
86 n-Butanol	56	6.793	6.792	0.001	66	27019	250.0	228.9	
88 Ethyl acrylate	55	6.775	6.792	-0.017	1	3489	NC	NC	
91 Methyl methacrylate	100	7.384	7.384	0.000	91	47579	20.0	19.6	
95 2-Nitropropane	41	7.889	7.889	0.000	90	23276	20.0	17.8	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	82	38994	10.0	7.62	
120 cis-1,4-Dichloro-2-butene	53	12.885	12.885	0.000	0	25121	10.0	9.45	
135 1,2,3-Trimethylbenzene	105	15.270	15.270	0.000	76	523134	10.0	10.0	
140 1,3,5-Trichlorobenzene	180	17.202	17.202	0.000	98	304005	10.0	10.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

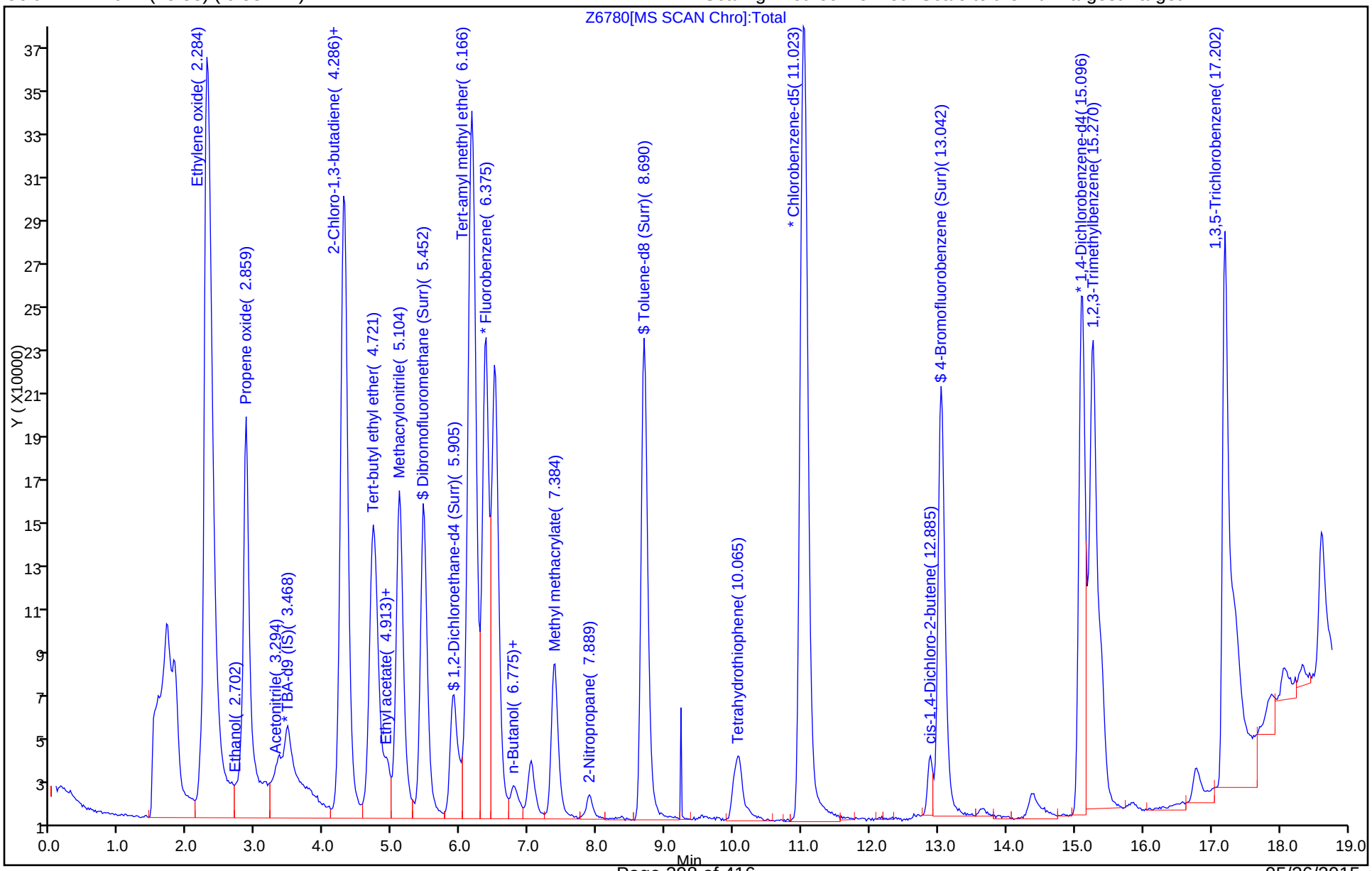
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 27-Apr-2015 20:56:25 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6780.D				
Injection Date:	27-Apr-2015 14:12:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	icv			Worklist Smp#:	24
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-274661/24 Calibration Date: 04/27/2015 14:12

Instrument ID: VMS_Z Calib Start Date: 12/11/2014 13:08

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 12/11/2014 15:07

Lab File ID: Z6780.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropyl alcohol	Lin2				32.0	100	-100.0*	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6780.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 27-Apr-2015 14:12:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: moanm Instrument ID: VMS_Z
Sublist:

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:23 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 14:37:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.468	3.485	-0.017	71	125414	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.375	0.000	86	744177	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.005	11.005	0.000	87	174677	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.113	15.113	0.000	94	309431	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.452	5.469	-0.017	58	312930	10.0	9.30	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.887	5.905	-0.018	62	130785	10.0	9.63	
$ 10 Toluene-d8 (Surr)	98	8.690	8.690	0.000	93	583403	10.0	9.26	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.042	0.000	86	323617	10.0	9.30	
34 Ethylene oxide	43	2.284	2.301	-0.017	99	508570	2000.0	1840.3	
39 Ethanol	45	2.702	2.684	0.018	46	10081	NC	NC	
42 Propene oxide	58	2.859	2.876	-0.017	96	492668	500.0	433.6	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.294	3.276	0.018	66	24872	100.0	83.3	
60 Isopropyl ether	87	4.286	4.303	-0.017	97	147699	10.0	10.3	
63 2-Chloro-1,3-butadiene	53	4.303	4.303	0.000	71	274686	10.0	9.85	
64 Tert-butyl ethyl ether	59	4.721	4.738	-0.017	98	463095	10.0	9.79	
69 Propionitrile	54	4.913	4.912	0.001	75	48586	100.0	100.9	
68 Ethyl acetate	43	4.947	4.947	0.000	70	51979	20.0	9.94	
73 Methacrylonitrile	41	5.104	5.121	-0.017	93	296987	100.0	96.5	
83 Tert-amyl methyl ether	73	6.183	6.183	0.000	56	392418	10.0	9.66	M
86 n-Butanol	56	6.793	6.792	0.001	66	27019	250.0	228.9	
88 Ethyl acrylate	55	6.775	6.792	-0.017	1	3489	NC	NC	
91 Methyl methacrylate	100	7.384	7.384	0.000	91	47579	20.0	19.6	
95 2-Nitropropane	41	7.889	7.889	0.000	90	23276	20.0	17.8	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	82	38994	10.0	7.62	
120 cis-1,4-Dichloro-2-butene	53	12.885	12.885	0.000	0	25121	10.0	9.45	
135 1,2,3-Trimethylbenzene	105	15.270	15.270	0.000	76	523134	10.0	10.0	
140 1,3,5-Trichlorobenzene	180	17.202	17.202	0.000	98	304005	10.0	10.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

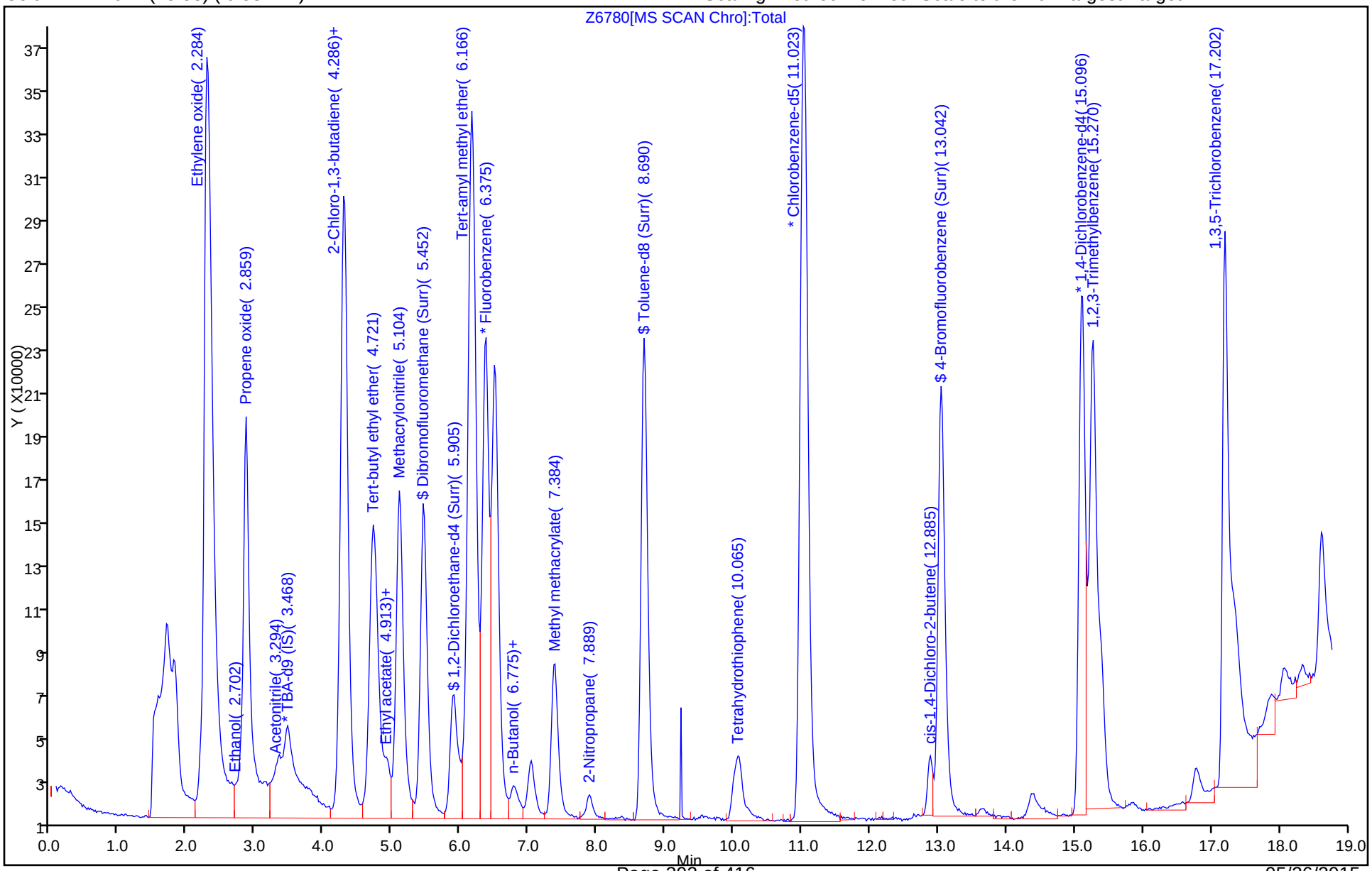
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 27-Apr-2015 20:56:25 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6780.D				
Injection Date:	27-Apr-2015 14:12:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	icv			Worklist Smp#:	24
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-274661/24 Calibration Date: 04/27/2015 14:12

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 11:28

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 13:21

Lab File ID: Z6780.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0050	0.0042		83.3	100	-16.7	20.0
Isopropyl ether	Ave	0.2406	0.2481		10.3	10.0	3.1	20.0
2-Chloro-1,3-butadiene	Ave	0.4684	0.4614		9.85	10.0	-1.5	20.0
Tert-butyl ethyl ether	Ave	0.7946	0.7779		9.79	10.0	-2.1	20.0
Propionitrile	Ave	0.0081	0.0082		101	100	0.9	20.0
Ethyl acetate	Ave	0.0878	0.0437		9.94	20.0	-50.3*	20.0
Methacrylonitrile	Ave	0.0517	0.0499		96.5	100	-3.5	20.0
Tert-amyl methyl ether	Ave	0.6822	0.6592		9.66	10.0	-3.4	20.0
n-Butanol	Ave	0.0020	0.0018		229	250	-8.5	20.0
Methyl methacrylate	Ave	0.0408	0.0400		19.6	20.0	-2.0	20.0
2-Nitropropane	Ave	0.0219	0.0196		17.8	20.0	-10.9	20.0
cis-1,4-Dichloro-2-butene	Ave	0.1074	0.1015		9.45	10.0	-5.5	20.0
1,2,3-Trimethylbenzene	Ave	2.113	2.113		10.0	10.0	0.0	20.0
Dibromofluoromethane (Surr)	Ave	0.5651	0.5256		9.30	10.0	-7.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2282	0.2197		9.63	10.0	-3.7	20.0
Toluene-d8 (Surr)	Ave	4.509	4.175		9.26	10.0	-7.4	20.0
4-Bromofluorobenzene (Surr)	Ave	1.406	1.307		9.30	10.0	-7.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6780.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 27-Apr-2015 14:12:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: moanm Instrument ID: VMS_Z
Sublist:

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:23 Calib Date: 27-Apr-2015 13:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 27-Apr-2015 14:37:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.468	3.485	-0.017	71	125414	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.375	0.000	86	744177	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.005	11.005	0.000	87	174677	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.113	15.113	0.000	94	309431	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.452	5.469	-0.017	58	312930	10.0	9.30	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.887	5.905	-0.018	62	130785	10.0	9.63	
$ 10 Toluene-d8 (Surr)	98	8.690	8.690	0.000	93	583403	10.0	9.26	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.042	0.000	86	323617	10.0	9.30	
34 Ethylene oxide	43	2.284	2.301	-0.017	99	508570	2000.0	1840.3	
39 Ethanol	45	2.702	2.684	0.018	46	10081	NC	NC	
42 Propene oxide	58	2.859	2.876	-0.017	96	492668	500.0	433.6	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.294	3.276	0.018	66	24872	100.0	83.3	
60 Isopropyl ether	87	4.286	4.303	-0.017	97	147699	10.0	10.3	
63 2-Chloro-1,3-butadiene	53	4.303	4.303	0.000	71	274686	10.0	9.85	
64 Tert-butyl ethyl ether	59	4.721	4.738	-0.017	98	463095	10.0	9.79	
69 Propionitrile	54	4.913	4.912	0.001	75	48586	100.0	100.9	
68 Ethyl acetate	43	4.947	4.947	0.000	70	51979	20.0	9.94	
73 Methacrylonitrile	41	5.104	5.121	-0.017	93	296987	100.0	96.5	
83 Tert-amyl methyl ether	73	6.183	6.183	0.000	56	392418	10.0	9.66	M
86 n-Butanol	56	6.793	6.792	0.001	66	27019	250.0	228.9	
88 Ethyl acrylate	55	6.775	6.792	-0.017	1	3489	NC	NC	
91 Methyl methacrylate	100	7.384	7.384	0.000	91	47579	20.0	19.6	
95 2-Nitropropane	41	7.889	7.889	0.000	90	23276	20.0	17.8	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	82	38994	10.0	7.62	
120 cis-1,4-Dichloro-2-butene	53	12.885	12.885	0.000	0	25121	10.0	9.45	
135 1,2,3-Trimethylbenzene	105	15.270	15.270	0.000	76	523134	10.0	10.0	
140 1,3,5-Trichlorobenzene	180	17.202	17.202	0.000	98	304005	10.0	10.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

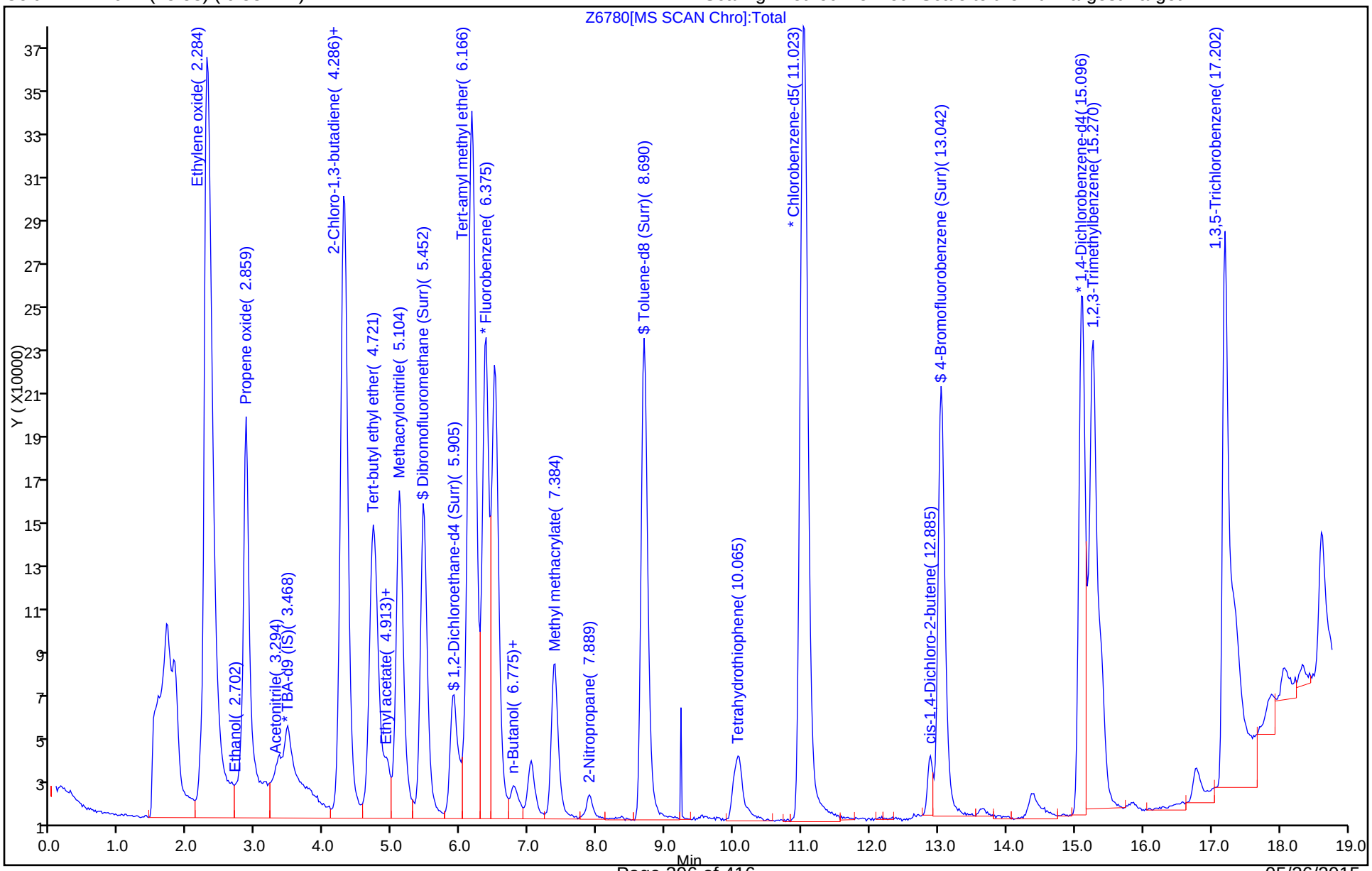
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 27-Apr-2015 20:56:25 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6780.D				
Injection Date:	27-Apr-2015 14:12:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	icv			Worklist Smp#:	24
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

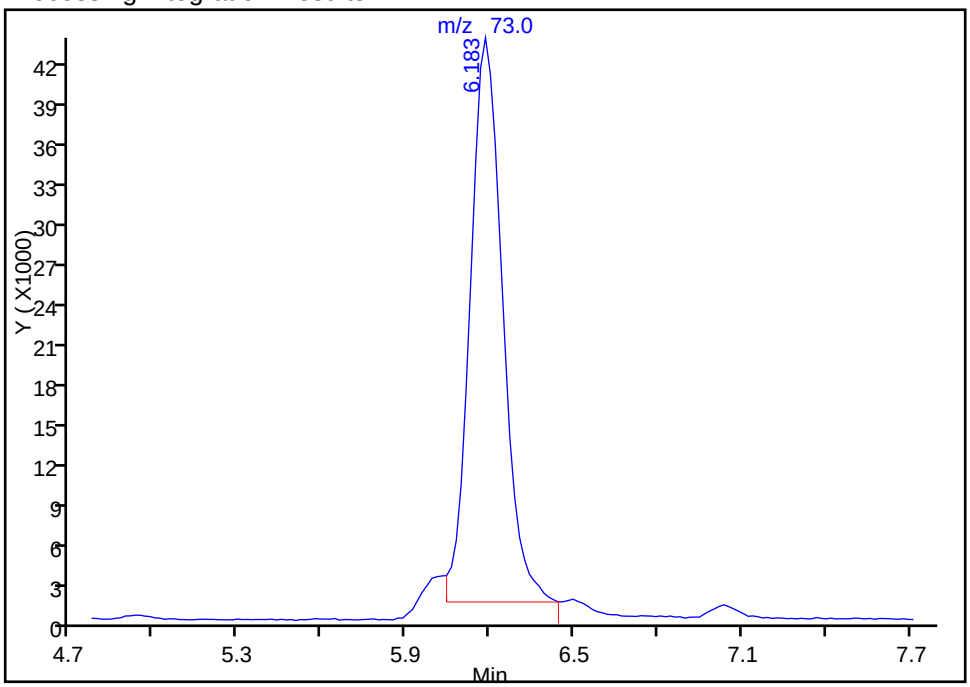
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6780.D				
Injection Date:	27-Apr-2015 14:12:30	Instrument ID:	VMS_Z		
Lims ID:	icv				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

83 Tert-amyl methyl ether, CAS: 994-05-8

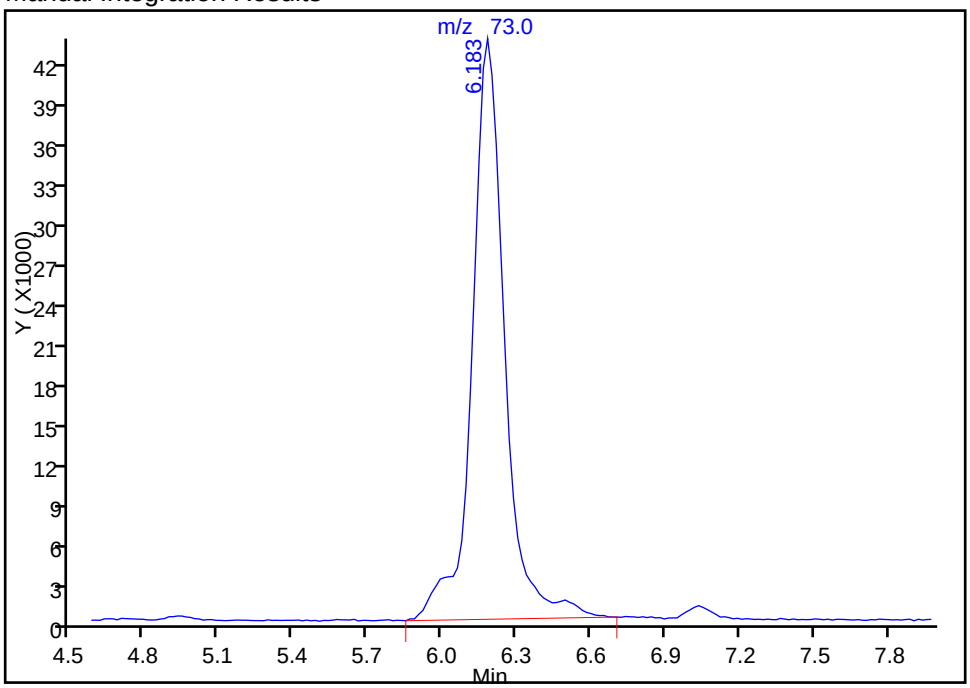
Processing Integration Results

RT: 6.18
Area: 336465
Amount: 8.284038
Amount Units: ug/l



Manual Integration Results

RT: 6.18
Area: 392418
Amount: 9.661646
Amount Units: ug/l



Reviewer: bergerb, 27-Apr-2015 20:41:43
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-277378/16 Calibration Date: 05/14/2015 11:21

Instrument ID: VMS_Z Calib Start Date: 04/06/2015 23:25

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/07/2015 01:41

Lab File ID: Z7578.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2				160	200	-100.0*	20.0

FORM VII 8260B

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7578.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 14-May-2015 11:21:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: moanm Instrument ID: VMS_Z
Sublist:

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:07 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 11:55:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.490	3.489	0.001	9	120219	250.0	250.0	
* 2 Fluorobenzene	96	6.378	6.377	0.001	94	729435	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.024	11.023	0.001	85	172126	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.113	15.112	0.001	75	307598	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.474	5.473	0.002	57	325595	10.0	9.46	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.891	5.908	-0.017	91	133382	10.0	8.93	
$ 10 Toluene-d8 (Surr)	98	8.693	8.692	0.001	90	580415	10.0	10.1	
$ 11 4-Bromofluorobenzene (Surr	95	13.043	13.059	-0.016	84	316025	10.0	9.68	
27 Dichlorodifluoromethane	85	1.906	1.923	-0.017	98	311846	10.0	11.2	
30 Chloromethane	50	1.993	1.992	0.001	99	182982	10.0	10.1	M
31 Butadiene	54	2.080	2.097	-0.017	91	122218	NC	NC	
32 Vinyl chloride	62	2.115	2.114	0.001	81	177366	10.0	10.2	
35 Bromomethane	94	2.341	2.340	0.001	88	182455	10.0	9.76	
36 Chloroethane	64	2.394	2.393	0.001	83	117469	10.0	9.86	
37 Dichlorofluoromethane	67	2.550	2.549	0.001	92	448879	10.0	9.39	
38 Trichlorofluoromethane	101	2.602	2.601	0.001	98	400657	10.0	9.73	
40 Ethyl ether	59	2.794	2.810	-0.016	86	74892	10.0	9.50	
44 Acrolein	56	2.916	2.915	0.001	62	52776	100.0	112.9	
48 Acetone	43	3.055	3.036	0.019	11	32500	40.0	36.9	
45 1,1-Dichloroethene	96	3.037	3.036	0.001	94	182479	10.0	9.49	
46 1,1,2-Trichloro-1,2,2-trif	151	3.090	3.089	0.001	85	287406	10.0	9.94	
49 Iodomethane	142	3.194	3.193	0.001	98	514567	10.0	10.2	
50 Carbon disulfide	76	3.281	3.280	0.001	98	641551	10.0	9.79	
52 3-Chloro-1-propene	41	3.351	3.350	0.001	81	247192	10.0	8.73	
51 Methyl acetate	43	3.351	3.350	0.001	70	176288	50.0	44.7	
54 Methylene Chloride	84	3.472	3.471	0.001	86	151288	10.0	9.22	
55 2-Methyl-2-propanol	59	3.577	3.558	0.019	6	31030	100.0	91.5	M
58 Acrylonitrile	53	3.681	3.680	0.001	97	118329	100.0	93.3	
57 trans-1,2-Dichloroethene	96	3.768	3.767	0.001	95	204301	10.0	9.83	
56 Methyl tert-butyl ether	73	3.786	3.785	0.001	55	267584	10.0	9.03	
59 Hexane	57	4.064	4.063	0.001	90	278106	10.0	9.59	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.203	4.202	0.001	96	342474	10.0	9.29	
61 Vinyl acetate	43	4.221	4.220	0.001	64	378131	20.0	21.2	
67 2-Butanone (MEK)	43	4.865	4.881	-0.017	38	76525	40.0	35.7	
65 cis-1,2-Dichloroethene	96	4.882	4.881	0.001	74	194362	10.0	9.49	
66 2,2-Dichloropropane	77	4.899	4.898	0.001	69	342364	10.0	10.7	
70 sec-Butyl Alcohol	45	5.108	5.107	0.001	51	113138	300.0	298.2	
71 Chlorobromomethane	128	5.178	5.177	0.001	69	98397	10.0	9.98	
72 Tetrahydrofuran	42	5.265	5.264	0.001	31	24694	20.0	17.3	
74 Chloroform	83	5.265	5.264	0.001	91	344935	10.0	9.47	
75 1,1,1-Trichloroethane	97	5.543	5.542	0.001	88	338993	10.0	9.37	
76 Cyclohexane	56	5.648	5.647	0.002	88	308989	10.0	9.31	
78 1,1-Dichloropropene	75	5.735	5.751	-0.016	82	310594	10.0	10.4	
77 Carbon tetrachloride	117	5.787	5.786	0.001	78	360641	10.0	10.1	
80 Isobutyl alcohol	41	5.874	5.873	0.001	24	33426	250.0	266.7	
82 1,2-Dichloroethane	62	5.996	5.995	0.001	44	132554	10.0	9.19	
81 Benzene	78	6.013	6.012	0.001	91	538183	10.0	9.40	
84 n-Heptane	43	6.396	6.395	0.001	67	325169	10.0	9.71	
85 Trichloroethene	95	6.900	6.899	0.001	84	243486	10.0	9.76	
89 2-Pentanone	43	7.144	7.143	0.001	84	176214	40.0	38.1	
90 1,2-Dichloropropane	63	7.196	7.195	0.001	76	187263	10.0	9.49	
87 Methylcyclohexane	55	7.214	7.213	0.001	85	266179	10.0	9.42	
92 Dibromomethane	93	7.370	7.369	0.001	83	104901	10.0	9.51	
94 Dichlorobromomethane	83	7.596	7.595	0.001	95	290786	10.0	9.33	
96 2-Chloroethyl vinyl ether	63	8.049	8.048	0.001	80	64009	10.0	10.3	
97 cis-1,3-Dichloropropene	75	8.275	8.274	0.001	83	255296	10.0	10.4	
98 4-Methyl-2-pentanone (MIBK	43	8.519	8.518	0.001	61	245959	40.0	37.8	
99 Toluene	91	8.797	8.796	0.001	97	609507	10.0	9.98	
100 trans-1,3-Dichloropropene	75	9.128	9.127	0.001	90	189510	10.0	10.8	
101 Ethyl methacrylate	69	9.319	9.318	0.001	72	133232	10.0	9.62	
102 1,1,2-Trichloroethane	97	9.406	9.405	0.001	75	106097	10.0	9.67	
104 1,3-Dichloropropane	76	9.667	9.666	0.001	70	177451	10.0	10.0	
103 Tetrachloroethene	164	9.684	9.701	-0.017	97	242337	10.0	11.2	
105 2-Hexanone	43	9.841	9.840	0.001	74	154458	40.0	37.6	
107 Chlorodibromomethane	129	10.050	10.049	0.001	88	227372	10.0	10.7	
109 Ethylene Dibromide	107	10.224	10.223	0.001	77	145268	10.0	10.3	
111 Chlorobenzene	112	11.059	11.058	0.001	91	438234	10.0	10.4	
110 1-Chlorohexane	91	11.059	11.058	0.001	77	295692	10.0	10.7	
113 1,1,1,2-Tetrachloroethane	131	11.216	11.215	0.001	72	225100	10.0	10.7	
112 Ethylbenzene	106	11.268	11.267	0.001	95	214183	10.0	10.3	
114 m-Xylene & p-Xylene	106	11.477	11.476	0.001	98	290438	10.0	10.6	
115 o-Xylene	106	12.155	12.154	0.001	89	250965	10.0	10.5	
116 Styrene	104	12.173	12.172	0.001	88	397649	10.0	10.5	
117 Bromoform	173	12.451	12.450	0.001	95	120417	10.0	10.7	
118 Isopropylbenzene	105	12.817	12.816	0.001	87	800049	10.0	10.0	
119 Cyclohexanone	55	12.938	12.937	0.001	74	65725	400.0	395.0	
121 Bromobenzene	156	13.304	13.303	0.001	87	219329	10.0	10.4	
122 1,1,2,2-Tetrachloroethane	83	13.304	13.320	-0.016	53	141457	10.0	9.73	
124 1,2,3-Trichloropropane	110	13.373	13.372	0.001	55	33535	10.0	10.0	
125 trans-1,4-Dichloro-2-buten	53	13.408	13.425	-0.017	1	28327	10.0	11.0	
123 N-Propylbenzene	120	13.547	13.546	0.001	87	222943	10.0	10.4	
126 2-Chlorotoluene	126	13.652	13.668	-0.016	93	183632	10.0	10.2	a
128 4-Chlorotoluene	126	13.861	13.860	0.001	81	225096	10.0	11.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.878	13.877	0.001	91	610263	10.0	9.87	
129 tert-Butylbenzene	119	14.435	14.451	-0.016	87	728571	10.0	10.1	
130 1,2,4-Trimethylbenzene	105	14.539	14.538	0.001	94	589874	10.0	9.86	
131 sec-Butylbenzene	134	14.852	14.851	0.001	79	203479	10.0	10.5	
132 1,3-Dichlorobenzene	146	14.992	15.008	-0.016	71	376310	10.0	10.4	
133 4-Isopropyltoluene	119	15.131	15.130	0.001	90	816522	10.0	10.0	
134 1,4-Dichlorobenzene	146	15.166	15.165	0.001	81	453083	10.0	10.5	
138 1,2-Dichlorobenzene	146	15.810	15.808	0.002	80	326943	10.0	10.4	
137 n-Butylbenzene	91	15.844	15.843	0.001	93	716236	10.0	10.2	
139 1,2-Dibromo-3-Chloropropan	157	16.923	16.940	-0.017	69	26329	10.0	10.9	
141 1,2,4-Trichlorobenzene	180	17.863	17.862	0.001	94	244009	10.0	11.1	
142 Hexachlorobutadiene	225	18.072	18.071	0.001	94	247355	10.0	11.6	
143 Naphthalene	128	18.089	18.088	0.001	95	226977	10.0	10.8	
144 1,2,3-Trichlorobenzene	180	18.350	18.349	0.001	91	183137	10.0	10.9	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	40.2	
S 150 Xylenes, Total (URS)	1				0		20.0	21.1	
S 148 1,3-Dichloropropene, Total	1				0		20.0	21.2	
S 145 1,2-Dichloroethene, Total	1				0		20.0	19.3	
S 146 Xylenes, Total	106				0		20.0	21.1	
S 147 1,2-Dichloroethene, Total	96				0		20.0	19.3	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

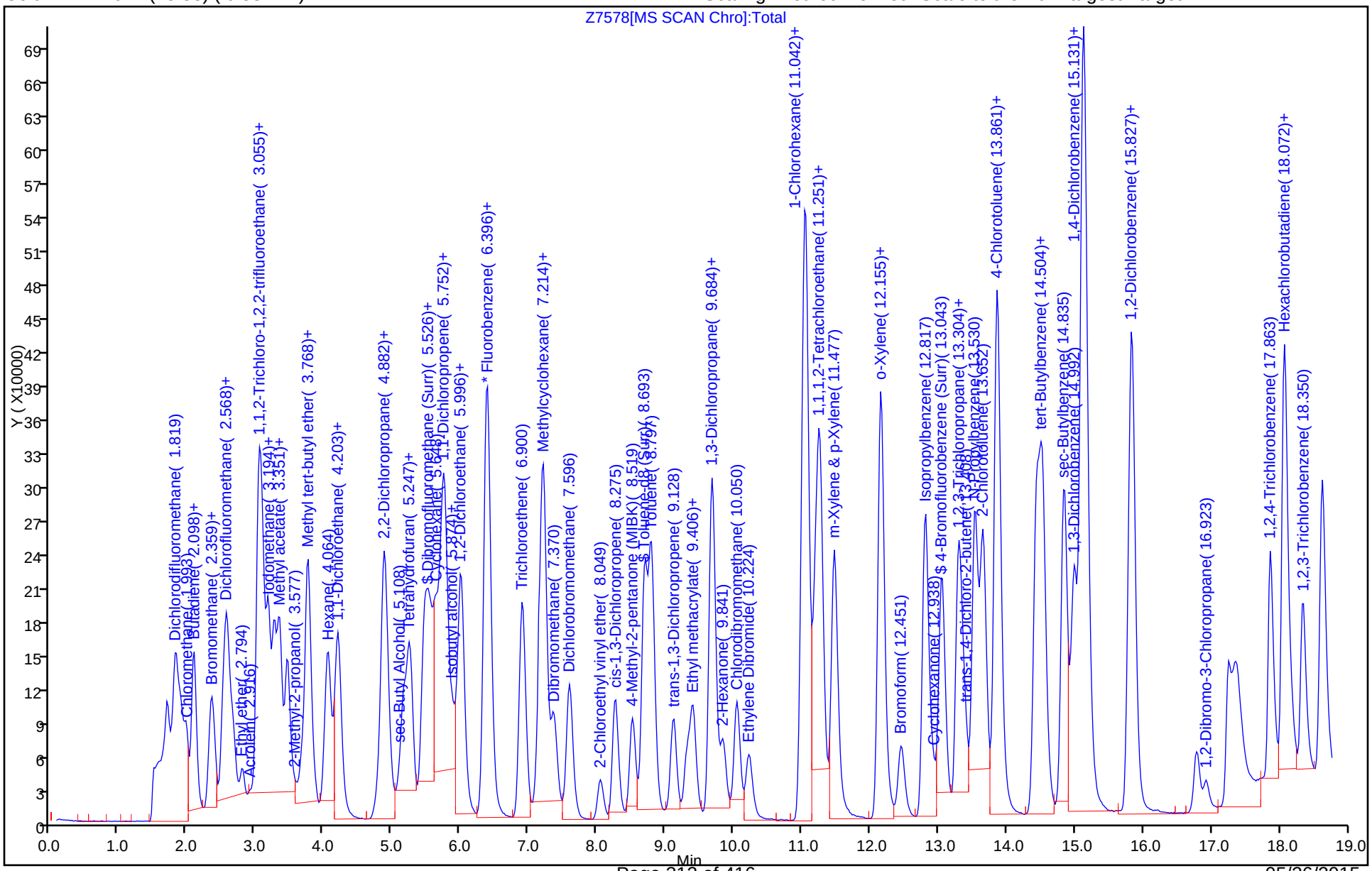
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main B_00009	Amount Added:	5.00	Units: uL
MV-Gas/Ket B_00019	Amount Added:	5.00	Units: uL
MV-SS 2-Cleve_00020	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 14-May-2015 14:33:08 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7578.D				
Injection Date:	14-May-2015 11:21:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	icv			Worklist Smp#:	16
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-277378/16 Calibration Date: 05/14/2015 11:21

Instrument ID: VMS_Z Calib Start Date: 05/14/2015 08:19

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/14/2015 10:35

Lab File ID: Z7578.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4755	0.5344		11.2	10.0	12.4	20.0
Chloromethane	Ave	0.3090	0.3136	0.1000	10.1	10.0	1.5	20.0
Vinyl chloride	Ave	0.2982	0.3039		10.2	10.0	1.9	20.0
Bromomethane	Ave	0.3205	0.3127		9.76	10.0	-2.4	20.0
Chloroethane	Ave	0.2042	0.2013		9.86	10.0	-1.4	20.0
Dichlorofluoromethane	Ave	0.8196	0.7692		9.39	10.0	-6.1	20.0
Trichlorofluoromethane	Ave	0.7058	0.6866		9.73	10.0	-2.7	20.0
Ethyl ether	Ave	0.1351	0.1283		9.50	10.0	-5.0	20.0
Acrolein	Ave	0.0080	0.0091		113	100	12.9	20.0
1,1-Dichloroethene	Ave	0.3295	0.3127		9.49	10.0	-5.1	20.0
Acetone	Ave	0.0151	0.0139		36.9	40.0	-7.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.4956	0.4925		9.94	10.0	-0.6	20.0
Iodomethane	Ave	0.8624	0.8818		10.2	10.0	2.3	20.0
Carbon disulfide	Ave	1.122	1.099		9.79	10.0	-2.1	20.0
3-Chloro-1-propene	Ave	0.4854	0.4236		8.73	10.0	-12.7	20.0
Methyl acetate	Ave	0.0675	0.0604		44.7	50.0	-10.5	20.0
Methylene Chloride	Ave	0.2812	0.2593		9.22	10.0	-7.8	20.0
tert-Butyl alcohol	Lin		0.6453		91.5	100	-8.5	20.0
Acrylonitrile	Ave	0.0217	0.0203		93.3	100	-6.7	20.0
trans-1,2-Dichloroethene	Ave	0.3561	0.3501		9.83	10.0	-1.7	20.0
Methyl tert-butyl ether	Ave	0.5076	0.4586		9.03	10.0	-9.7	20.0
Hexane	Ave	2.105	2.020		9.59	10.0	-4.1	20.0
1,1-Dichloroethane	Ave	0.6317	0.5869	0.1000	9.29	10.0	-7.1	20.0
Vinyl acetate	Ave	0.3050	0.3240		21.2	20.0	6.2	20.0
2-Butanone (MEK)	Ave	0.0367	0.0328		35.7	40.0	-10.8	20.0
cis-1,2-Dichloroethene	Ave	0.3510	0.3331		9.49	10.0	-5.1	20.0
2,2-Dichloropropane	Lin1		0.5867		10.7	10.0	6.6	20.0
sec-Butyl Alcohol	Ave	0.7889	0.7843		298	300	-0.6	20.0
Bromochloromethane	Ave	0.1690	0.1686		9.98	10.0	-0.2	20.0
Chloroform	Ave	0.6242	0.5911		9.47	10.0	-5.3	20.0
Tetrahydrofuran	Ave	0.0244	0.0212		17.3	20.0	-13.3	20.0
1,1,1-Trichloroethane	Ave	0.6197	0.5809		9.37	10.0	-6.3	20.0
Cyclohexane	Ave	0.5690	0.5295		9.31	10.0	-6.9	20.0
1,1-Dichloropropene	Ave	0.5108	0.5323		10.4	10.0	4.2	20.0
Carbon tetrachloride	Ave	0.6149	0.6180		10.1	10.0	0.5	20.0
Isobutyl alcohol	Ave	0.2606	0.2780		267	250	6.7	20.0
1,2-Dichloroethane	Ave	0.2473	0.2272		9.19	10.0	-8.1	20.0
Benzene	Ave	0.9810	0.9223		9.40	10.0	-6.0	20.0
Trichloroethene	Ave	0.4276	0.4173		9.76	10.0	-2.4	20.0
2-Pentanone	Ave	0.0793	0.0755		38.1	40.0	-4.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-277378/16 Calibration Date: 05/14/2015 11:21

Instrument ID: VMS_Z Calib Start Date: 05/14/2015 08:19

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/14/2015 10:35

Lab File ID: Z7578.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3382	0.3209		9.49	10.0	-5.1	20.0
Methylcyclohexane	Ave	0.4844	0.4561		9.42	10.0	-5.8	20.0
Dibromomethane	Ave	0.1890	0.1798		9.51	10.0	-4.9	20.0
Bromodichloromethane	Ave	0.5342	0.4983		9.33	10.0	-6.7	20.0
2-Chloroethyl vinyl ether	Ave	0.1070	0.1097		10.3	10.0	2.5	20.0
cis-1,3-Dichloropropene	Ave	1.785	1.854		10.4	10.0	3.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1114	0.1054		37.8	40.0	-5.4	20.0
Toluene	Ave	1.047	1.044		9.98	10.0	-0.2	20.0
trans-1,3-Dichloropropene	Ave	0.2994	0.3248		10.8	10.0	8.5	20.0
Ethyl methacrylate	Ave	1.006	0.9676		9.62	10.0	-3.8	20.0
1,1,2-Trichloroethane	Ave	0.1881	0.1818		9.67	10.0	-3.3	20.0
1,3-Dichloropropane	Ave	1.288	1.289		10.0	10.0	0.0	20.0
Tetrachloroethene	Ave	1.578	1.760		11.2	10.0	11.5	20.0
2-Hexanone	Ave	0.2986	0.2804		37.6	40.0	-6.1	20.0
Chlorodibromomethane	Ave	1.545	1.651		10.7	10.0	6.8	20.0
1,2-Dibromoethane	Ave	1.021	1.055		10.3	10.0	3.3	20.0
1-Chlorohexane	Ave	2.012	2.147		10.7	10.0	6.7	20.0
Chlorobenzene	Ave	3.064	3.183	0.3000	10.4	10.0	3.9	20.0
1,1,1,2-Tetrachloroethane	Ave	1.522	1.635		10.7	10.0	7.4	20.0
Ethylbenzene	Ave	1.507	1.555		10.3	10.0	3.2	20.0
m-Xylene & p-Xylene	Ave	1.996	2.109		10.6	10.0	5.7	20.0
o-Xylene	Ave	1.732	1.823		10.5	10.0	5.2	20.0
Styrene	Ave	2.743	2.888		10.5	10.0	5.3	20.0
Bromoform	Ave	0.8142	0.8745	0.1000	10.7	10.0	7.4	20.0
Isopropylbenzene	Ave	3.243	3.251		10.0	10.0	0.3	20.0
Cyclohexanone	Lin1		0.0119		395	400	-1.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5910	0.5749	0.3000	9.73	10.0	-2.7	20.0
Bromobenzene	Ave	0.8591	0.8913		10.4	10.0	3.7	20.0
1,2,3-Trichloropropane	Ave	0.1359	0.1363		10.0	10.0	0.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1050	0.1151		11.0	10.0	9.6	20.0
N-Propylbenzene	Ave	0.8699	0.9060		10.4	10.0	4.1	20.0
2-Chlorotoluene	Ave	0.7341	0.7462		10.2	10.0	1.7	20.0
4-Chlorotoluene	Ave	0.8332	0.9147		11.0	10.0	9.8	20.0
1,3,5-Trimethylbenzene	Ave	2.513	2.480		9.87	10.0	-1.3	20.0
tert-Butylbenzene	Ave	2.922	2.961		10.1	10.0	1.3	20.0
1,2,4-Trimethylbenzene	Ave	2.432	2.397		9.86	10.0	-1.4	20.0
sec-Butylbenzene	Ave	0.7850	0.8269		10.5	10.0	5.3	20.0
1,3-Dichlorobenzene	Ave	1.468	1.529		10.4	10.0	4.2	20.0
p-Isopropyltoluene	Ave	3.314	3.318		10.0	10.0	0.1	20.0
1,4-Dichlorobenzene	Ave	1.760	1.841		10.5	10.0	4.6	20.0
1,2-Dichlorobenzene	Ave	1.283	1.329		10.4	10.0	3.5	20.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: ICV 280-277378/16 Calibration Date: 05/14/2015 11:21

Instrument ID: VMS_Z Calib Start Date: 05/14/2015 08:19

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/14/2015 10:35

Lab File ID: Z7578.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	2.848	2.911		10.2	10.0	2.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0982	0.1070		10.9	10.0	9.0	20.0
1,2,4-Trichlorobenzene	Ave	0.8943	0.9916		11.1	10.0	10.9	20.0
Hexachlorobutadiene	Ave	0.8679	1.005		11.6	10.0	15.8	20.0
Naphthalene	Ave	0.8574	0.9224		10.8	10.0	7.6	20.0
1,2,3-Trichlorobenzene	Ave	0.6829	0.7442		10.9	10.0	9.0	20.0
Dibromofluoromethane (Surr)	Ave	0.5901	0.5580		9.46	10.0	-5.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2560	0.2286		8.93	10.0	-10.7	20.0
Toluene-d8 (Surr)	Ave	4.182	4.215		10.1	10.0	0.8	20.0
4-Bromofluorobenzene (Surr)	Ave	1.327	1.284		9.68	10.0	-3.2	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7578.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 14-May-2015 11:21:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: moanm Instrument ID: VMS_Z
Sublist:

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:33:07 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: moanm Date: 14-May-2015 11:55:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.490	3.489	0.001	9	120219	250.0	250.0	
* 2 Fluorobenzene	96	6.378	6.377	0.001	94	729435	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.024	11.023	0.001	85	172126	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.113	15.112	0.001	75	307598	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.474	5.473	0.002	57	325595	10.0	9.46	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.891	5.908	-0.017	91	133382	10.0	8.93	
$ 10 Toluene-d8 (Surr)	98	8.693	8.692	0.001	90	580415	10.0	10.1	
$ 11 4-Bromofluorobenzene (Surr	95	13.043	13.059	-0.016	84	316025	10.0	9.68	
27 Dichlorodifluoromethane	85	1.906	1.923	-0.017	98	311846	10.0	11.2	
30 Chloromethane	50	1.993	1.992	0.001	99	182982	10.0	10.1	M
31 Butadiene	54	2.080	2.097	-0.017	91	122218	NC	NC	
32 Vinyl chloride	62	2.115	2.114	0.001	81	177366	10.0	10.2	
35 Bromomethane	94	2.341	2.340	0.001	88	182455	10.0	9.76	
36 Chloroethane	64	2.394	2.393	0.001	83	117469	10.0	9.86	
37 Dichlorofluoromethane	67	2.550	2.549	0.001	92	448879	10.0	9.39	
38 Trichlorofluoromethane	101	2.602	2.601	0.001	98	400657	10.0	9.73	
40 Ethyl ether	59	2.794	2.810	-0.016	86	74892	10.0	9.50	
44 Acrolein	56	2.916	2.915	0.001	62	52776	100.0	112.9	
48 Acetone	43	3.055	3.036	0.019	11	32500	40.0	36.9	
45 1,1-Dichloroethene	96	3.037	3.036	0.001	94	182479	10.0	9.49	
46 1,1,2-Trichloro-1,2,2-trif	151	3.090	3.089	0.001	85	287406	10.0	9.94	
49 Iodomethane	142	3.194	3.193	0.001	98	514567	10.0	10.2	
50 Carbon disulfide	76	3.281	3.280	0.001	98	641551	10.0	9.79	
52 3-Chloro-1-propene	41	3.351	3.350	0.001	81	247192	10.0	8.73	
51 Methyl acetate	43	3.351	3.350	0.001	70	176288	50.0	44.7	
54 Methylene Chloride	84	3.472	3.471	0.001	86	151288	10.0	9.22	
55 2-Methyl-2-propanol	59	3.577	3.558	0.019	6	31030	100.0	91.5	M
58 Acrylonitrile	53	3.681	3.680	0.001	97	118329	100.0	93.3	
57 trans-1,2-Dichloroethene	96	3.768	3.767	0.001	95	204301	10.0	9.83	
56 Methyl tert-butyl ether	73	3.786	3.785	0.001	55	267584	10.0	9.03	
59 Hexane	57	4.064	4.063	0.001	90	278106	10.0	9.59	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.203	4.202	0.001	96	342474	10.0	9.29	
61 Vinyl acetate	43	4.221	4.220	0.001	64	378131	20.0	21.2	
67 2-Butanone (MEK)	43	4.865	4.881	-0.017	38	76525	40.0	35.7	
65 cis-1,2-Dichloroethene	96	4.882	4.881	0.001	74	194362	10.0	9.49	
66 2,2-Dichloropropane	77	4.899	4.898	0.001	69	342364	10.0	10.7	
70 sec-Butyl Alcohol	45	5.108	5.107	0.001	51	113138	300.0	298.2	
71 Chlorobromomethane	128	5.178	5.177	0.001	69	98397	10.0	9.98	
72 Tetrahydrofuran	42	5.265	5.264	0.001	31	24694	20.0	17.3	
74 Chloroform	83	5.265	5.264	0.001	91	344935	10.0	9.47	
75 1,1,1-Trichloroethane	97	5.543	5.542	0.001	88	338993	10.0	9.37	
76 Cyclohexane	56	5.648	5.647	0.002	88	308989	10.0	9.31	
78 1,1-Dichloropropene	75	5.735	5.751	-0.016	82	310594	10.0	10.4	
77 Carbon tetrachloride	117	5.787	5.786	0.001	78	360641	10.0	10.1	
80 Isobutyl alcohol	41	5.874	5.873	0.001	24	33426	250.0	266.7	
82 1,2-Dichloroethane	62	5.996	5.995	0.001	44	132554	10.0	9.19	
81 Benzene	78	6.013	6.012	0.001	91	538183	10.0	9.40	
84 n-Heptane	43	6.396	6.395	0.001	67	325169	10.0	9.71	
85 Trichloroethene	95	6.900	6.899	0.001	84	243486	10.0	9.76	
89 2-Pentanone	43	7.144	7.143	0.001	84	176214	40.0	38.1	
90 1,2-Dichloropropane	63	7.196	7.195	0.001	76	187263	10.0	9.49	
87 Methylcyclohexane	55	7.214	7.213	0.001	85	266179	10.0	9.42	
92 Dibromomethane	93	7.370	7.369	0.001	83	104901	10.0	9.51	
94 Dichlorobromomethane	83	7.596	7.595	0.001	95	290786	10.0	9.33	
96 2-Chloroethyl vinyl ether	63	8.049	8.048	0.001	80	64009	10.0	10.3	
97 cis-1,3-Dichloropropene	75	8.275	8.274	0.001	83	255296	10.0	10.4	
98 4-Methyl-2-pentanone (MIBK	43	8.519	8.518	0.001	61	245959	40.0	37.8	
99 Toluene	91	8.797	8.796	0.001	97	609507	10.0	9.98	
100 trans-1,3-Dichloropropene	75	9.128	9.127	0.001	90	189510	10.0	10.8	
101 Ethyl methacrylate	69	9.319	9.318	0.001	72	133232	10.0	9.62	
102 1,1,2-Trichloroethane	97	9.406	9.405	0.001	75	106097	10.0	9.67	
104 1,3-Dichloropropane	76	9.667	9.666	0.001	70	177451	10.0	10.0	
103 Tetrachloroethene	164	9.684	9.701	-0.017	97	242337	10.0	11.2	
105 2-Hexanone	43	9.841	9.840	0.001	74	154458	40.0	37.6	
107 Chlorodibromomethane	129	10.050	10.049	0.001	88	227372	10.0	10.7	
109 Ethylene Dibromide	107	10.224	10.223	0.001	77	145268	10.0	10.3	
111 Chlorobenzene	112	11.059	11.058	0.001	91	438234	10.0	10.4	
110 1-Chlorohexane	91	11.059	11.058	0.001	77	295692	10.0	10.7	
113 1,1,1,2-Tetrachloroethane	131	11.216	11.215	0.001	72	225100	10.0	10.7	
112 Ethylbenzene	106	11.268	11.267	0.001	95	214183	10.0	10.3	
114 m-Xylene & p-Xylene	106	11.477	11.476	0.001	98	290438	10.0	10.6	
115 o-Xylene	106	12.155	12.154	0.001	89	250965	10.0	10.5	
116 Styrene	104	12.173	12.172	0.001	88	397649	10.0	10.5	
117 Bromoform	173	12.451	12.450	0.001	95	120417	10.0	10.7	
118 Isopropylbenzene	105	12.817	12.816	0.001	87	800049	10.0	10.0	
119 Cyclohexanone	55	12.938	12.937	0.001	74	65725	400.0	395.0	
121 Bromobenzene	156	13.304	13.303	0.001	87	219329	10.0	10.4	
122 1,1,2,2-Tetrachloroethane	83	13.304	13.320	-0.016	53	141457	10.0	9.73	
124 1,2,3-Trichloropropane	110	13.373	13.372	0.001	55	33535	10.0	10.0	
125 trans-1,4-Dichloro-2-buten	53	13.408	13.425	-0.017	1	28327	10.0	11.0	
123 N-Propylbenzene	120	13.547	13.546	0.001	87	222943	10.0	10.4	
126 2-Chlorotoluene	126	13.652	13.668	-0.016	93	183632	10.0	10.2	a
128 4-Chlorotoluene	126	13.861	13.860	0.001	81	225096	10.0	11.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.878	13.877	0.001	91	610263	10.0	9.87	
129 tert-Butylbenzene	119	14.435	14.451	-0.016	87	728571	10.0	10.1	
130 1,2,4-Trimethylbenzene	105	14.539	14.538	0.001	94	589874	10.0	9.86	
131 sec-Butylbenzene	134	14.852	14.851	0.001	79	203479	10.0	10.5	
132 1,3-Dichlorobenzene	146	14.992	15.008	-0.016	71	376310	10.0	10.4	
133 4-Isopropyltoluene	119	15.131	15.130	0.001	90	816522	10.0	10.0	
134 1,4-Dichlorobenzene	146	15.166	15.165	0.001	81	453083	10.0	10.5	
138 1,2-Dichlorobenzene	146	15.810	15.808	0.002	80	326943	10.0	10.4	
137 n-Butylbenzene	91	15.844	15.843	0.001	93	716236	10.0	10.2	
139 1,2-Dibromo-3-Chloropropan	157	16.923	16.940	-0.017	69	26329	10.0	10.9	
141 1,2,4-Trichlorobenzene	180	17.863	17.862	0.001	94	244009	10.0	11.1	
142 Hexachlorobutadiene	225	18.072	18.071	0.001	94	247355	10.0	11.6	
143 Naphthalene	128	18.089	18.088	0.001	95	226977	10.0	10.8	
144 1,2,3-Trichlorobenzene	180	18.350	18.349	0.001	91	183137	10.0	10.9	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	40.2	
S 150 Xylenes, Total (URS)	1				0		20.0	21.1	
S 148 1,3-Dichloropropene, Total	1				0		20.0	21.2	
S 145 1,2-Dichloroethene, Total	1				0		20.0	19.3	
S 146 Xylenes, Total	106				0		20.0	21.1	
S 147 1,2-Dichloroethene, Total	96				0		20.0	19.3	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

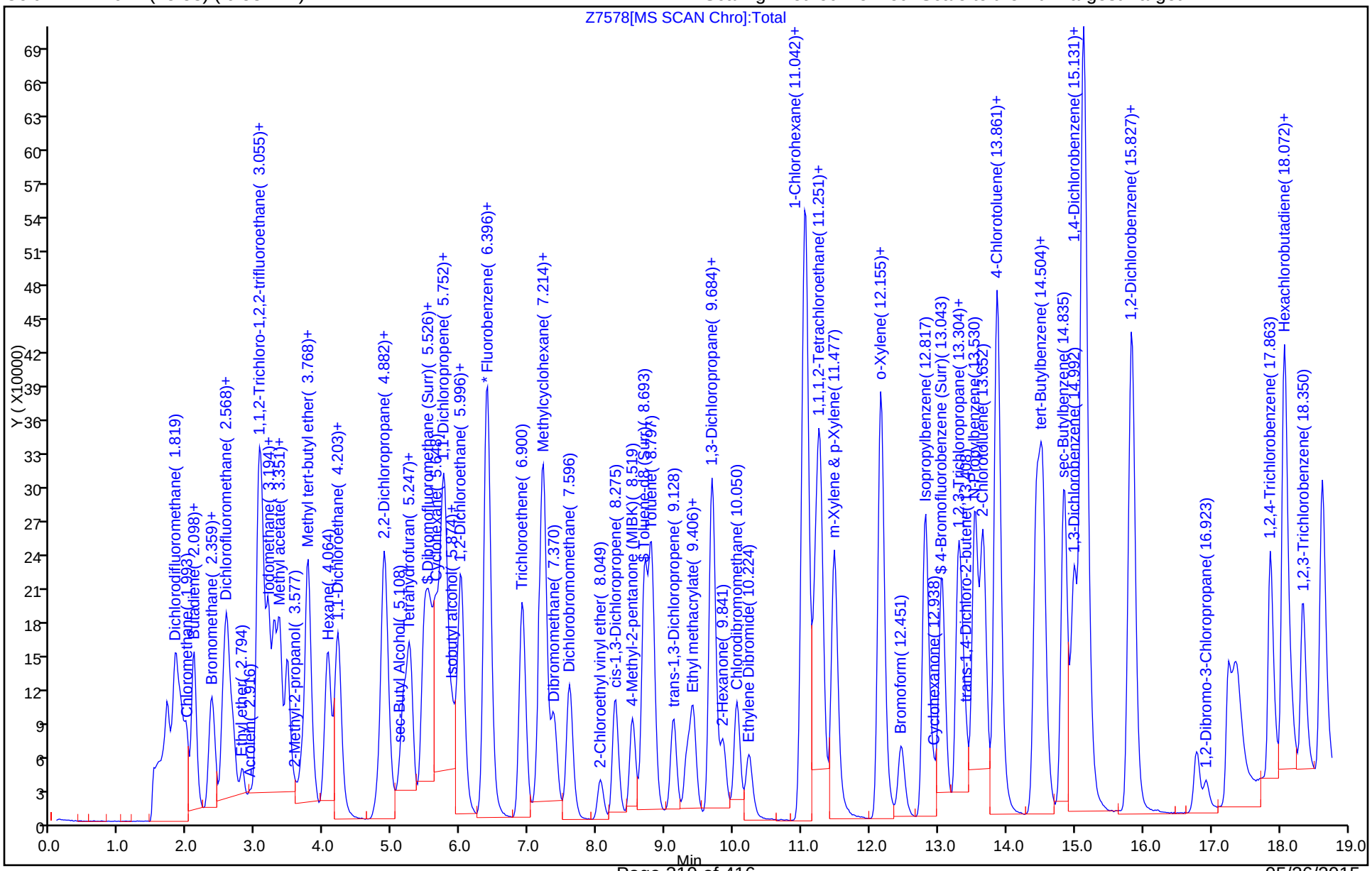
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main B_00009	Amount Added:	5.00	Units: uL
MV-Gas/Ket B_00019	Amount Added:	5.00	Units: uL
MV-SS 2-Cleve_00020	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 14-May-2015 14:33:08 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7578.D				
Injection Date:	14-May-2015 11:21:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	icv			Worklist Smp#:	16
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

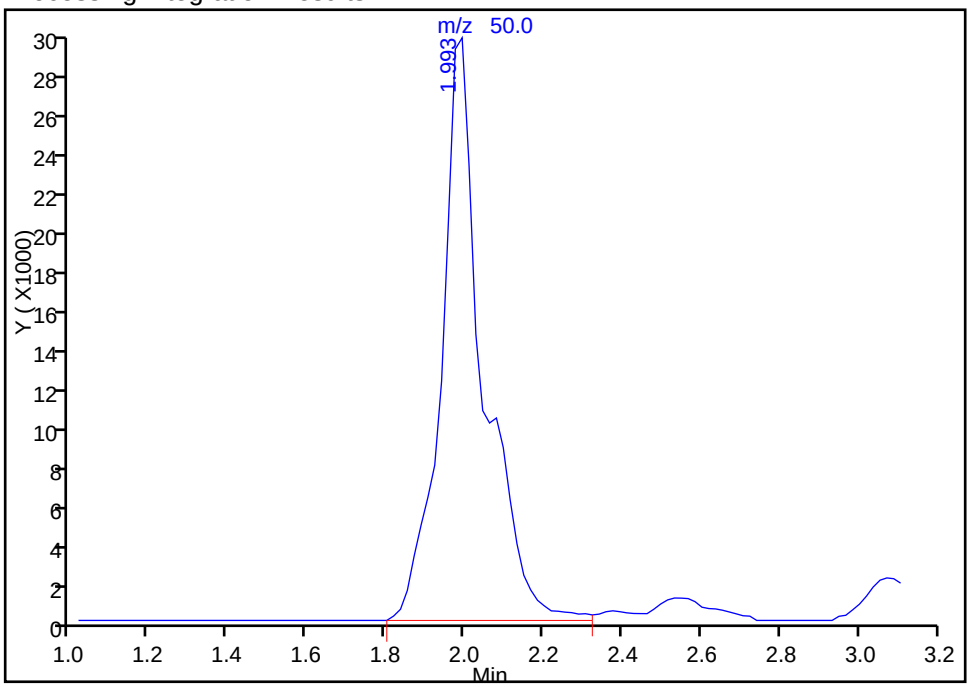
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7578.D				
Injection Date:	14-May-2015 11:21:30	Instrument ID:	VMS_Z		
Lims ID:	icv				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

30 Chloromethane, CAS: 74-87-3

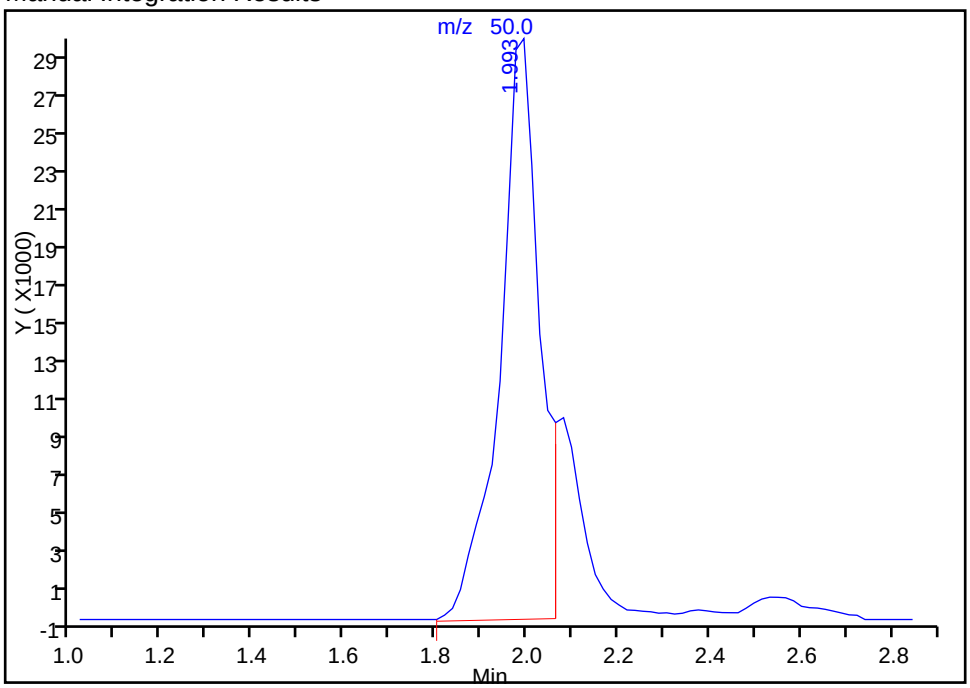
Processing Integration Results

RT: 1.99
Area: 221913
Amount: 12.407711
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 182982
Amount: 10.149474
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:08:33
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

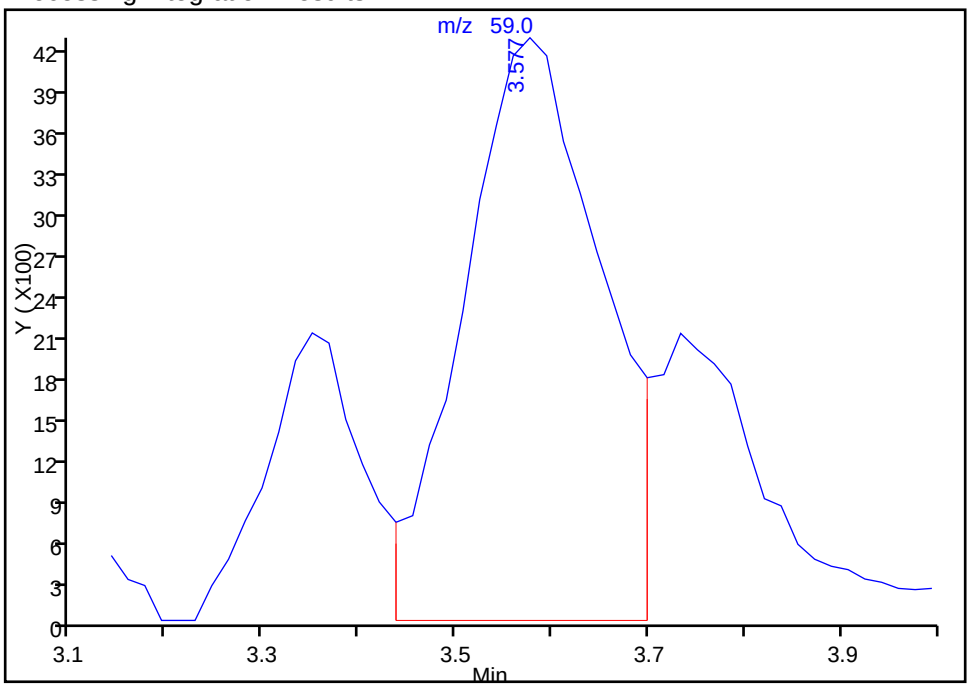
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7578.D				
Injection Date:	14-May-2015 11:21:30	Instrument ID:	VMS_Z		
Lims ID:	icv				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

55 2-Methyl-2-propanol, CAS: 75-65-0

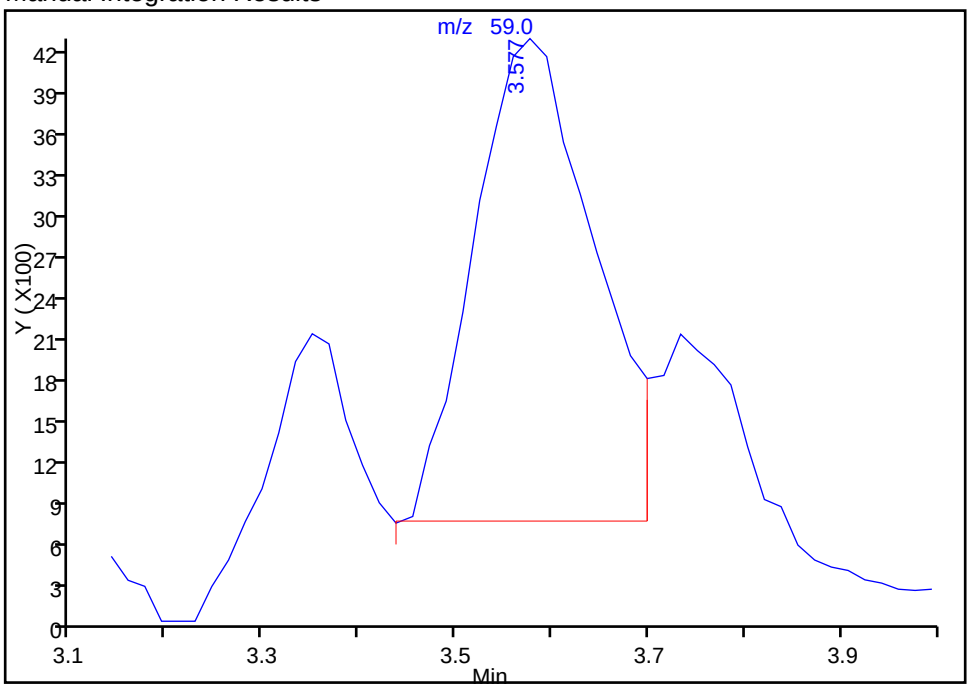
Processing Integration Results

RT: 3.58
Area: 43357
Amount: 135.5364
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 31030
Amount: 91.483136
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:08:33
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

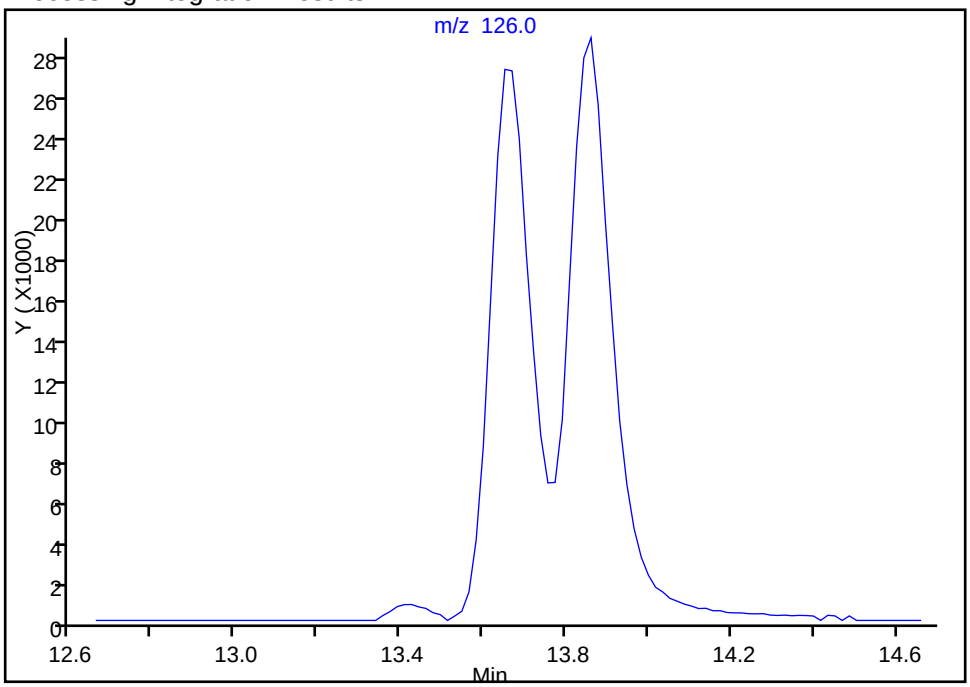
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7578.D				
Injection Date:	14-May-2015 11:21:30	Instrument ID:	VMS_Z		
Lims ID:	icv				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

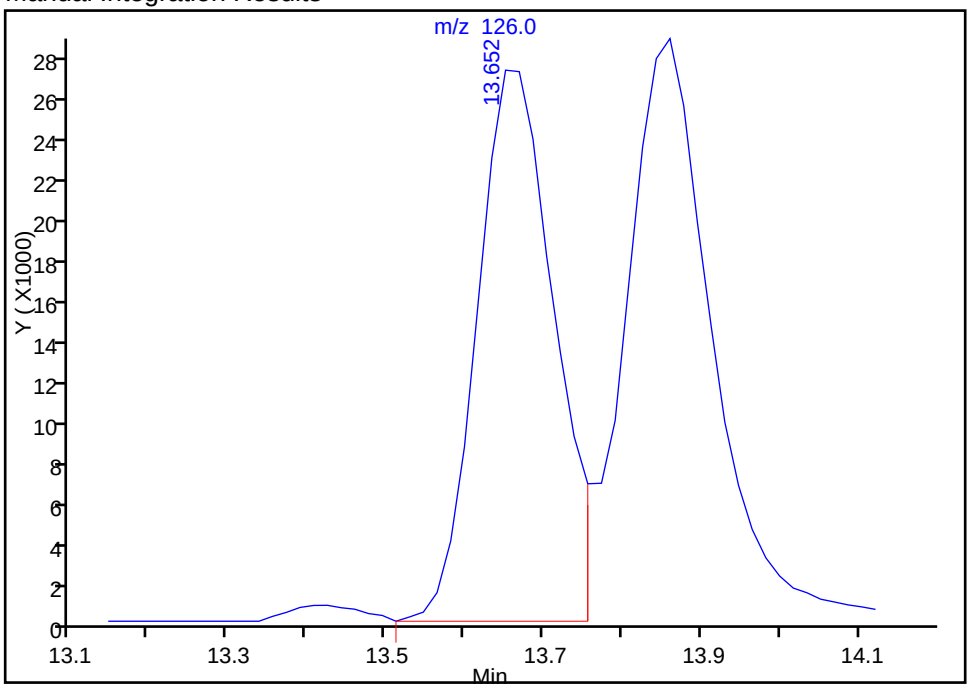
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT: 13.65
Area: 183632
Amount: 10.165296
Amount Units: ug/l



Reviewer: moanm, 14-May-2015 12:08:33
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCVC 280-277378/22 Calibration Date: 05/14/2015 14:47

Instrument ID: VMS_Z Calib Start Date: 04/06/2015 23:25

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/07/2015 01:41

Lab File ID: Z7586.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2				160	200	-100.0*	50.0

FORM VII 8260B

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7586.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 14-May-2015 14:47:30 ALS Bottle#: 18 Worklist Smp#: 22
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 15-May-2015 11:30:19 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: moanm Date: 15-May-2015 11:16:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.488	3.488	0.000	86	106215	250.0	250.0	
* 2 Fluorobenzene	96	6.377	6.377	0.000	98	664980	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.023	11.023	0.000	86	158902	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.129	15.129	0.000	82	283738	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.472	5.472	0.000	94	328525	10.3	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.907	5.907	0.000	95	121906	10.3	8.95	
$ 10 Toluene-d8 (Surr)	98	8.709	8.709	0.000	92	604155	10.3	11.4	
$ 11 4-Bromofluorobenzene (Surr	95	13.059	13.059	0.000	92	319697	10.3	10.6	
27 Dichlorodifluoromethane	85	1.905	1.905	0.000	98	281791	10.0	11.1	
30 Chloromethane	50	1.992	1.992	0.000	99	160860	10.0	9.79	M
31 Butadiene	54	2.079	2.079	0.000	93	111946	NC	NC	
32 Vinyl chloride	62	2.114	2.114	0.000	98	163679	10.0	10.3	
35 Bromomethane	94	2.340	2.340	0.000	90	167887	10.0	9.85	
36 Chloroethane	64	2.392	2.392	0.000	99	108048	10.0	9.95	
37 Dichlorofluoromethane	67	2.549	2.549	0.000	97	412211	10.0	9.45	
38 Trichlorofluoromethane	101	2.601	2.601	0.000	100	368958	10.0	9.83	
40 Ethyl ether	59	2.810	2.810	0.000	91	70672	10.0	9.83	
44 Acrolein	56	2.914	2.914	0.000	98	45132	100.0	105.9	
45 1,1-Dichloroethene	96	3.036	3.036	0.000	99	187123	10.0	10.7	
48 Acetone	43	3.053	3.053	0.000	98	32055	40.0	40.0	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.088	0.000	96	297820	10.0	11.3	
49 Iodomethane	142	3.192	3.192	0.000	98	488165	10.0	10.6	
50 Carbon disulfide	76	3.280	3.280	0.000	99	641699	10.0	10.7	
51 Methyl acetate	43	3.349	3.349	0.000	68	170399	50.0	47.4	
52 3-Chloro-1-propene	41	3.349	3.349	0.000	86	256444	10.0	9.93	
54 Methylene Chloride	84	3.471	3.471	0.000	94	162136	10.0	10.8	
55 2-Methyl-2-propanol	59	3.575	3.575	0.000	93	38505	100.0	136.1	
58 Acrylonitrile	53	3.680	3.680	0.000	99	109416	100.0	94.6	
57 trans-1,2-Dichloroethene	96	3.767	3.767	0.000	99	190786	10.0	10.1	
56 Methyl tert-butyl ether	73	3.784	3.784	0.000	94	241730	10.0	8.95	
59 Hexane	57	4.063	4.063	0.000	90	255812	10.0	9.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.202	4.202	0.000	96	310900	10.0	9.25	
61 Vinyl acetate	43	4.219	4.219	0.000	96	295466	20.0	18.2	
67 2-Butanone (MEK)	43	4.880	4.880	0.000	41	65070	40.0	33.3	
65 cis-1,2-Dichloroethene	96	4.880	4.880	0.000	83	179322	10.0	9.60	
66 2,2-Dichloropropane	77	4.898	4.898	0.000	86	320225	10.0	11.0	
70 sec-Butyl Alcohol	45	5.107	5.107	0.000	96	103505	300.0	308.8	
71 Chlorobromomethane	128	5.176	5.176	0.000	89	91410	10.0	10.2	
72 Tetrahydrofuran	42	5.263	5.263	0.000	36	22039	20.0	17.0	
74 Chloroform	83	5.263	5.263	0.000	94	312240	10.0	9.40	
75 1,1,1-Trichloroethane	97	5.542	5.542	0.000	99	313936	10.0	9.52	
76 Cyclohexane	56	5.646	5.646	0.000	87	288697	10.0	9.54	
78 1,1-Dichloropropene	75	5.750	5.750	0.000	99	267210	10.0	9.83	
77 Carbon tetrachloride	117	5.785	5.785	0.000	97	321775	10.0	9.84	
80 Isobutyl alcohol	41	5.872	5.872	0.000	93	27058	250.0	244.4	
82 1,2-Dichloroethane	62	6.011	6.011	0.000	94	118327	10.0	8.99	
81 Benzene	78	6.011	6.011	0.000	94	496009	10.0	9.50	
84 n-Heptane	43	6.412	6.412	0.000	90	296006	10.0	9.70	
85 Trichloroethene	95	6.916	6.916	0.000	95	219475	10.0	9.65	
89 2-Pentanone	43	7.142	7.142	0.000	99	146784	40.0	34.8	
90 1,2-Dichloropropane	63	7.195	7.195	0.000	96	166950	10.0	9.28	
87 Methylcyclohexane	55	7.229	7.229	0.000	92	251520	10.0	9.76	
92 Dibromomethane	93	7.369	7.369	0.000	93	95871	10.0	9.53	
94 Dichlorobromomethane	83	7.595	7.595	0.000	100	261429	10.0	9.20	
96 2-Chloroethyl vinyl ether	63	8.047	8.047	0.000	92	52938	10.0	9.30	
97 cis-1,3-Dichloropropene	75	8.273	8.273	0.000	98	220551	10.0	9.72	
98 4-Methyl-2-pentanone (MIBK	43	8.517	8.517	0.000	96	201254	40.0	34.0	
99 Toluene	91	8.813	8.813	0.000	99	555486	10.0	9.97	
100 trans-1,3-Dichloropropene	75	9.126	9.126	0.000	90	149090	10.0	9.36	
101 Ethyl methacrylate	69	9.318	9.318	0.000	86	116985	10.0	9.15	
102 1,1,2-Trichloroethane	97	9.422	9.422	0.000	90	94825	10.0	9.48	
104 1,3-Dichloropropane	76	9.683	9.683	0.000	89	156762	10.0	9.57	
103 Tetrachloroethene	164	9.700	9.700	0.000	97	216615	10.0	10.8	
105 2-Hexanone	43	9.840	9.840	0.000	96	138548	40.0	36.5	
107 Chlorodibromomethane	129	10.048	10.048	0.000	89	198982	10.0	10.1	
109 Ethylene Dibromide	107	10.240	10.240	0.000	98	128419	10.0	9.89	
111 Chlorobenzene	112	11.075	11.075	0.000	95	403646	10.0	10.4	
110 1-Chlorohexane	91	11.075	11.075	0.000	79	260716	10.0	10.2	
113 1,1,1,2-Tetrachloroethane	131	11.214	11.214	0.000	94	200765	10.0	10.4	
112 Ethylbenzene	106	11.284	11.284	0.000	98	199745	10.0	10.4	
114 m-Xylene & p-Xylene	106	11.493	11.493	0.000	99	265825	10.0	10.5	
115 o-Xylene	106	12.154	12.154	0.000	96	229431	10.0	10.4	
116 Styrene	104	12.171	12.171	0.000	94	362196	10.0	10.4	
117 Bromoform	173	12.467	12.467	0.000	98	107346	10.0	10.4	
118 Isopropylbenzene	105	12.815	12.815	0.000	95	716311	10.0	9.73	
119 Cyclohexanone	55	12.937	12.937	0.000	90	63032	400.0	410.7	
121 Bromobenzene	156	13.302	13.302	0.000	90	197773	10.0	10.1	
122 1,1,2,2-Tetrachloroethane	83	13.320	13.320	0.000	95	122306	10.0	9.12	
124 1,2,3-Trichloropropane	110	13.372	13.372	0.000	82	29080	10.0	9.43	
125 trans-1,4-Dichloro-2-buten	53	13.424	13.424	0.000	78	23154	10.0	9.71	
123 N-Propylbenzene	120	13.546	13.546	0.000	99	200546	10.0	10.2	
126 2-Chlorotoluene	126	13.668	13.668	0.000	82	168134	10.0	10.1	a
128 4-Chlorotoluene	126	13.859	13.859	0.000	97	191985	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.877	13.877	0.000	96	555158	10.0	9.73	
129 tert-Butylbenzene	119	14.451	14.451	0.000	93	651811	10.0	9.83	
130 1,2,4-Trimethylbenzene	105	14.538	14.538	0.000	95	531342	10.0	9.62	
131 sec-Butylbenzene	134	14.851	14.851	0.000	93	187277	10.0	10.5	
132 1,3-Dichlorobenzene	146	15.008	15.008	0.000	96	354794	10.0	10.6	
133 4-Isopropyltoluene	119	15.129	15.129	0.000	96	749147	10.0	9.96	
134 1,4-Dichlorobenzene	146	15.164	15.164	0.000	95	398326	10.0	9.97	
138 1,2-Dichlorobenzene	146	15.808	15.808	0.000	98	291545	10.0	10.0	
137 n-Butylbenzene	91	15.843	15.843	0.000	96	638725	10.0	9.88	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.939	0.000	93	22570	10.0	10.1	
141 1,2,4-Trichlorobenzene	180	17.879	17.879	0.000	94	211661	10.0	10.4	
142 Hexachlorobutadiene	225	18.070	18.070	0.000	96	217406	10.0	11.0	
143 Naphthalene	128	18.105	18.105	0.000	97	194244	10.0	9.98	
144 1,2,3-Trichlorobenzene	180	18.348	18.348	0.000	96	157263	10.0	10.1	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	39.1	
S 150 Xylenes, Total (URS)	1				0		20.0	20.9	
S 151 Total BTEX	1				0			50.8	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.1	
S 145 1,2-Dichloroethene, Total	1				0		20.0	19.7	
S 146 Xylenes, Total	106				0		20.0	20.9	
S 147 1,2-Dichloroethene, Total	96				0		20.0	19.7	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

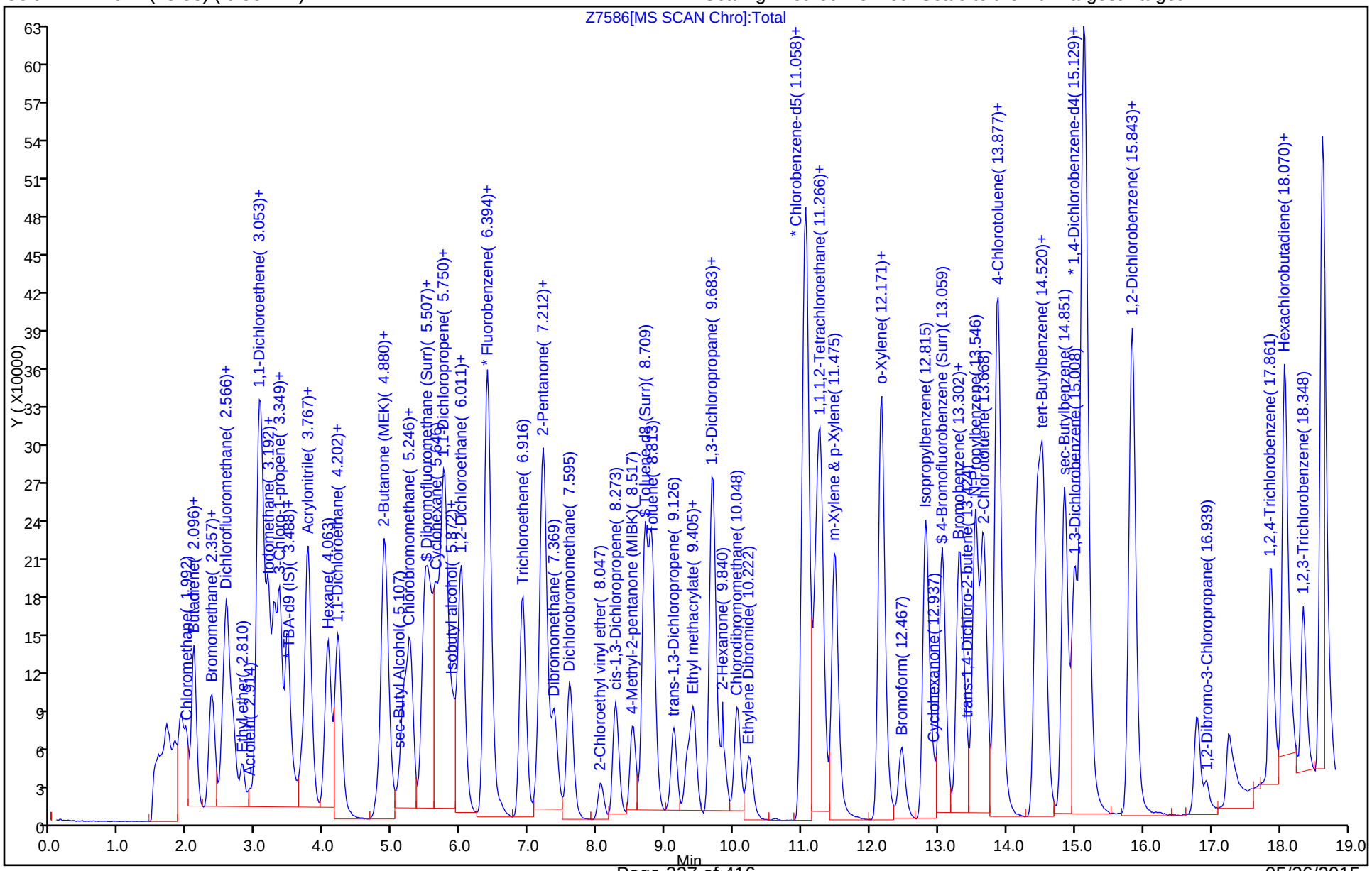
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.82	Units: uL	Run Reagent

Report Date: 15-May-2015 11:30:19 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7586.D				
Injection Date:	14-May-2015 14:47:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ccvc			Worklist Smp#:	22
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCVC 280-277378/22 Calibration Date: 05/14/2015 14:47

Instrument ID: VMS_Z Calib Start Date: 05/14/2015 08:19

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/14/2015 10:35

Lab File ID: Z7586.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4755	0.5297		11.1	10.0	11.4	50.0
Chloromethane	Ave	0.3090	0.3024	0.1000	9.79	10.0	-2.1	50.0
Vinyl chloride	Ave	0.2982	0.3077		10.3	10.0	3.2	50.0
Bromomethane	Ave	0.3205	0.3156		9.85	10.0	-1.5	50.0
Chloroethane	Ave	0.2042	0.2031		9.95	10.0	-0.5	50.0
Dichlorofluoromethane	Ave	0.8196	0.7749		9.45	10.0	-5.5	50.0
Trichlorofluoromethane	Ave	0.7058	0.6936		9.83	10.0	-1.7	50.0
Ethyl ether	Ave	0.1351	0.1329		9.83	10.0	-1.7	50.0
Acrolein	Ave	0.0080	0.0085		106	100	5.9	50.0
1,1-Dichloroethene	Ave	0.3295	0.3518		10.7	10.0	6.8	50.0
Acetone	Ave	0.0151	0.0151		40.0	40.0	-0.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.4956	0.5598		11.3	10.0	12.9	50.0
Iodomethane	Ave	0.8624	0.9176		10.6	10.0	6.4	50.0
Carbon disulfide	Ave	1.122	1.206		10.7	10.0	7.5	50.0
3-Chloro-1-propene	Ave	0.4854	0.4821		9.93	10.0	-0.7	50.0
Methyl acetate	Ave	0.0675	0.0641		47.4	50.0	-5.1	50.0
Methylene Chloride	Ave	0.2812	0.3048		10.8	10.0	8.4	50.0
tert-Butyl alcohol	Lin		0.9063		136	100	36.1	50.0
Acrylonitrile	Ave	0.0217	0.0206		94.6	100	-5.4	50.0
trans-1,2-Dichloroethene	Ave	0.3561	0.3586		10.1	10.0	0.7	50.0
Methyl tert-butyl ether	Ave	0.5076	0.4544		8.95	10.0	-10.5	50.0
Hexane	Ave	2.105	2.012		9.56	10.0	-4.4	50.0
1,1-Dichloroethane	Ave	0.6317	0.5844	0.1000	9.25	10.0	-7.5	50.0
Vinyl acetate	Ave	0.3050	0.2777		18.2	20.0	-8.9	50.0
2-Butanone (MEK)	Ave	0.0367	0.0306		33.3	40.0	-16.8	50.0
cis-1,2-Dichloroethene	Ave	0.3510	0.3371		9.60	10.0	-4.0	50.0
2,2-Dichloropropane	Lin1		0.6019		11.0	10.0	9.6	50.0
sec-Butyl Alcohol	Ave	0.7889	0.8121		309	300	2.9	50.0
Bromochloromethane	Ave	0.1690	0.1718		10.2	10.0	1.7	50.0
Chloroform	Ave	0.6242	0.5869		9.40	10.0	-6.0	50.0
Tetrahydrofuran	Ave	0.0244	0.0207		17.0	20.0	-15.1	50.0
1,1,1-Trichloroethane	Ave	0.6197	0.5901		9.52	10.0	-4.8	50.0
Cyclohexane	Ave	0.5690	0.5427		9.54	10.0	-4.6	50.0
1,1-Dichloropropene	Ave	0.5108	0.5023		9.83	10.0	-1.7	50.0
Carbon tetrachloride	Ave	0.6149	0.6049		9.84	10.0	-1.6	50.0
Isobutyl alcohol	Ave	0.2606	0.2548		244	250	-2.3	50.0
1,2-Dichloroethane	Ave	0.2473	0.2224		8.99	10.0	-10.1	50.0
Benzene	Ave	0.9810	0.9324		9.50	10.0	-5.0	50.0
Trichloroethene	Ave	0.4276	0.4126		9.65	10.0	-3.5	50.0
2-Pentanone	Ave	0.0793	0.0690		34.8	40.0	-13.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCVC 280-277378/22 Calibration Date: 05/14/2015 14:47

Instrument ID: VMS_Z Calib Start Date: 05/14/2015 08:19

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/14/2015 10:35

Lab File ID: Z7586.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3382	0.3138		9.28	10.0	-7.2	50.0
Methylcyclohexane	Ave	0.4844	0.4728		9.76	10.0	-2.4	50.0
Dibromomethane	Ave	0.1890	0.1802		9.53	10.0	-4.7	50.0
Bromodichloromethane	Ave	0.5342	0.4914		9.20	10.0	-8.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1070	0.0995		9.30	10.0	-7.0	50.0
cis-1,3-Dichloropropene	Ave	1.785	1.735		9.72	10.0	-2.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1114	0.0946		34.0	40.0	-15.1	50.0
Toluene	Ave	1.047	1.044		9.97	10.0	-0.3	50.0
trans-1,3-Dichloropropene	Ave	0.2994	0.2803		9.36	10.0	-6.4	50.0
Ethyl methacrylate	Ave	1.006	0.9203		9.15	10.0	-8.5	50.0
1,1,2-Trichloroethane	Ave	0.1881	0.1783		9.48	10.0	-5.2	50.0
1,3-Dichloropropane	Ave	1.288	1.233		9.57	10.0	-4.3	50.0
Tetrachloroethene	Ave	1.578	1.704		10.8	10.0	8.0	50.0
2-Hexanone	Ave	0.2986	0.2725		36.5	40.0	-8.7	50.0
Chlorodibromomethane	Ave	1.545	1.565		10.1	10.0	1.3	50.0
1,2-Dibromoethane	Ave	1.021	1.010		9.89	10.0	-1.1	50.0
1-Chlorohexane	Ave	2.012	2.051		10.2	10.0	2.0	50.0
Chlorobenzene	Ave	3.064	3.175	0.3000	10.4	10.0	3.6	50.0
1,1,1,2-Tetrachloroethane	Ave	1.522	1.579		10.4	10.0	3.8	50.0
Ethylbenzene	Ave	1.507	1.571		10.4	10.0	4.2	50.0
m-Xylene & p-Xylene	Ave	1.996	2.091		10.5	10.0	4.8	50.0
o-Xylene	Ave	1.732	1.805		10.4	10.0	4.2	50.0
Styrene	Ave	2.743	2.849		10.4	10.0	3.9	50.0
Bromoform	Ave	0.8142	0.8444	0.1000	10.4	10.0	3.7	50.0
Isopropylbenzene	Ave	3.243	3.156		9.73	10.0	-2.7	50.0
Cyclohexanone	Lin1		0.0124		411	400	2.7	50.0
Bromobenzene	Ave	0.8591	0.8713		10.1	10.0	1.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5910	0.5388	0.3000	9.12	10.0	-8.8	50.0
1,2,3-Trichloropropane	Ave	0.1359	0.1281		9.43	10.0	-5.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1050	0.1020		9.71	10.0	-2.9	50.0
N-Propylbenzene	Ave	0.8699	0.8835		10.2	10.0	1.6	50.0
2-Chlorotoluene	Ave	0.7341	0.7407		10.1	10.0	0.9	50.0
4-Chlorotoluene	Ave	0.8332	0.8458		10.2	10.0	1.5	50.0
1,3,5-Trimethylbenzene	Ave	2.513	2.446		9.73	10.0	-2.7	50.0
tert-Butylbenzene	Ave	2.922	2.872		9.83	10.0	-1.7	50.0
1,2,4-Trimethylbenzene	Ave	2.432	2.341		9.62	10.0	-3.8	50.0
sec-Butylbenzene	Ave	0.7850	0.8250		10.5	10.0	5.1	50.0
1,3-Dichlorobenzene	Ave	1.468	1.563		10.6	10.0	6.5	50.0
p-Isopropyltoluene	Ave	3.314	3.300		9.96	10.0	-0.4	50.0
1,4-Dichlorobenzene	Ave	1.760	1.755		9.97	10.0	-0.3	50.0
1,2-Dichlorobenzene	Ave	1.283	1.284		10.0	10.0	0.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Lab Sample ID: CCVC 280-277378/22 Calibration Date: 05/14/2015 14:47

Instrument ID: VMS_Z Calib Start Date: 05/14/2015 08:19

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/14/2015 10:35

Lab File ID: Z7586.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	2.848	2.814		9.88	10.0	-1.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0982	0.0994		10.1	10.0	1.3	50.0
1,2,4-Trichlorobenzene	Ave	0.8943	0.9325		10.4	10.0	4.3	50.0
Hexachlorobutadiene	Ave	0.8679	0.9578		11.0	10.0	10.4	50.0
Naphthalene	Ave	0.8574	0.8557		9.98	10.0	-0.2	50.0
1,2,3-Trichlorobenzene	Ave	0.6829	0.6928		10.1	10.0	1.5	50.0
Dibromofluoromethane (Surr)	Ave	0.5901	0.6025		10.5	10.3	2.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2560	0.2236		8.95	10.3	-12.7	50.0
Toluene-d8 (Surr)	Ave	4.182	4.637		11.4	10.3	10.9	50.0
4-Bromofluorobenzene (Surr)	Ave	1.327	1.374		10.6	10.3	3.6	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7586.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 14-May-2015 14:47:30 ALS Bottle#: 18 Worklist Smp#: 22
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 15-May-2015 11:30:19 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: moanm Date: 15-May-2015 11:16:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.488	3.488	0.000	86	106215	250.0	250.0	
* 2 Fluorobenzene	96	6.377	6.377	0.000	98	664980	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.023	11.023	0.000	86	158902	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.129	15.129	0.000	82	283738	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.472	5.472	0.000	94	328525	10.3	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.907	5.907	0.000	95	121906	10.3	8.95	
$ 10 Toluene-d8 (Surr)	98	8.709	8.709	0.000	92	604155	10.3	11.4	
$ 11 4-Bromofluorobenzene (Surr	95	13.059	13.059	0.000	92	319697	10.3	10.6	
27 Dichlorodifluoromethane	85	1.905	1.905	0.000	98	281791	10.0	11.1	
30 Chloromethane	50	1.992	1.992	0.000	99	160860	10.0	9.79	M
31 Butadiene	54	2.079	2.079	0.000	93	111946	NC	NC	
32 Vinyl chloride	62	2.114	2.114	0.000	98	163679	10.0	10.3	
35 Bromomethane	94	2.340	2.340	0.000	90	167887	10.0	9.85	
36 Chloroethane	64	2.392	2.392	0.000	99	108048	10.0	9.95	
37 Dichlorofluoromethane	67	2.549	2.549	0.000	97	412211	10.0	9.45	
38 Trichlorofluoromethane	101	2.601	2.601	0.000	100	368958	10.0	9.83	
40 Ethyl ether	59	2.810	2.810	0.000	91	70672	10.0	9.83	
44 Acrolein	56	2.914	2.914	0.000	98	45132	100.0	105.9	
45 1,1-Dichloroethene	96	3.036	3.036	0.000	99	187123	10.0	10.7	
48 Acetone	43	3.053	3.053	0.000	98	32055	40.0	40.0	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.088	0.000	96	297820	10.0	11.3	
49 Iodomethane	142	3.192	3.192	0.000	98	488165	10.0	10.6	
50 Carbon disulfide	76	3.280	3.280	0.000	99	641699	10.0	10.7	
51 Methyl acetate	43	3.349	3.349	0.000	68	170399	50.0	47.4	
52 3-Chloro-1-propene	41	3.349	3.349	0.000	86	256444	10.0	9.93	
54 Methylene Chloride	84	3.471	3.471	0.000	94	162136	10.0	10.8	
55 2-Methyl-2-propanol	59	3.575	3.575	0.000	93	38505	100.0	136.1	
58 Acrylonitrile	53	3.680	3.680	0.000	99	109416	100.0	94.6	
57 trans-1,2-Dichloroethene	96	3.767	3.767	0.000	99	190786	10.0	10.1	
56 Methyl tert-butyl ether	73	3.784	3.784	0.000	94	241730	10.0	8.95	
59 Hexane	57	4.063	4.063	0.000	90	255812	10.0	9.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 1,1-Dichloroethane	63	4.202	4.202	0.000	96	310900	10.0	9.25	
61 Vinyl acetate	43	4.219	4.219	0.000	96	295466	20.0	18.2	
67 2-Butanone (MEK)	43	4.880	4.880	0.000	41	65070	40.0	33.3	
65 cis-1,2-Dichloroethene	96	4.880	4.880	0.000	83	179322	10.0	9.60	
66 2,2-Dichloropropane	77	4.898	4.898	0.000	86	320225	10.0	11.0	
70 sec-Butyl Alcohol	45	5.107	5.107	0.000	96	103505	300.0	308.8	
71 Chlorobromomethane	128	5.176	5.176	0.000	89	91410	10.0	10.2	
72 Tetrahydrofuran	42	5.263	5.263	0.000	36	22039	20.0	17.0	
74 Chloroform	83	5.263	5.263	0.000	94	312240	10.0	9.40	
75 1,1,1-Trichloroethane	97	5.542	5.542	0.000	99	313936	10.0	9.52	
76 Cyclohexane	56	5.646	5.646	0.000	87	288697	10.0	9.54	
78 1,1-Dichloropropene	75	5.750	5.750	0.000	99	267210	10.0	9.83	
77 Carbon tetrachloride	117	5.785	5.785	0.000	97	321775	10.0	9.84	
80 Isobutyl alcohol	41	5.872	5.872	0.000	93	27058	250.0	244.4	
82 1,2-Dichloroethane	62	6.011	6.011	0.000	94	118327	10.0	8.99	
81 Benzene	78	6.011	6.011	0.000	94	496009	10.0	9.50	
84 n-Heptane	43	6.412	6.412	0.000	90	296006	10.0	9.70	
85 Trichloroethene	95	6.916	6.916	0.000	95	219475	10.0	9.65	
89 2-Pentanone	43	7.142	7.142	0.000	99	146784	40.0	34.8	
90 1,2-Dichloropropane	63	7.195	7.195	0.000	96	166950	10.0	9.28	
87 Methylcyclohexane	55	7.229	7.229	0.000	92	251520	10.0	9.76	
92 Dibromomethane	93	7.369	7.369	0.000	93	95871	10.0	9.53	
94 Dichlorobromomethane	83	7.595	7.595	0.000	100	261429	10.0	9.20	
96 2-Chloroethyl vinyl ether	63	8.047	8.047	0.000	92	52938	10.0	9.30	
97 cis-1,3-Dichloropropene	75	8.273	8.273	0.000	98	220551	10.0	9.72	
98 4-Methyl-2-pentanone (MIBK	43	8.517	8.517	0.000	96	201254	40.0	34.0	
99 Toluene	91	8.813	8.813	0.000	99	555486	10.0	9.97	
100 trans-1,3-Dichloropropene	75	9.126	9.126	0.000	90	149090	10.0	9.36	
101 Ethyl methacrylate	69	9.318	9.318	0.000	86	116985	10.0	9.15	
102 1,1,2-Trichloroethane	97	9.422	9.422	0.000	90	94825	10.0	9.48	
104 1,3-Dichloropropane	76	9.683	9.683	0.000	89	156762	10.0	9.57	
103 Tetrachloroethene	164	9.700	9.700	0.000	97	216615	10.0	10.8	
105 2-Hexanone	43	9.840	9.840	0.000	96	138548	40.0	36.5	
107 Chlorodibromomethane	129	10.048	10.048	0.000	89	198982	10.0	10.1	
109 Ethylene Dibromide	107	10.240	10.240	0.000	98	128419	10.0	9.89	
111 Chlorobenzene	112	11.075	11.075	0.000	95	403646	10.0	10.4	
110 1-Chlorohexane	91	11.075	11.075	0.000	79	260716	10.0	10.2	
113 1,1,1,2-Tetrachloroethane	131	11.214	11.214	0.000	94	200765	10.0	10.4	
112 Ethylbenzene	106	11.284	11.284	0.000	98	199745	10.0	10.4	
114 m-Xylene & p-Xylene	106	11.493	11.493	0.000	99	265825	10.0	10.5	
115 o-Xylene	106	12.154	12.154	0.000	96	229431	10.0	10.4	
116 Styrene	104	12.171	12.171	0.000	94	362196	10.0	10.4	
117 Bromoform	173	12.467	12.467	0.000	98	107346	10.0	10.4	
118 Isopropylbenzene	105	12.815	12.815	0.000	95	716311	10.0	9.73	
119 Cyclohexanone	55	12.937	12.937	0.000	90	63032	400.0	410.7	
121 Bromobenzene	156	13.302	13.302	0.000	90	197773	10.0	10.1	
122 1,1,2,2-Tetrachloroethane	83	13.320	13.320	0.000	95	122306	10.0	9.12	
124 1,2,3-Trichloropropane	110	13.372	13.372	0.000	82	29080	10.0	9.43	
125 trans-1,4-Dichloro-2-buten	53	13.424	13.424	0.000	78	23154	10.0	9.71	
123 N-Propylbenzene	120	13.546	13.546	0.000	99	200546	10.0	10.2	
126 2-Chlorotoluene	126	13.668	13.668	0.000	82	168134	10.0	10.1	a
128 4-Chlorotoluene	126	13.859	13.859	0.000	97	191985	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.877	13.877	0.000	96	555158	10.0	9.73	
129 tert-Butylbenzene	119	14.451	14.451	0.000	93	651811	10.0	9.83	
130 1,2,4-Trimethylbenzene	105	14.538	14.538	0.000	95	531342	10.0	9.62	
131 sec-Butylbenzene	134	14.851	14.851	0.000	93	187277	10.0	10.5	
132 1,3-Dichlorobenzene	146	15.008	15.008	0.000	96	354794	10.0	10.6	
133 4-Isopropyltoluene	119	15.129	15.129	0.000	96	749147	10.0	9.96	
134 1,4-Dichlorobenzene	146	15.164	15.164	0.000	95	398326	10.0	9.97	
138 1,2-Dichlorobenzene	146	15.808	15.808	0.000	98	291545	10.0	10.0	
137 n-Butylbenzene	91	15.843	15.843	0.000	96	638725	10.0	9.88	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.939	0.000	93	22570	10.0	10.1	
141 1,2,4-Trichlorobenzene	180	17.879	17.879	0.000	94	211661	10.0	10.4	
142 Hexachlorobutadiene	225	18.070	18.070	0.000	96	217406	10.0	11.0	
143 Naphthalene	128	18.105	18.105	0.000	97	194244	10.0	9.98	
144 1,2,3-Trichlorobenzene	180	18.348	18.348	0.000	96	157263	10.0	10.1	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	39.1	
S 150 Xylenes, Total (URS)	1				0		20.0	20.9	
S 151 Total BTEX	1				0			50.8	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.1	
S 145 1,2-Dichloroethene, Total	1				0		20.0	19.7	
S 146 Xylenes, Total	106				0		20.0	20.9	
S 147 1,2-Dichloroethene, Total	96				0		20.0	19.7	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

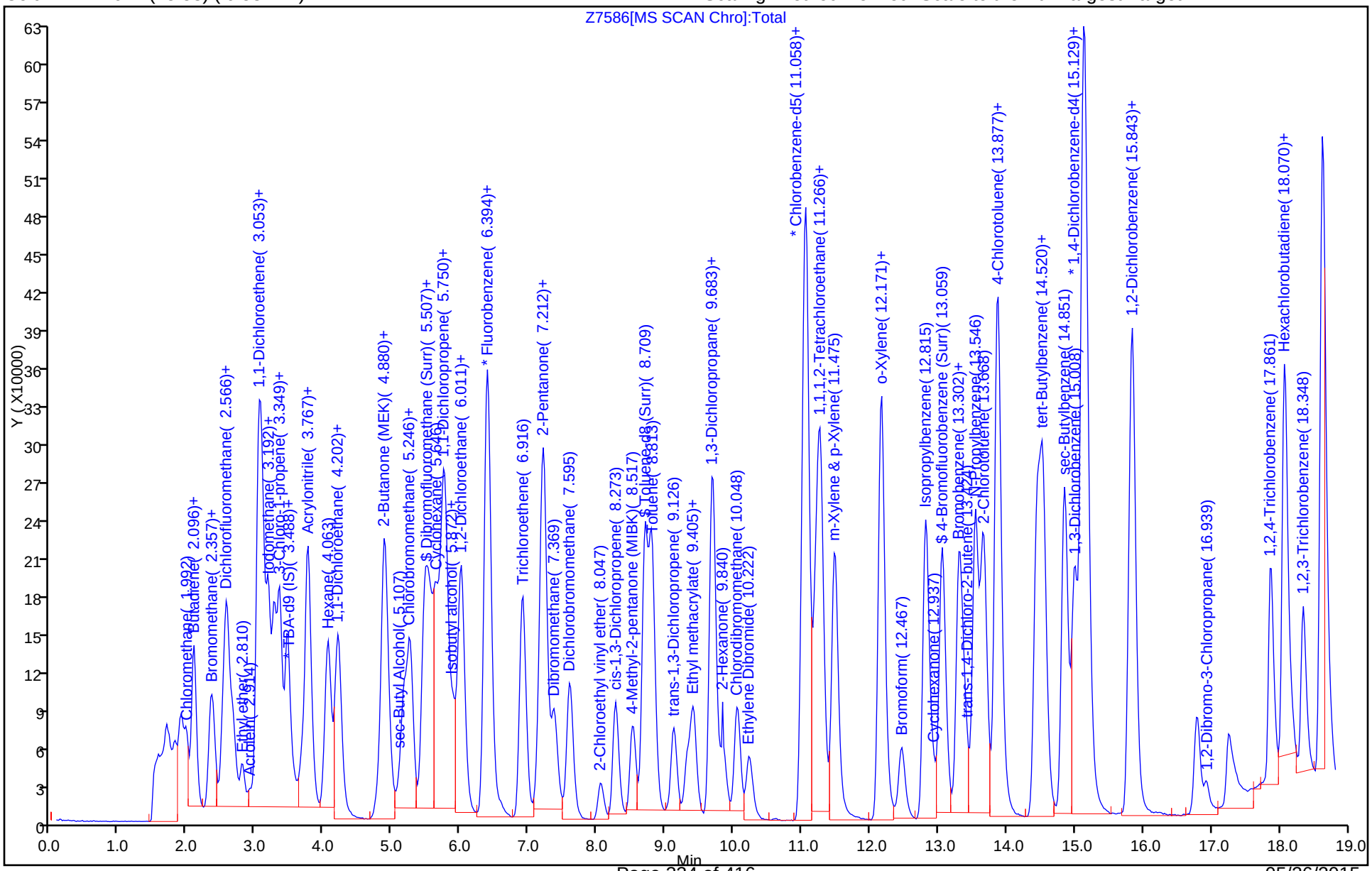
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.82	Units: uL	Run Reagent

Report Date: 15-May-2015 11:30:19 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7586.D				
Injection Date:	14-May-2015 14:47:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ccvc			Worklist Smp#:	22
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

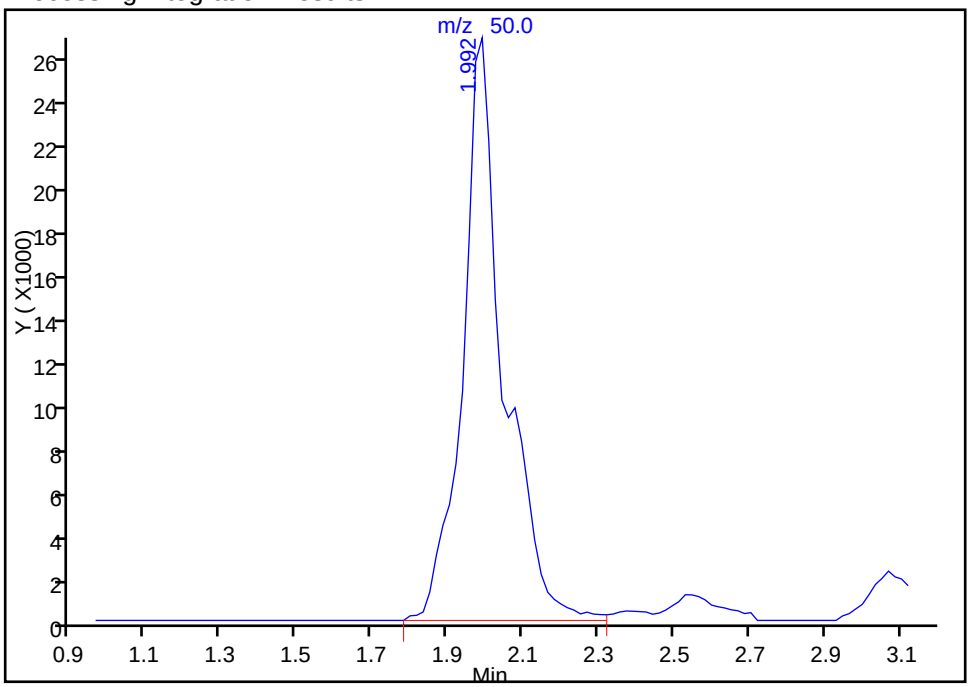
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7586.D				
Injection Date:	14-May-2015 14:47:30	Instrument ID:	VMS_Z		
Lims ID:	ccvc				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

30 Chloromethane, CAS: 74-87-3

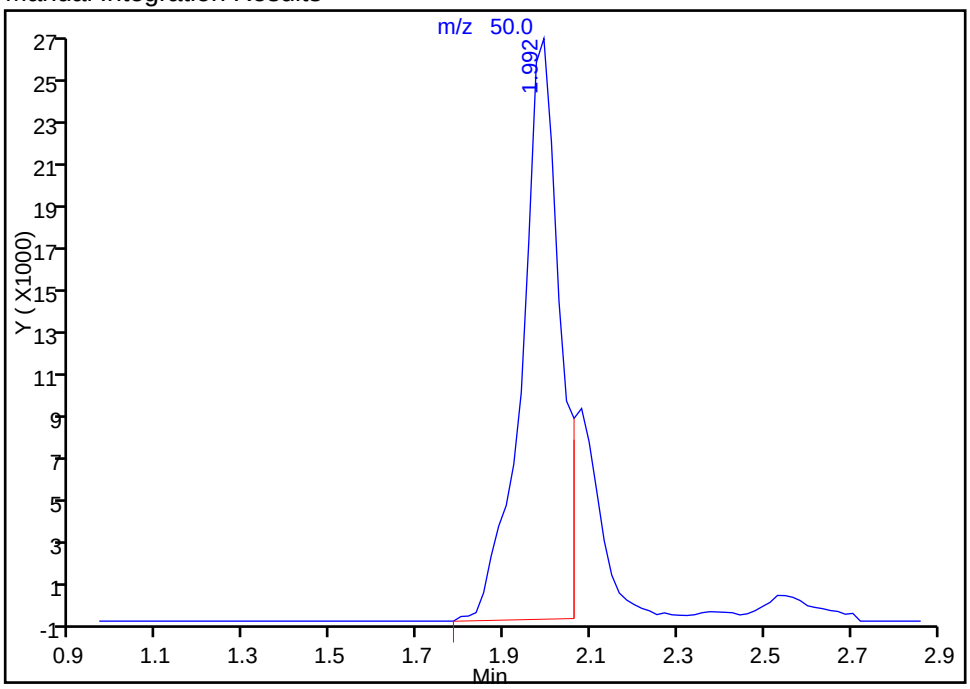
Processing Integration Results

RT: 1.99
Area: 197965
Amount: 12.044856
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 160860
Amount: 9.787263
Amount Units: ug/l



Reviewer: moanm, 15-May-2015 11:16:47
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

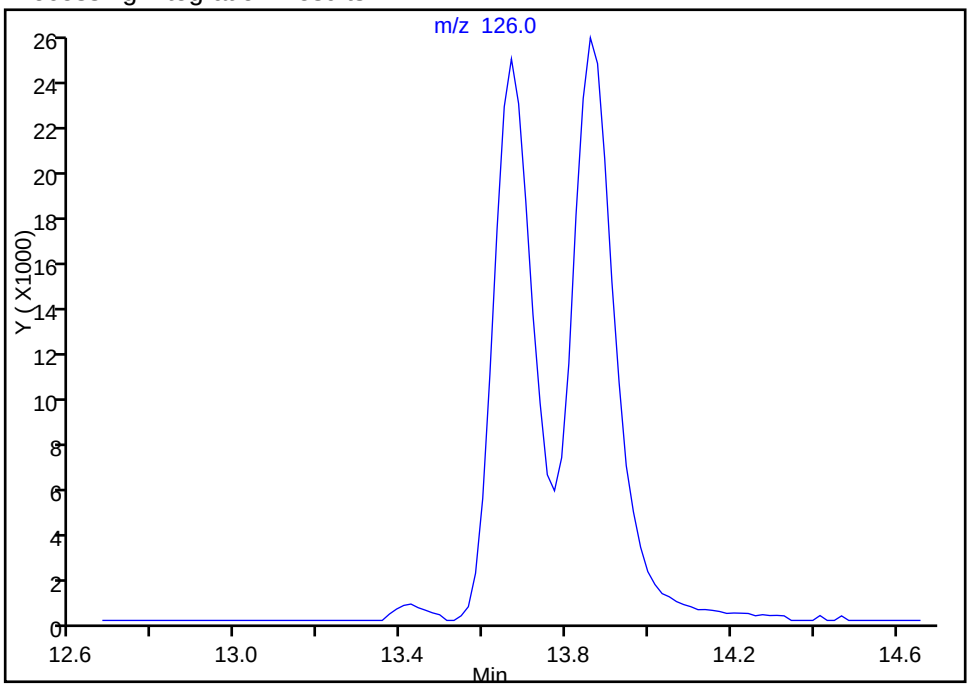
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7586.D				
Injection Date:	14-May-2015 14:47:30	Instrument ID:	VMS_Z		
Lims ID:	ccvc				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

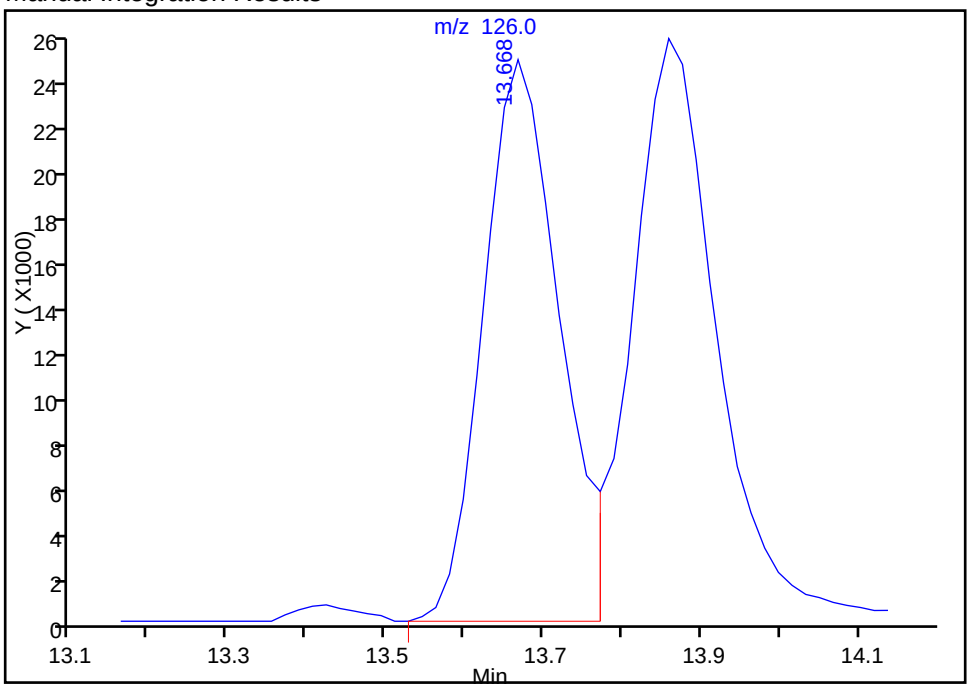
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT: 13.67
Area: 168134
Amount: 10.090048
Amount Units: ug/l



Reviewer: moanm, 15-May-2015 11:16:47
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3684.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	28-Apr-2015 13:12:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	ilczyszyn	Instrument ID:	VMS_G2		
Method:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	28-Apr-2015 23:36:59	Calib Date:	28-Apr-2015 17:55:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK051				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	4.573	4.573	0.000	82	109394	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

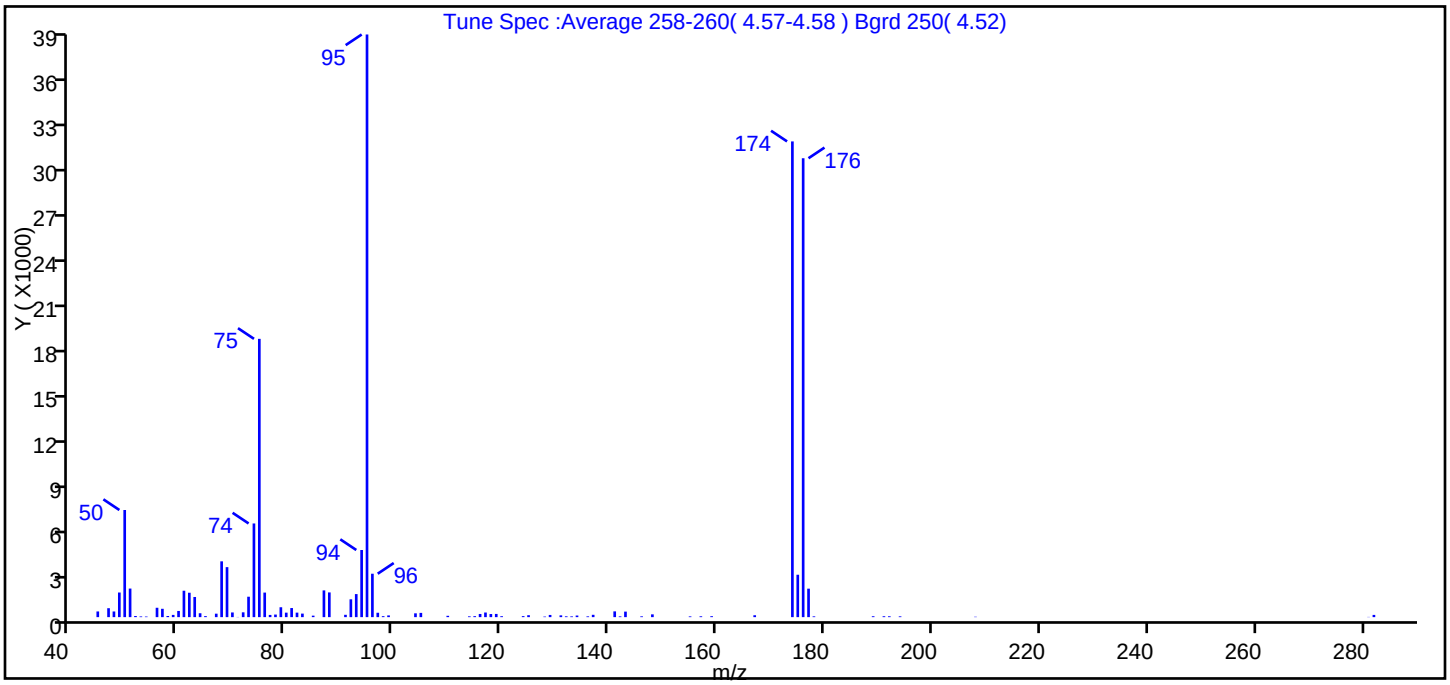
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3684.D				
Injection Date:	28-Apr-2015 13:12:30	Instrument ID:	VMS_G2		
Lims ID:	BFB				
Client ID:					
Operator ID:	ilczyszyn	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Tune Method:	BFB Method 8260				

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.4
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	81.6
175	5 to 9% of m/z 174	7.3 (8.9)
176	Greater than 95% but less than 101% of m/z 174	78.8 (96.5)
177	5 to 9% of m/z 176	4.9 (6.2)

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3684.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 28-Apr-2015 13:12:30
Spectrum: Tune Spec :Average 258-260(4.57-4.58) Bgrd 250(4.52)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	379	71.00	12	98.00	64	142.00	50
47.00	595	72.00	321	99.00	115	143.00	368
48.00	378	73.00	1360	104.00	254	146.00	53
49.00	1640	74.00	6237	105.00	283	148.00	186
50.00	7133	75.00	18528	110.00	89	155.00	50
51.00	1903	76.00	1635	114.00	53	157.00	56
52.00	76	77.00	147	115.00	65	159.00	62
53.00	47	78.00	172	116.00	211	167.00	126
54.00	40	79.00	659	117.00	308	174.00	31672
56.00	624	80.00	299	118.00	207	175.00	2823
57.00	556	81.00	606	119.00	214	176.00	30552
58.00	76	82.00	300	120.00	61	177.00	1896
59.00	149	83.00	236	124.00	67	178.00	51
60.00	412	85.00	99	125.00	129	189.00	59
61.00	1759	87.00	1781	128.00	37	191.00	59
62.00	1625	88.00	1646	129.00	146	192.00	57
63.00	1342	91.00	156	131.00	119	194.00	52
64.00	260	92.00	1187	132.00	54	208.00	26
65.00	68	93.00	1535	133.00	50	281.00	15
67.00	231	94.00	4470	134.00	107	282.00	149
68.00	3716	95.00	38792	136.00	51		
69.00	3329	96.00	2891	137.00	156		
70.00	312	97.00	292	141.00	384		

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4148.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	11-May-2015 05:48:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	ilczyszynd	Instrument ID:	VMS_G2		
Method:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\AQ_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	11-May-2015 12:03:13	Calib Date:	11-May-2015 09:39:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK036				

First Level Reviewer: ilczyszynd Date: 11-May-2015 12:03:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	4.591	4.591	0.000	83	144787	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

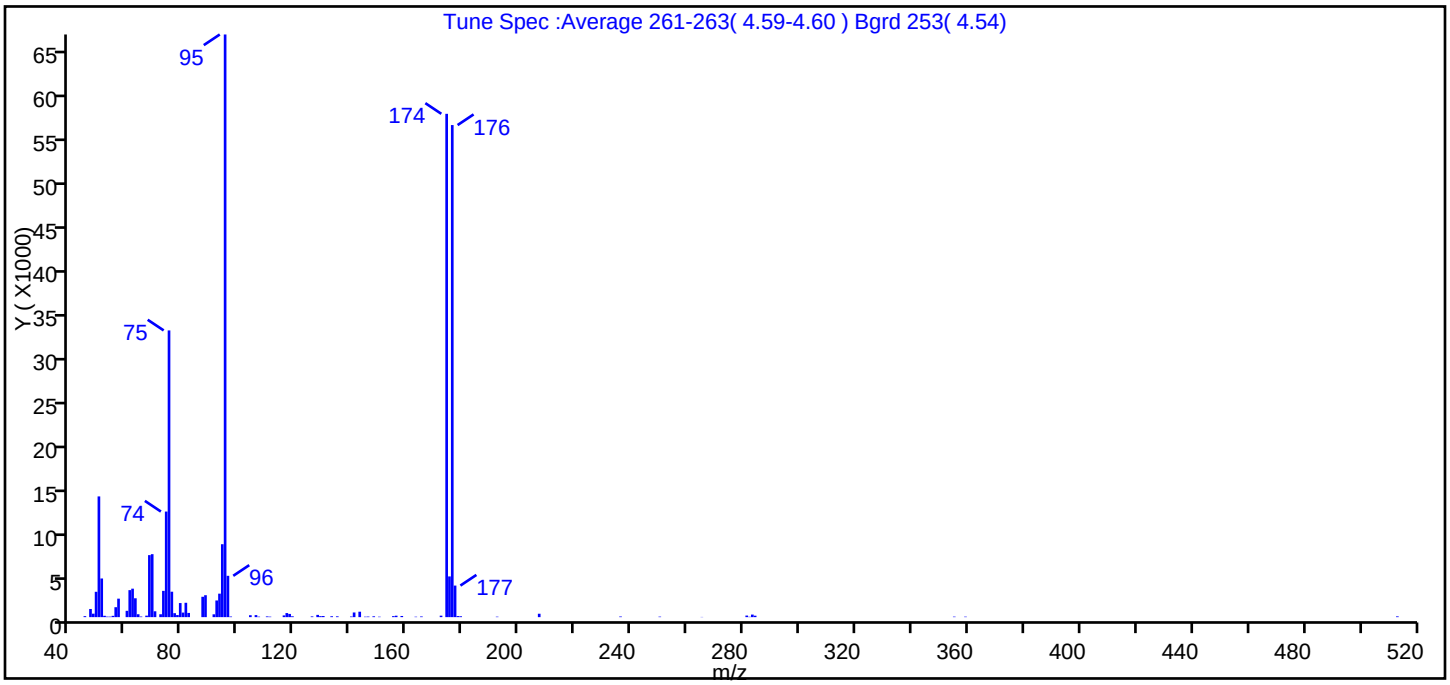
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4148.D
Injection Date: 11-May-2015 05:48:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: ilczyszynd ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.7
75	30 to 60% of m/z 95	49.2
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	86.4
175	5 to 9% of m/z 174	7.0 (8.1)
176	Greater than 95% but less than 101% of m/z 174	84.5 (97.8)
177	5 to 9% of m/z 176	5.4 (6.4)

Data File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4148.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 11-May-2015 05:48:30
Spectrum: Tune Spec :Average 261-263(4.59-4.60) Bgrd 253(4.54)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 88

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	114	72.00	331	107.00	56	158.00	133
47.00	934	73.00	3011	110.00	83	163.00	50
48.00	397	74.00	12094	111.00	55	165.00	77
49.00	2903	75.00	32840	116.00	198	172.00	168
50.00	13827	76.00	2913	117.00	467	174.00	57648
51.00	4428	77.00	454	118.00	368	175.00	4663
52.00	154	78.00	239	119.00	96	176.00	56360
53.00	60	79.00	1614	126.00	85	177.00	3615
54.00	57	80.00	522	128.00	259	178.00	122
55.00	149	81.00	1645	129.00	113	179.00	99
56.00	1138	82.00	484	130.00	127	192.00	54
57.00	2118	87.00	2334	133.00	102	207.00	390
60.00	724	88.00	2512	135.00	93	236.00	73
61.00	3093	91.00	325	140.00	70	250.00	59
62.00	3261	92.00	1910	141.00	535	265.00	23
63.00	2161	93.00	2690	143.00	622	281.00	181
64.00	332	94.00	8353	145.00	51	282.00	43
65.00	70	95.00	66736	146.00	66	283.00	294
67.00	171	96.00	4734	148.00	96	284.00	165
68.00	7103	97.00	70	150.00	51	355.00	58
69.00	7213	104.00	219	155.00	114	359.00	55
70.00	671	106.00	233	156.00	165	513.00	88

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4242.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	12-May-2015 17:47:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	DUKESA	Instrument ID:	VMS_G2		
Method:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\AQ_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	13-May-2015 16:10:09	Calib Date:	11-May-2015 09:39:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK010				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	4.573	4.573	0.000	82	101826	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

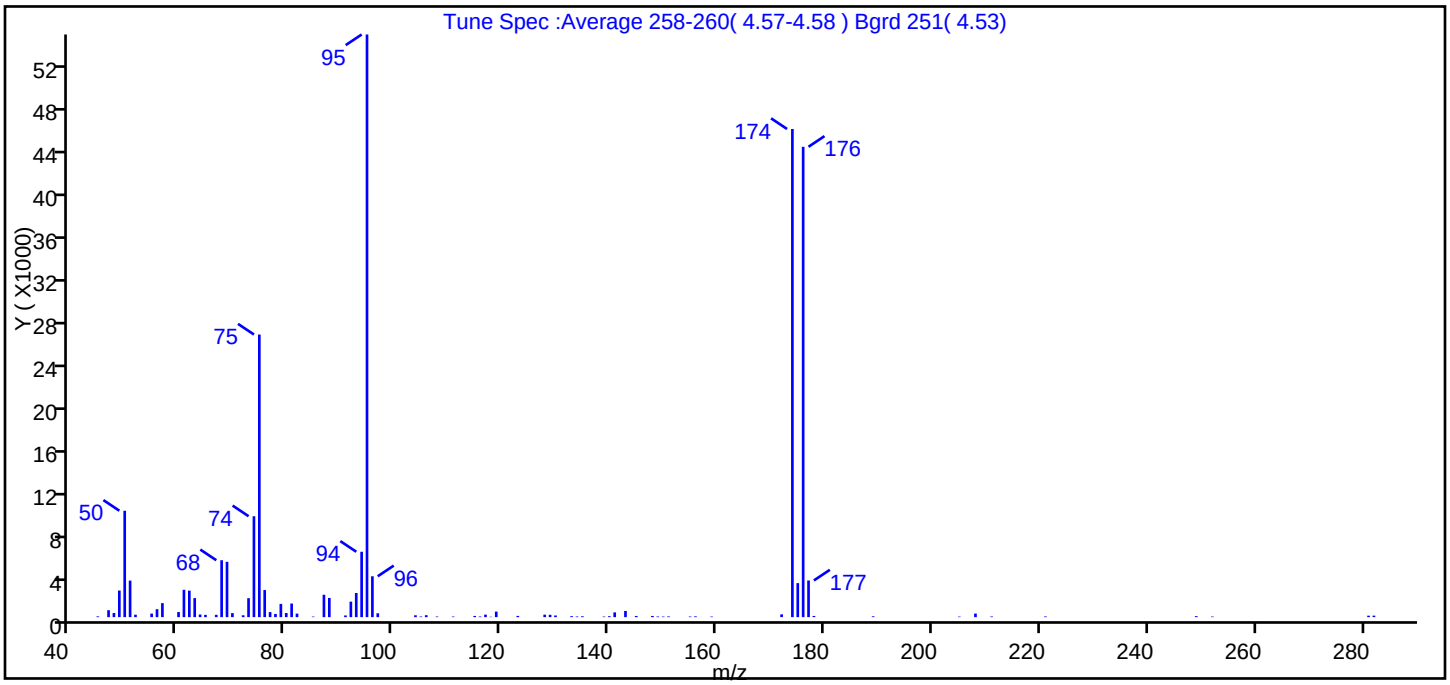
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4242.D				
Injection Date:	12-May-2015 17:47:30	Instrument ID:	VMS_G2		
Lims ID:	BFB				
Client ID:					
Operator ID:	DUKESA	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Tune Method:	BFB Method 8260				

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.3
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	83.8
175	5 to 9% of m/z 174	5.8 (7.0)
176	Greater than 95% but less than 101% of m/z 174	80.7 (96.4)
177	5 to 9% of m/z 176	6.3 (7.8)

Data File: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4242.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 12-May-2015 17:47:30
Spectrum: Tune Spec :Average 258-260(4.57-4.58) Bgrd 251(4.53)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	71	74.00	9386	108.00	58	151.00	65
47.00	647	75.00	26288	111.00	55	155.00	57
48.00	383	76.00	2521	115.00	113	156.00	72
49.00	2475	77.00	471	116.00	59	159.00	52
50.00	9897	78.00	296	117.00	232	172.00	261
51.00	3400	79.00	1231	118.00	34	174.00	45408
52.00	227	80.00	383	119.00	517	175.00	3166
55.00	331	81.00	1264	123.00	114	176.00	43752
56.00	739	82.00	329	128.00	230	177.00	3411
57.00	1304	85.00	52	129.00	218	178.00	112
60.00	475	87.00	2083	130.00	154	189.00	76
61.00	2544	88.00	1786	133.00	89	205.00	51
62.00	2466	91.00	157	134.00	60	208.00	332
63.00	1773	92.00	1442	135.00	79	211.00	61
64.00	244	93.00	2246	139.00	53	221.00	64
65.00	212	94.00	6082	140.00	85	249.00	93
67.00	216	95.00	54200	141.00	443	252.00	56
68.00	5294	96.00	3801	143.00	574	281.00	136
69.00	5147	97.00	358	145.00	112	282.00	140
70.00	376	104.00	173	148.00	112		
72.00	172	105.00	59	149.00	60		
73.00	1764	106.00	180	150.00	53		

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6760.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	27-Apr-2015 06:31:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	bfb				
Operator ID:	moanm	Instrument ID:	VMS_Z		
Method:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	27-Apr-2015 21:05:23	Calib Date:	27-Apr-2015 13:21:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6778.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK036				

First Level Reviewer: bergerb Date: 27-Apr-2015 21:05:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.545	2.545	0.000	80	157954	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

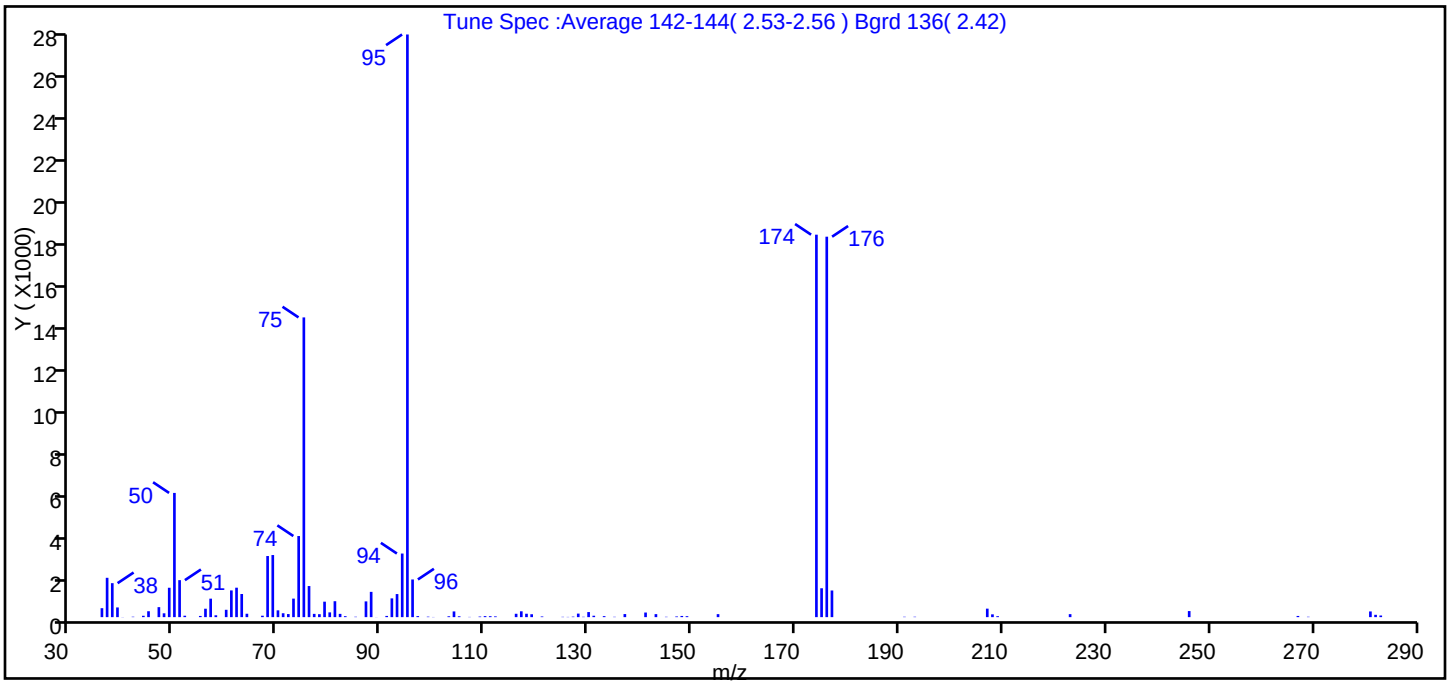
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6760.D				
Injection Date:	27-Apr-2015 06:31:30	Instrument ID:	VMS_Z		
Lims ID:	BFB				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Tune Method:	BFB Method 8260				

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.3
75	30 to 60% of m/z 95	51.4
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.6
175	5 to 9% of m/z 174	5.0 (7.6)
176	Greater than 95% but less than 101% of m/z 174	65.3 (99.5)
177	5 to 9% of m/z 176	4.6 (7.0)

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6760.D\AQ_VMSZ_8260.rslt\spectra.d
Injection Date: 27-Apr-2015 06:31:30
Spectrum: Tune Spec :Average 142-144(2.53-2.56) Bgrd 136(2.42)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	427	69.00	2963	97.00	49	137.00	147
37.00	1877	70.00	325	99.00	23	141.00	220
38.00	1621	71.00	186	100.00	8	143.00	144
39.00	463	72.00	147	103.00	41	145.00	17
40.00	6	73.00	884	104.00	273	147.00	33
42.00	20	74.00	3870	105.00	40	148.00	57
44.00	65	75.00	14301	107.00	11	149.00	46
45.00	282	76.00	1484	109.00	28	155.00	143
47.00	477	77.00	156	110.00	49	174.00	18248
48.00	183	78.00	141	111.00	45	175.00	1378
49.00	1402	79.00	738	112.00	36	176.00	18152
50.00	5927	80.00	227	116.00	161	177.00	1272
51.00	1765	81.00	760	117.00	279	191.00	18
52.00	68	82.00	156	118.00	162	193.00	19
55.00	57	83.00	46	119.00	139	207.00	405
56.00	402	85.00	19	121.00	32	208.00	134
57.00	882	87.00	752	125.00	15	209.00	45
58.00	89	88.00	1206	126.00	11	223.00	143
60.00	351	89.00	4	127.00	24	246.00	290
61.00	1275	91.00	58	128.00	169	267.00	57
62.00	1405	92.00	895	129.00	17	269.00	18
63.00	1104	93.00	1101	130.00	242	281.00	272
64.00	162	94.00	3035	131.00	67	282.00	111
67.00	68	95.00	27800	133.00	48	283.00	78
68.00	2916	96.00	1797	135.00	16		

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7568.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	14-May-2015 07:49:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	bfb				
Operator ID:	moanm	Instrument ID:	VMS_Z		
Method:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	15-May-2015 01:16:33	Calib Date:	14-May-2015 10:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK015				

First Level Reviewer: bergerb Date: 15-May-2015 01:16:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.580	2.580	0.000	81	112748	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

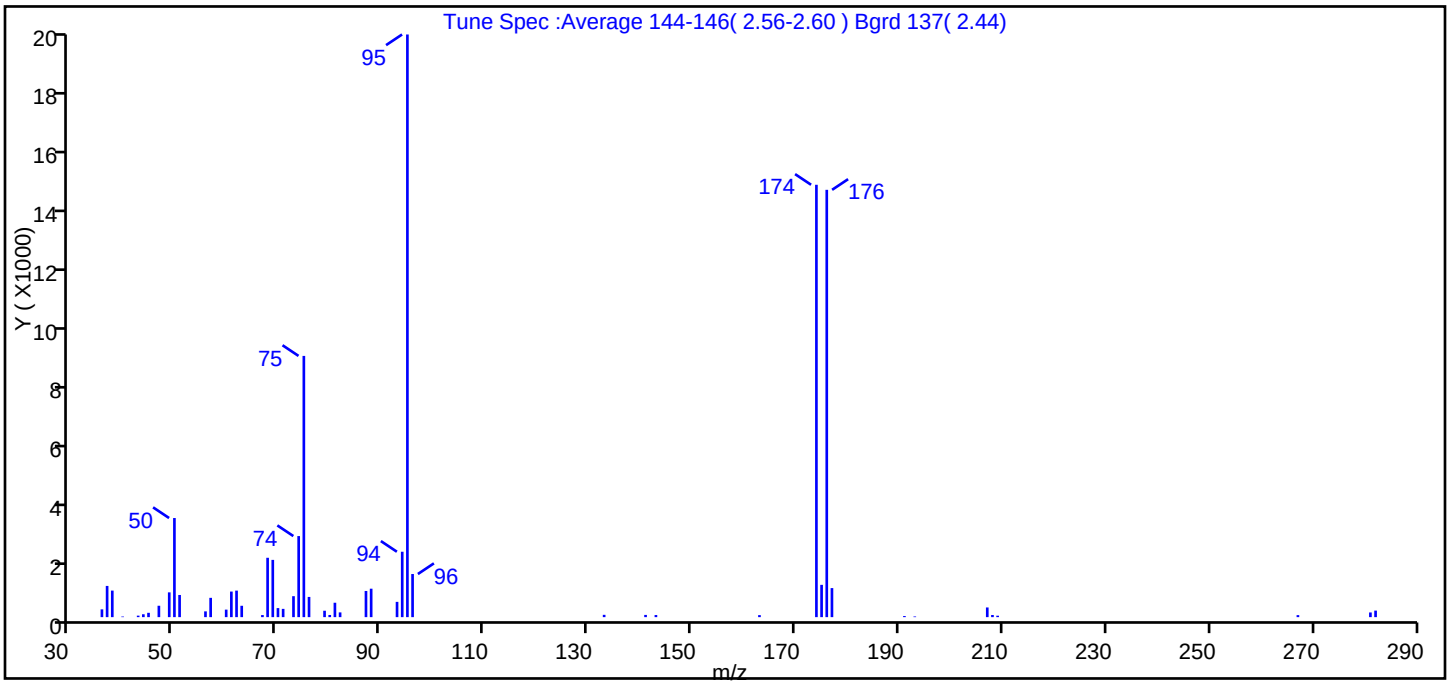
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7568.D				
Injection Date:	14-May-2015 07:49:30	Instrument ID:	VMS_Z		
Lims ID:	BFB				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Tune Method:	BFB Method 8260				

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.0
75	30 to 60% of m/z 95	44.8
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	74.2
175	5 to 9% of m/z 174	5.5 (7.5)
176	Greater than 95% but less than 101% of m/z 174	73.3 (98.8)
177	5 to 9% of m/z 176	5.0 (6.8)

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7568.D\AQ_VMSZ_8260.rslt\spectra.d
Injection Date: 14-May-2015 07:49:30
Spectrum: Tune Spec :Average 144-146(2.56-2.60) Bgrd 137(2.44)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 52

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	259	60.00	250	79.00	213	163.00	67
37.00	1038	61.00	851	80.00	72	174.00	14378
38.00	883	62.00	882	81.00	479	175.00	1074
40.00	20	63.00	378	82.00	158	176.00	14210
43.00	50	67.00	69	87.00	870	177.00	966
44.00	96	68.00	1974	88.00	946	191.00	36
45.00	144	69.00	1904	93.00	508	193.00	22
47.00	379	70.00	301	94.00	2175	207.00	322
49.00	824	71.00	275	95.00	19376	208.00	71
50.00	3296	73.00	697	96.00	1434	209.00	48
51.00	737	74.00	2696	133.00	77	267.00	67
56.00	192	75.00	8687	141.00	74	281.00	156
57.00	642	76.00	672	143.00	70	282.00	217

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-277119/6
Matrix: Water | Lab File ID: G2_4246.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 19:13
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-277119/6
Matrix: Water | Lab File ID: G2_4246.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 19:13
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	0.80	U	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-277119/6

Matrix: Water | Lab File ID: G2_4246.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 19:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

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

Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		81-118
460-00-4	4-Bromofluorobenzene (Surr)	114		85-114
1868-53-7	Dibromofluoromethane (Surr)	104		80-119
2037-26-5	Toluene-d8 (Surr)	109		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4246.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-May-2015 19:13:30 ALS Bottle#: 13 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-May-2015 16:10:11 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 12-May-2015 19:49:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	139097	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1385984	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.801	-0.008	86	317958	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	95	435011	12.5	12.5	
* 5 1,4-Dioxane-d8	96		0.000					ND	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	308991	10.0	10.4	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	96	280913	10.0	10.7	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	94	1444042	10.0	10.9	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	91	444937	10.0	11.4	
$ 10 Trifluorotoluene (Surr)	1		0.000					ND	
$ 11 BFB	95		4.573					ND	
12 Chlorotrifluoroethene	116		3.867					ND	
13 Dichlorodifluoromethane	85		3.895					ND	
15 1,2-Dichloro-1,1,2,2-tetra	85		4.077					ND	
14 Chloromethane	50		4.091					ND	
16 Vinyl chloride	62		4.230					ND	
138 Butadiene	54		4.258					ND	
17 2-Chloro-1,1,1-Trifluoroet	118		4.314					ND	
18 Ethylene oxide	43		4.524					ND	
19 Bromomethane	94		4.593					ND	
20 Chloroethane	64		4.663					ND	
21 Dichlorofluoromethane	67		4.803					ND	
22 Trichlorofluoromethane	101		4.887					ND	
23 Ethanol	45		4.915					ND	
25 Ethyl ether	59		5.068					ND	
24 1,2-Dichloro-1,1,2-trifluo	117		5.082					ND	
26 1,1,1-Trifluoro-2,2-dichlo	83		5.110					ND	
27 Propene oxide	58		5.152					ND	
28 Acrolein	56		5.194					ND	
29 Acetone	43		5.292					ND	
30 Isopropyl alcohol	45		5.320					ND	
31 1,1,2-Trichloro-1,2,2-trif	151		5.334					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 1,1-Dichloroethene	96		5.334					ND	
34 Iodomethane	142		5.501					ND	
33 Acetonitrile	41		5.515					ND	
35 Methyl acetate	43		5.529					ND	
36 3-Chloro-1-propene	41		5.585					ND	
37 Carbon disulfide	76		5.613					ND	
38 2-Methyl-2-propanol	59		5.641					ND	
39 Methylene Chloride	84		5.669					ND	
40 Acrylonitrile	53		5.808					ND	
41 Methyl tert-butyl ether	73		5.864					ND	
42 trans-1,2-Dichloroethene	96		5.892					ND	
43 Hexane	57		6.082					ND	
44 Vinyl acetate	43		6.154					ND	
45 Isopropyl ether	87		6.183					ND	
46 1,1-Dichloroethane	63		6.218					ND	
47 2-Chloro-1,3-butadiene	53		6.290					ND	
48 Tert-butyl ethyl ether	59		6.461					ND	
50 2-Butanone (MEK)	43		6.583					ND	
49 Ethyl acetate	43		6.583					ND	
52 sec-Butyl Alcohol	45		6.633					ND	
51 Propionitrile	54		6.633					ND	
53 cis-1,2-Dichloroethene	96		6.647					ND	
54 2,2-Dichloropropane	77		6.683					ND	
55 Methacrylonitrile	41		6.762					ND	
56 Chlorobromomethane	128		6.840					ND	
57 Chloroform	83		6.847					ND	
58 Tetrahydrofuran	42		6.876					ND	
59 Isobutyl alcohol	41		7.048					ND	
60 1,1,1-Trichloroethane	97		7.076					ND	
61 Cyclohexane	56		7.155					ND	
62 1,1-Dichloropropene	75		7.176					ND	
63 Carbon tetrachloride	117		7.219					ND	
64 1,2-Dichloroethane	62		7.326					ND	
66 Benzene	78		7.355					ND	
65 Tert-amyl methyl ether	73		7.355					ND	
67 n-Heptane	43		7.448					ND	
68 n-Butanol	56		7.548					ND	
69 Trichloroethene	95		7.820					ND	
70 2-Pentanone	43		7.848					ND	
71 Methyl methacrylate	100		7.956					ND	
72 1,2-Dichloropropane	63		7.999					ND	
73 Methylcyclohexane	55		8.020					ND	
74 1,4-Dioxane	88		8.056					ND	
75 Dibromomethane	93		8.099					ND	
76 Dichlorobromomethane	83		8.170					ND	
77 2-Nitropropane	41		8.306					ND	
78 2-Chloroethyl vinyl ether	63		8.313					ND	
79 cis-1,3-Dichloropropene	75		8.492					ND	
80 4-Methyl-2-pentanone (MIBK	43		8.549					ND	
81 Toluene	91		8.778					ND	
82 Ethyl methacrylate	69		8.864					ND	
83 trans-1,3-Dichloropropene	75		8.871					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,1,2-Trichloroethane	97		9.028					ND	
85 2-Hexanone	43		9.143					ND	
86 1,3-Dichloropropane	76		9.164					ND	
87 Tetrachloroethene	164		9.200					ND	
88 Chlorodibromomethane	129		9.357					ND	
89 Tetrahydrothiophene	60		9.400					ND	
90 Ethylene Dibromide	107		9.479					ND	
91 1-Chlorohexane	91		9.715					ND	
92 Chlorobenzene	112		9.822					ND	
131 4-Ethyltoluene TIC	105		9.850					ND	
132 1,3-Butadiene TIC	39		9.850					ND	
133 Propene TIC	41		9.850					ND	
130 Dicyclopentadiene TIC	66		9.850					ND	
93 1,1,1,2-Tetrachloroethane	131		9.858					ND	
94 Ethylbenzene	106		9.865					ND	
95 m-Xylene & p-Xylene	106		9.936					ND	
97 o-Xylene	106		10.251					ND	
96 Styrene	104		10.251					ND	
98 Bromoform	173		10.444					ND	
99 Isopropylbenzene	105		10.515					ND	
100 cis-1,4-Dichloro-2-butene	53		10.523					ND	
101 Cyclohexanone	55		10.630					ND	
102 1,1,2,2-Tetrachloroethane	83		10.701					ND	
103 trans-1,4-Dichloro-2-buten	53		10.737					ND	
104 1,2,3-Trichloropropane	110		10.773					ND	
105 Bromobenzene	156		10.823					ND	
106 N-Propylbenzene	120		10.830					ND	
107 1,3,5-Trimethylbenzene	105		10.937					ND	
108 2-Chlorotoluene	126		10.952					ND	
109 4-Chlorotoluene	126		11.023					ND	
110 tert-Butylbenzene	119		11.230					ND	
111 1,2,4-Trimethylbenzene	105		11.259					ND	
112 sec-Butylbenzene	134		11.409					ND	
113 4-Isopropyltoluene	119		11.502					ND	
114 1,3-Dichlorobenzene	146		11.567					ND	
116 1,4-Dichlorobenzene	146		11.631					ND	
115 1,2,3-Trimethylbenzene	105		11.638					ND	
117 n-Butylbenzene	91		11.860					ND	
118 1,2-Dichlorobenzene	146		11.988					ND	
119 1,2-Dibromo-3-Chloropropan	157		12.711					ND	
120 1,3,5-Trichlorobenzene	180		12.932					ND	
121 1,2,4-Trichlorobenzene	180		13.647					ND	
122 Hexachlorobutadiene	225		13.812					ND	
123 Naphthalene	128		14.005					ND	
124 1,2,3-Trichlorobenzene	180		14.319					ND	
142 2,4-Dimethylpentane	1		0.000					ND	
136 3-Ethylpentane	1		0.000					ND	
135 Benzyl chloride	126		0.000					ND	
126 Dimethyl disulfide	1		0.000					ND	
125 2,3-Dimethylpentane	1		0.000					ND	
143 n-Nonyl Aldehyde	1		0.000					ND	
134 2-Methylnaphthalene	142		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
140 n-Butyl acetate	43		0.000					ND	
137 2,2,3-Trimethylbutane	1		0.000					ND	
129 2-Methylhexane	1		0.000					ND	
145 Pentachloroethane	167		0.000					ND	
128 2,2-Dimethylpentane	1		0.000					ND	
144 Ethyl acrylate	55		0.000					ND	
127 2-Butoxyethanol TIC	1		0.000					ND	
141 3,3-Dimethylpentane	1		0.000					ND	
139 3-Methylhexane	1		0.000					ND	
146 2,3-dichloro-1-propene TIC	75		1.000					ND	
147 Dichloroacetonitrile TIC	74		1.000					ND	
148 Propene oxide TIC	58		5.334					ND	
S 149 1,2-Dichloroethene, Total	96		2.000					ND	
S 150 Trihalomethanes, Total	1		0.000					ND	
S 151 Xylenes, Total (URS)	1		0.000					ND	
S 152 Total BTEX	1		0.000					ND	
S 153 1,3-Dichloropropene, Total	1		0.000					ND	
S 154 1,2-Dichloroethene, Total	1		0.000					ND	
S 155 Xylenes, Total	106		0.000					ND	

Reagents:

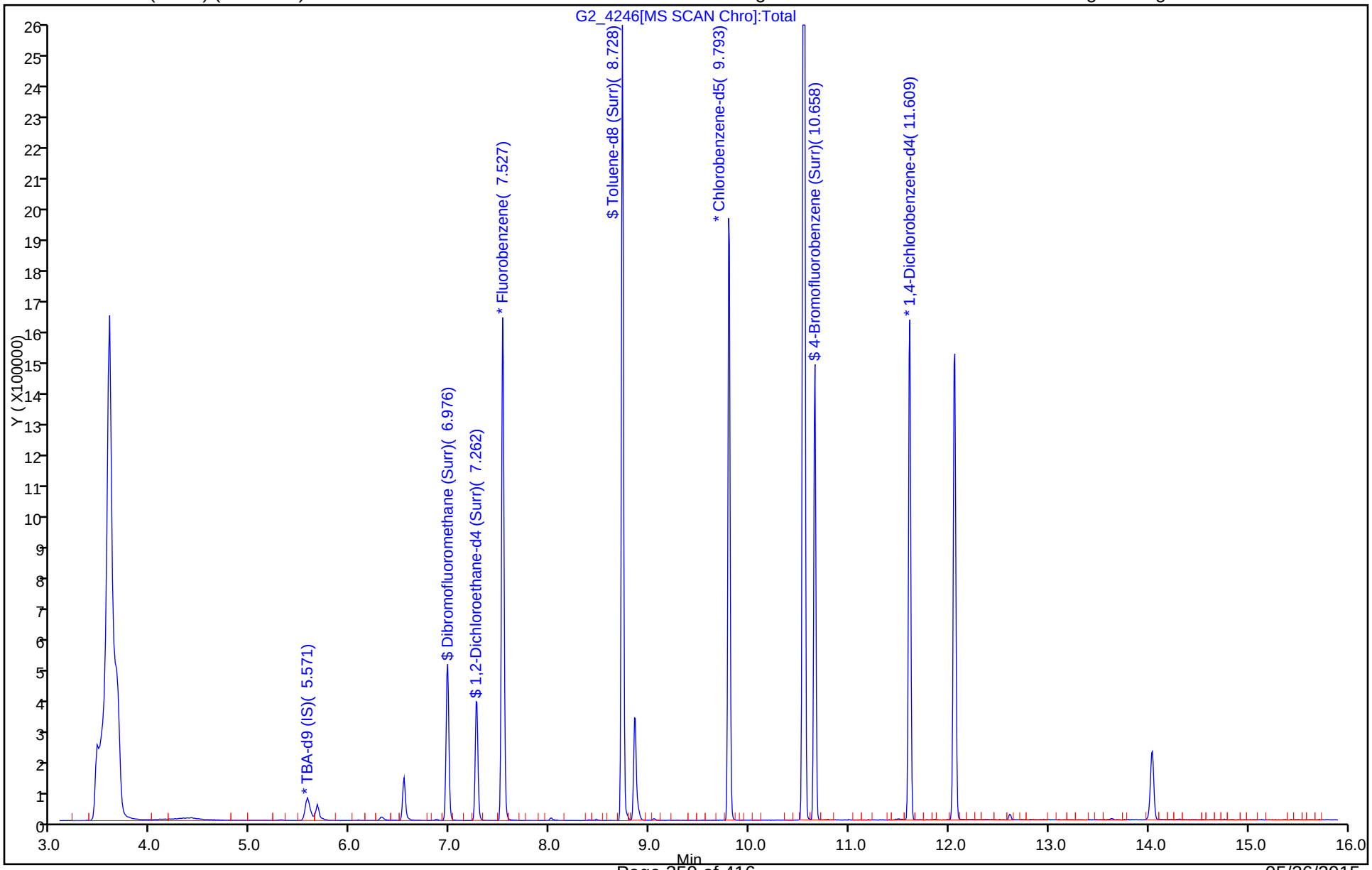
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 13-May-2015 16:10:14 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4246.D				
Injection Date:	12-May-2015 19:13:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-277378/18
Matrix: Water | Lab File ID: Z7585.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 14:24
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	0.40	U	1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	0.80	U	3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	0.40	U	1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	0.40	U	1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	0.80	U	1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	0.40	U	1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	1.8
95-49-8	2-Chlorotoluene	0.40	U	1.0	0.40	0.17
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.4
106-43-4	4-Chlorotoluene	0.80	U	1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	1.0
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
108-86-1	Bromobenzene	0.40	U	1.0	0.40	0.17
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	0.40	U	1.0	0.40	0.19
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	1.6	U	2.0	1.6	0.45
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-277378/18
Matrix: Water | Lab File ID: Z7585.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 14:24
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
74-95-3	Dibromomethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	0.80	U	1.0	0.80	0.36
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
75-09-2	Methylene Chloride	1.42	J	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68855-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-277378/18
Matrix: Water
Lab File ID: Z7585.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/14/2015 14:24
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 277378
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		81-118
460-00-4	4-Bromofluorobenzene (Surr)	109		85-114
1868-53-7	Dibromofluoromethane (Surr)	105		80-119
2037-26-5	Toluene-d8 (Surr)	108		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7585.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 14-May-2015 14:24:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: blk
Operator ID: moanm Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 15-May-2015 11:30:19 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: moanm Date: 14-May-2015 15:08:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.503	3.488	0.015	94	113032	250.0	250.0	
* 2 Fluorobenzene	96	6.374	6.377	-0.003	98	667975	12.5	12.5	
* 3 1,4-Dioxane-d8	96	7.383	7.292	0.091	27	4644		0	
* 4 Chlorobenzene-d5	119	11.020	11.023	-0.003	85	165057	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.126	15.129	-0.003	94	276546	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.469	5.472	-0.003	95	338421	10.3	10.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.904	5.907	-0.003	94	120729	10.3	8.82	
$ 10 Toluene-d8 (Surr)	98	8.706	8.709	-0.002	92	609782	10.3	11.0	
$ 11 4-Bromofluorobenzene (Surr	95	13.056	13.059	-0.003	92	328730	10.3	11.2	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.580					ND	
26 Chlorotrifluoroethene	116		1.824					ND	
27 Dichlorodifluoromethane	85		1.905					ND	
29 1,2-Dichloro-1,1,2,2-tetra	85		1.946					ND	
30 Chloromethane	50		1.992					ND	
31 Butadiene	54		2.079					ND	
33 2-Chloro-1,1,1-Trifluoroet	118		2.102					ND	
32 Vinyl chloride	62		2.114					ND	
34 Ethylene oxide	43		2.305					ND	
35 Bromomethane	94		2.340					ND	
36 Chloroethane	64		2.392					ND	
37 Dichlorofluoromethane	67		2.549					ND	
38 Trichlorofluoromethane	101		2.601					ND	
39 Ethanol	45		2.718					ND	
41 1,2-Dichloro-1,1,2-trifluo	117		2.746					ND	
43 1,1,1-Trifluoro-2,2-dichlo	83		2.781					ND	
40 Ethyl ether	59		2.810					ND	
42 Propene oxide	58		2.862					ND	
44 Acrolein	56		2.914					ND	
45 1,1-Dichloroethene	96		3.036					ND	
48 Acetone	43		3.053					ND	
46 1,1,2-Trichloro-1,2,2-trif	151		3.088					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 Isopropyl alcohol	45		3.154					ND	
49 Iodomethane	142	3.207	3.192	0.015	98	9124		0.1980	
50 Carbon disulfide	76		3.280					ND	
53 Acetonitrile	41		3.315					ND	
51 Methyl acetate	43		3.349					ND	
52 3-Chloro-1-propene	41		3.349					ND	
54 Methylene Chloride	84	3.468	3.471	-0.003	94	21392		1.42	
55 2-Methyl-2-propanol	59		3.575					ND	
58 Acrylonitrile	53		3.680					ND	
57 trans-1,2-Dichloroethene	96		3.767					ND	
56 Methyl tert-butyl ether	73		3.784					ND	
59 Hexane	57		4.063					ND	
62 1,1-Dichloroethane	63		4.202					ND	
61 Vinyl acetate	43		4.219					ND	
63 2-Chloro-1,3-butadiene	53		4.306					ND	
60 Isopropyl ether	87		4.306					ND	
64 Tert-butyl ethyl ether	59		4.724					ND	
67 2-Butanone (MEK)	43		4.880					ND	
65 cis-1,2-Dichloroethene	96		4.880					ND	
66 2,2-Dichloropropane	77		4.898					ND	
69 Propionitrile	54		4.933					ND	
68 Ethyl acetate	43		4.950					ND	
70 sec-Butyl Alcohol	45		5.107					ND	
73 Methacrylonitrile	41		5.124					ND	
71 Chlorobromomethane	128		5.176					ND	
72 Tetrahydrofuran	42		5.263					ND	
74 Chloroform	83		5.263					ND	
75 1,1,1-Trichloroethane	97		5.542					ND	
76 Cyclohexane	56		5.646					ND	
78 1,1-Dichloropropene	75		5.750					ND	
77 Carbon tetrachloride	117		5.785					ND	
80 Isobutyl alcohol	41		5.872					ND	
82 1,2-Dichloroethane	62		6.011					ND	
81 Benzene	78		6.011					ND	
83 Tert-amyl methyl ether	73		6.203					ND	
84 n-Heptane	43		6.412					ND	
88 Ethyl acrylate	55		6.795					ND	
86 n-Butanol	56		6.830					ND	
85 Trichloroethene	95		6.916					ND	
89 2-Pentanone	43		7.142					ND	
90 1,2-Dichloropropane	63		7.195					ND	
87 Methylcyclohexane	55		7.229					ND	
92 Dibromomethane	93		7.369					ND	
91 Methyl methacrylate	100		7.404					ND	
94 Dichlorobromomethane	83		7.595					ND	
95 2-Nitropropane	41		7.908					ND	
96 2-Chloroethyl vinyl ether	63		8.047					ND	
97 cis-1,3-Dichloropropene	75		8.273					ND	
98 4-Methyl-2-pentanone (MIBK	43		8.517					ND	
99 Toluene	91		8.813					ND	
100 trans-1,3-Dichloropropene	75		9.126					ND	
101 Ethyl methacrylate	69		9.318					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,1,2-Trichloroethane	97		9.422					ND	
104 1,3-Dichloropropane	76		9.683					ND	
103 Tetrachloroethene	164		9.700					ND	
105 2-Hexanone	43		9.840					ND	
108 n-Butyl acetate	43		9.866					ND	
107 Chlorodibromomethane	129		10.048					ND	
106 Tetrahydrothiophene	60		10.049					ND	
109 Ethylene Dibromide	107		10.240					ND	
154 4-Ethyltoluene TIC	105		10.778					ND	
153 Dicyclopentadiene TIC	66		10.778					ND	
155 1,3-Butadiene TIC	39		10.778					ND	
152 Propene TIC	41		10.778					ND	
111 Chlorobenzene	112		11.075					ND	
110 1-Chlorohexane	91		11.075					ND	
113 1,1,1,2-Tetrachloroethane	131		11.214					ND	
112 Ethylbenzene	106		11.284					ND	
114 m-Xylene & p-Xylene	106		11.493					ND	
115 o-Xylene	106		12.154					ND	
116 Styrene	104		12.171					ND	
117 Bromoform	173		12.467					ND	
118 Isopropylbenzene	105		12.815					ND	
120 cis-1,4-Dichloro-2-butene	53		12.902					ND	
119 Cyclohexanone	55		12.937					ND	
121 Bromobenzene	156		13.302					ND	
122 1,1,2,2-Tetrachloroethane	83		13.320					ND	
124 1,2,3-Trichloropropane	110		13.372					ND	
125 trans-1,4-Dichloro-2-buten	53		13.424					ND	
123 N-Propylbenzene	120		13.546					ND	
126 2-Chlorotoluene	126		13.668					ND	
128 4-Chlorotoluene	126		13.859					ND	
127 1,3,5-Trimethylbenzene	105		13.877					ND	
129 tert-Butylbenzene	119		14.451					ND	
130 1,2,4-Trimethylbenzene	105		14.538					ND	
131 sec-Butylbenzene	134		14.851					ND	
132 1,3-Dichlorobenzene	146		15.008					ND	
133 4-Isopropyltoluene	119		15.129					ND	
136 Benzyl chloride	126		15.156					ND	
134 1,4-Dichlorobenzene	146		15.164					ND	
135 1,2,3-Trimethylbenzene	105		15.286					ND	
138 1,2-Dichlorobenzene	146		15.808					ND	
137 n-Butylbenzene	91		15.843					ND	
139 1,2-Dibromo-3-Chloropropan	157		16.939					ND	
140 1,3,5-Trichlorobenzene	180		17.218					ND	
141 1,2,4-Trichlorobenzene	180		17.879					ND	
142 Hexachlorobutadiene	225		18.070					ND	
143 Naphthalene	128		18.105					ND	
144 1,2,3-Trichlorobenzene	180	18.363	18.348	0.015	76	2513		0.1663	
93 1,4-Dioxane	88		18.432					ND	
22 Dimethyl disulfide	1		0.000					ND	
23 2,4-Dimethylpentane	1		0.000					ND	
21 2,2-Dimethylpentane	1		0.000					ND	
19 2-Butoxyethanol TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
20 3,3-Dimethylpentane	1		0.000					ND	
12 2,2,3-Trimethylbutane	1		0.000					ND	
16 2-Methylhexane	1		0.000					ND	
17 n-Nonyl Aldehyde	1		0.000					ND	
15 2-Methylnaphthalene	142		0.000					ND	
13 2,3-Dimethylpentane	1		0.000					ND	
14 3-Methylhexane	1		0.000					ND	
18 Pentachloroethane	167		0.000					ND	
24 2,3-dichloro-1-propene TIC	75		1.000					ND	
25 Dichloroacetonitrile TIC	74		1.000					ND	
28 3-Ethylpentane	1		1.795					ND	
79 Propene oxide TIC	58		5.334					ND	
S 149 Trihalomethanes, Total	1		0.000					ND	
S 150 Xylenes, Total (URS)	1		0.000					ND	
S 151 Total BTEX	1		0.000					ND	
S 148 1,3-Dichloropropene, Total	1		0.000					ND	
S 145 1,2-Dichloroethene, Total	1		0.000					ND	
S 146 Xylenes, Total	106		0.000					ND	
S 147 1,2-Dichloroethene, Total	96		0.000					ND	

Reagents:

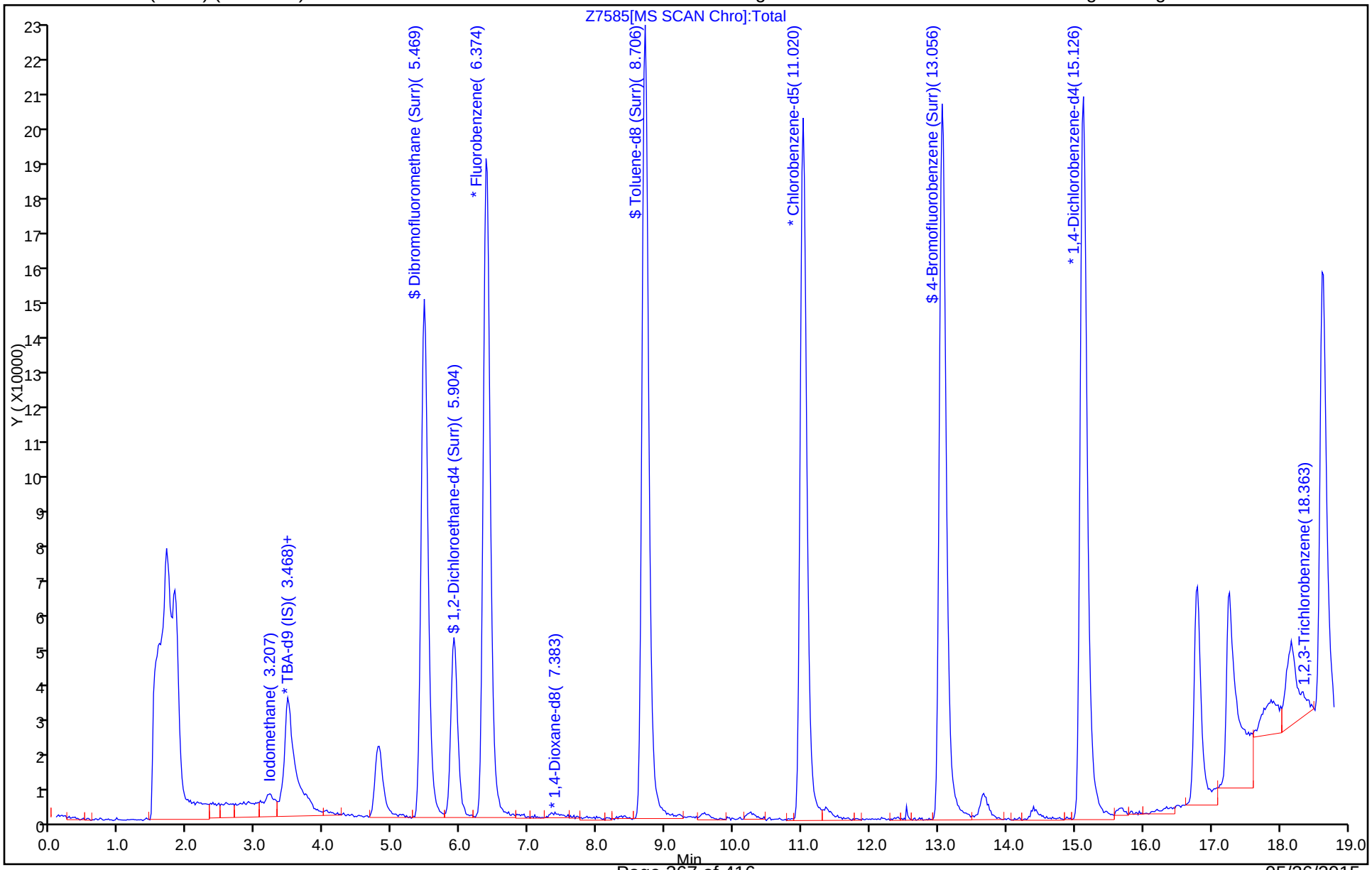
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.82	Units: uL	Run Reagent

Report Date: 20-May-2015 15:13:01 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7585.D				
Injection Date:	14-May-2015 14:24:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	mb			Worklist Smp#:	18
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

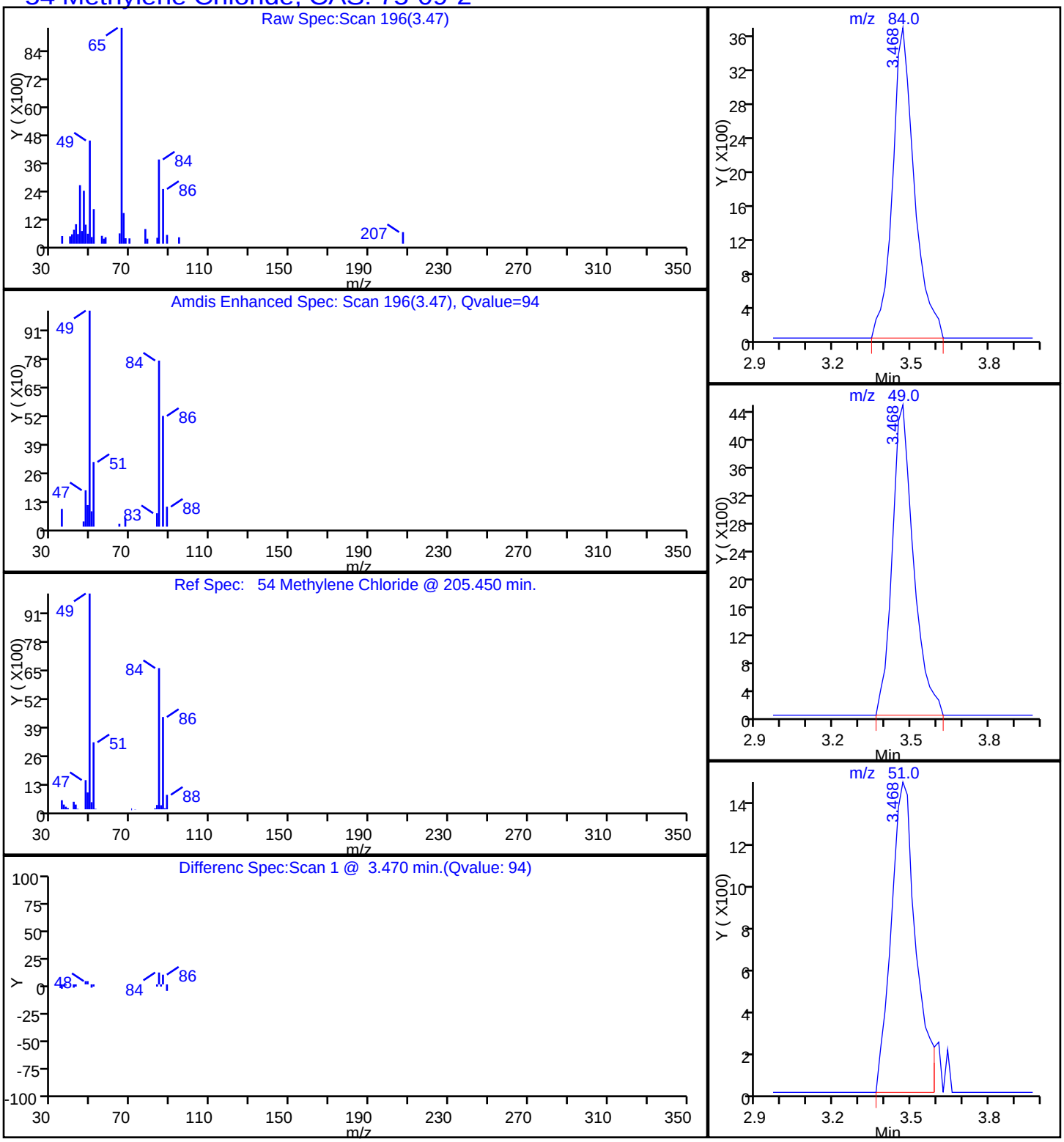


Report Date: 20-May-2015 15:13:01 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7585.D				
Injection Date:	14-May-2015 14:24:30	Instrument ID:	VMS_Z		
Lims ID:	mb				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

54 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-277119/4
Matrix: Water | Lab File ID: G2_4245.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 18:53
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	5.38		1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	5.02		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	5.22		1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	5.15		1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	5.02		1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	4.72		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	5.26		1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	5.02		1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	5.38		3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	5.14		1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	5.39		1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	4.89	J	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	5.15		1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	5.31		1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	5.65		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	5.01		1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	5.47		1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	5.33		1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	5.25		1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	5.65		1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	5.09		1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	17.8		6.0	4.0	1.8
95-49-8	2-Chlorotoluene	5.37		1.0	0.40	0.17
591-78-6	2-Hexanone	17.3		5.0	4.0	1.4
106-43-4	4-Chlorotoluene	5.36		1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	17.7		5.0	3.2	1.0
67-64-1	Acetone	18.5		10	6.4	1.9
71-43-2	Benzene	5.29		1.0	0.40	0.16
108-86-1	Bromobenzene	5.28		1.0	0.40	0.17
74-97-5	Bromochloromethane	5.20		1.0	0.20	0.10
75-27-4	Bromodichloromethane	5.12		1.0	0.40	0.17
75-25-2	Bromoform	4.90		1.0	0.40	0.19
74-83-9	Bromomethane	4.63		2.0	0.80	0.21
75-15-0	Carbon disulfide	4.91		2.0	1.6	0.45
56-23-5	Carbon tetrachloride	5.24		2.0	0.40	0.19
108-90-7	Chlorobenzene	5.44		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-277119/4
Matrix: Water | Lab File ID: G2_4245.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/12/2015 18:53
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277119 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	5.20		1.0	0.40	0.17
75-00-3	Chloroethane	4.61		2.0	1.6	0.41
67-66-3	Chloroform	5.42		1.0	0.40	0.16
74-87-3	Chloromethane	4.54		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	5.03		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	5.27		1.0	0.40	0.16
74-95-3	Dibromomethane	5.11		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	4.76		2.0	0.80	0.31
100-41-4	Ethylbenzene	5.00		1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	5.52		1.0	0.80	0.36
98-82-8	Isopropylbenzene	5.41		1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	5.12		5.0	0.80	0.25
75-09-2	Methylene Chloride	4.85	J	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	5.10		2.0	0.80	0.34
91-20-3	Naphthalene	4.40		1.0	0.80	0.22
104-51-8	n-Butylbenzene	5.41		1.0	0.80	0.32
103-65-1	N-Propylbenzene	5.32		1.0	0.40	0.16
95-47-6	o-Xylene	5.20		1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	5.44		1.0	0.40	0.17
135-98-8	sec-Butylbenzene	5.33		1.0	0.40	0.17
100-42-5	Styrene	5.10		1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	52.1		50	32	11
98-06-6	tert-Butylbenzene	5.39		1.0	0.40	0.16
127-18-4	Tetrachloroethene	4.98		1.0	0.40	0.20
108-88-3	Toluene	5.22		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	5.01		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	5.74		1.0	0.40	0.19
79-01-6	Trichloroethene	5.01		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	4.54		2.0	0.80	0.29
75-01-4	Vinyl chloride	4.80		1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68855-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-277119/4
Matrix: Water
Lab File ID: G2_4245.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/12/2015 18:53
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 277119
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	95		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4245.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-May-2015 18:53:30 ALS Bottle#: 12 Worklist Smp#: 4
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150512-34948.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-May-2015 16:10:11 Calib Date: 11-May-2015 09:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150511-34861.b\G2_4158.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	148312	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	1536816	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.801	-0.008	86	362175	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	95	521939	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.969	6.976	-0.007	93	313575	10.0	9.47	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	96	279524	10.0	9.60	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1488428	10.0	9.87	
$ 9 4-Bromofluorobenzene (Surr	95	10.659	10.658	0.000	91	471159	10.0	10.1	
13 Dichlorodifluoromethane	85	3.881	3.895	-0.014	99	243312	5.00	4.76	
14 Chloromethane	50	4.091	4.091	0.000	99	209722	5.00	4.54	
16 Vinyl chloride	62	4.230	4.230	0.000	98	217188	5.00	4.80	
138 Butadiene	54	4.258	4.258	0.000	0	181373	NC	NC	
19 Bromomethane	94	4.593	4.593	0.000	91	160702	5.00	4.63	
20 Chloroethane	64	4.663	4.663	0.000	100	154265	5.00	4.61	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	378800	5.00	4.48	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	327541	5.00	4.54	
25 Ethyl ether	59	5.054	5.068	-0.014	91	83812	5.00	5.01	
28 Acrolein	56	5.194	5.194	0.000	99	88624	50.0	66.3	
29 Acetone	43	5.292	5.292	0.000	100	66987	20.0	18.5	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.334	-0.014	93	174644	5.00	4.65	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	190766	5.00	4.72	
34 Iodomethane	142	5.501	5.501	0.000	98	329035	5.00	5.13	
35 Methyl acetate	43	5.529	5.529	0.000	97	189071	25.0	24.0	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	80	314755	5.00	4.71	
37 Carbon disulfide	76	5.599	5.613	-0.014	99	853968	5.00	4.91	
38 2-Methyl-2-propanol	59	5.627	5.641	-0.014	92	48924	50.0	52.1	
39 Methylene Chloride	84	5.669	5.669	0.000	93	200750	5.00	4.85	
40 Acrylonitrile	53	5.809	5.808	0.001	98	196431	50.0	49.6	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	269639	5.00	5.12	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	97	220859	5.00	5.01	
43 Hexane	57	6.075	6.082	-0.007	93	333996	5.00	4.77	
44 Vinyl acetate	43	6.147	6.154	-0.007	98	341007	10.0	13.0	
46 1,1-Dichloroethane	63	6.211	6.218	-0.007	96	376336	5.00	5.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	6.583	6.583	0.000	99	104264	20.0	17.8	
52 sec-Butyl Alcohol	45	6.626	6.633	-0.007	94	74957	150.0	151.7	
53 cis-1,2-Dichloroethene	96	6.640	6.647	-0.007	80	203987	5.00	5.03	
54 2,2-Dichloropropane	77	6.676	6.683	-0.007	90	321172	5.00	5.09	
56 Chlorobromomethane	128	6.833	6.840	-0.007	96	72332	5.00	5.20	
57 Chloroform	83	6.847	6.847	0.000	94	335079	5.00	5.42	
58 Tetrahydrofuran	42	6.876	6.876	0.000	84	25223	10.0	9.49	
59 Isobutyl alcohol	41	7.048	7.048	0.000	91	32862	125.0	134.5	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	98	327707	5.00	5.02	
61 Cyclohexane	56	7.155	7.155	0.000	91	376153	5.00	4.75	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	95	313520	5.00	5.26	
63 Carbon tetrachloride	117	7.219	7.219	0.000	96	279178	5.00	5.24	
64 1,2-Dichloroethane	62	7.319	7.326	-0.007	98	182595	5.00	5.65	
66 Benzene	78	7.355	7.355	0.000	96	812982	5.00	5.29	
67 n-Heptane	43	7.448	7.448	0.000	90	351198	5.00	4.92	
69 Trichloroethene	95	7.813	7.820	-0.007	97	216289	5.00	5.01	
70 2-Pentanone	43	7.848	7.848	0.000	99	141323	20.0	15.9	
72 1,2-Dichloropropane	63	7.999	7.999	0.000	92	177472	5.00	5.01	
73 Methylcyclohexane	55	8.020	8.020	0.000	92	315645	5.00	4.83	
74 1,4-Dioxane	88	8.056	8.056	0.000	91	11085	100.0	106.1	
75 Dibromomethane	93	8.099	8.099	0.000	95	62871	5.00	5.11	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	200034	5.00	5.12	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	92	14246	5.00	6.62	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	94	235171	5.00	5.27	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	176928	20.0	17.7	
81 Toluene	91	8.778	8.778	0.000	98	912830	5.00	5.22	
82 Ethyl methacrylate	69	8.864	8.864	0.000	92	85245	5.00	4.71	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	183873	5.00	5.74	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	94	91927	5.00	5.15	
85 2-Hexanone	43	9.143	9.143	0.000	97	114406	20.0	17.3	
86 1,3-Dichloropropane	76	9.157	9.164	-0.007	95	174234	5.00	5.25	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	205743	5.00	4.98	
88 Chlorodibromomethane	129	9.350	9.357	-0.007	90	105991	5.00	5.20	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	82449	5.00	5.15	
91 1-Chlorohexane	91	9.715	9.715	0.000	97	314426	5.00	5.07	
92 Chlorobenzene	112	9.822	9.822	0.000	96	577401	5.00	5.44	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.858	-0.007	94	166221	5.00	5.38	
94 Ethylbenzene	106	9.858	9.865	-0.007	98	335893	5.00	5.00	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	99	410389	5.00	5.10	
97 o-Xylene	106	10.251	10.251	0.000	89	380513	5.00	5.20	
96 Styrene	104	10.251	10.251	0.000	85	525954	5.00	5.10	
98 Bromoform	173	10.444	10.444	0.000	96	45863	5.00	4.90	
99 Isopropylbenzene	105	10.508	10.515	-0.007	96	1056209	5.00	5.41	
101 Cyclohexanone	55	10.623	10.630	-0.007	93	48288	200.0	160.1	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	93	86700	5.00	5.22	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	84	21355	5.00	5.37	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	24895	5.00	5.38	
105 Bromobenzene	156	10.823	10.823	0.000	97	209457	5.00	5.28	
106 N-Propylbenzene	120	10.830	10.830	0.000	98	302262	5.00	5.32	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	855999	5.00	5.47	
108 2-Chlorotoluene	126	10.945	10.952	-0.007	95	249150	5.00	5.37	
109 4-Chlorotoluene	126	11.023	11.023	0.000	98	242109	5.00	5.36	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	11.231	11.230	0.001	93	881897	5.00	5.39	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	98	847335	5.00	5.39	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	243742	5.00	5.33	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	987115	5.00	5.44	
114 1,3-Dichlorobenzene	146	11.567	11.567	0.000	98	440645	5.00	5.33	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	425026	5.00	5.65	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	883456	5.00	5.41	
118 1,2-Dichlorobenzene	146	11.981	11.988	-0.007	98	342171	5.00	5.31	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.711	-0.008	81	10142	5.00	4.89	
121 1,2,4-Trichlorobenzene	180	13.647	13.647	0.000	94	202607	5.00	5.14	
122 Hexachlorobutadiene	225	13.805	13.812	-0.007	96	186180	5.00	5.52	
123 Naphthalene	128	13.998	14.005	-0.007	97	172271	5.00	4.40	
124 1,2,3-Trichlorobenzene	180	14.312	14.319	-0.007	95	146895	5.00	5.02	
S 149 1,2-Dichloroethene, Total	96				0		10.0	10.0	
S 150 Trihalomethanes, Total	1				0		20.0	20.6	
S 151 Xylenes, Total (URS)	1				0		10.0	10.3	
S 153 1,3-Dichloropropene, Total	1				0		10.0	11.0	
S 154 1,2-Dichloroethene, Total	1				0		10.0	10.0	
S 155 Xylenes, Total	106				0		10.0	10.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

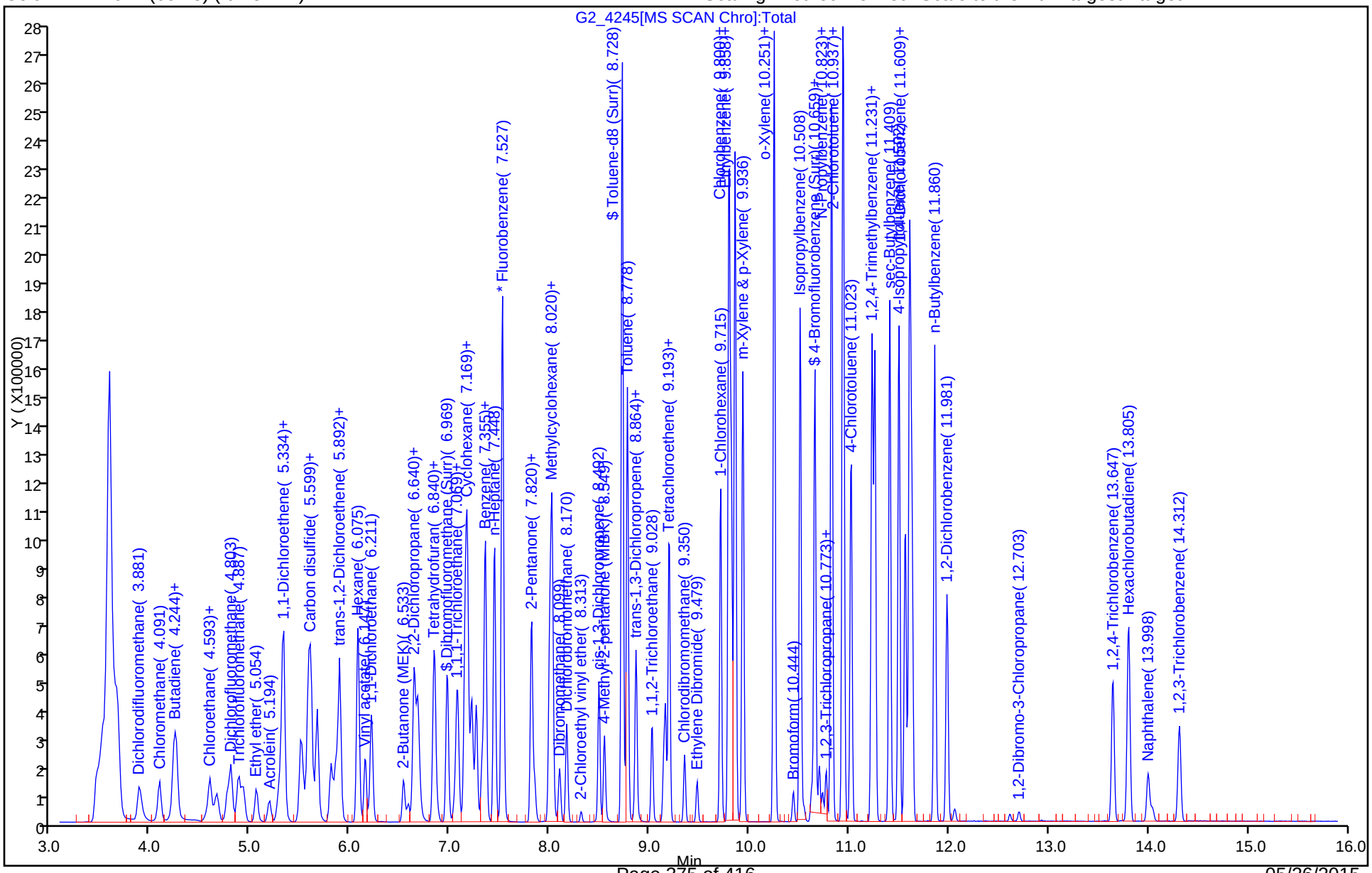
MV-SS 2-Cleve_00020	Amount Added:	2.50	Units: uL	
MV-Main B_00009	Amount Added:	2.50	Units: uL	
MV-Gas/Ket B_00017	Amount Added:	2.50	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 13-May-2015 16:10:13 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150512-34948.b\G2_4245.D				
Injection Date:	12-May-2015 18:53:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68855-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-277378/17
Matrix: Water | Lab File ID: Z7579.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/14/2015 11:44
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 277378 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	5.54		1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	4.84		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	4.90		1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	5.15		1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	4.92		1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	4.98		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	5.36		1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	6.09		1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	5.10		3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	6.09		1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	5.02		1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	5.46		5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	5.33		1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	5.73		1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	4.72		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	4.91		1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	5.11		1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	5.49		1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	5.15		1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	5.48		1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	5.68		1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	17.7		6.0	4.0	1.8
95-49-8	2-Chlorotoluene	5.28	M	1.0	0.40	0.17
591-78-6	2-Hexanone	17.9		5.0	4.0	1.4
106-43-4	4-Chlorotoluene	5.57		1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	19.1		5.0	3.2	1.0
67-64-1	Acetone	20.0		10	6.4	1.9
71-43-2	Benzene	4.96		1.0	0.40	0.16
108-86-1	Bromobenzene	5.35		1.0	0.40	0.17
74-97-5	Bromochloromethane	5.16		1.0	0.20	0.10
75-27-4	Bromodichloromethane	4.73		1.0	0.40	0.17
75-25-2	Bromoform	5.43		1.0	0.40	0.19
74-83-9	Bromomethane	5.15		2.0	0.80	0.21
75-15-0	Carbon disulfide	5.09		2.0	1.6	0.45
56-23-5	Carbon tetrachloride	5.04		2.0	0.40	0.19
108-90-7	Chlorobenzene	5.42		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68855-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-277378/17
Matrix: Water
Lab File ID: Z7579.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/14/2015 11:44
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 277378
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	5.44		1.0	0.40	0.17
75-00-3	Chloroethane	4.76		2.0	1.6	0.41
67-66-3	Chloroform	4.98		1.0	0.40	0.16
74-87-3	Chloromethane	5.03		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	4.93		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	5.41		1.0	0.40	0.16
74-95-3	Dibromomethane	4.97		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	5.55		2.0	0.80	0.31
100-41-4	Ethylbenzene	5.35		1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	6.21		1.0	0.80	0.36
98-82-8	Isopropylbenzene	5.12		1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	4.71	J	5.0	0.80	0.25
75-09-2	Methylene Chloride	5.29		5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	5.39		2.0	0.80	0.34
91-20-3	Naphthalene	6.04		1.0	0.80	0.22
104-51-8	n-Butylbenzene	5.22		1.0	0.80	0.32
103-65-1	N-Propylbenzene	5.31		1.0	0.40	0.16
95-47-6	o-Xylene	5.62		1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	5.22		1.0	0.40	0.17
135-98-8	sec-Butylbenzene	5.37		1.0	0.40	0.17
100-42-5	Styrene	5.46		1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	36.2	J	50	32	11
98-06-6	tert-Butylbenzene	5.20		1.0	0.40	0.16
127-18-4	Tetrachloroethene	5.76		1.0	0.40	0.20
108-88-3	Toluene	5.14		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	5.12		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	5.49		1.0	0.40	0.19
79-01-6	Trichloroethene	5.10		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	4.75		2.0	0.80	0.29
75-01-4	Vinyl chloride	4.89		1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68855-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-277378/17
Matrix: Water
Lab File ID: Z7579.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/14/2015 11:44
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (75.53) ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 277378
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		81-118
460-00-4	4-Bromofluorobenzene (Surr)	104		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	111		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7579.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 14-May-2015 11:44:30 ALS Bottle#: 11 Worklist Smp#: 17
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: moanm Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 14-May-2015 14:43:07 Calib Date: 14-May-2015 10:35:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7576.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK036

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.492	3.506	-0.014	20	119882	250.0	250.0	
* 2 Fluorobenzene	96	6.380	6.394	-0.014	96	728556	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.009	11.023	-0.014	86	171086	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.115	15.130	-0.015	95	311801	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.475	5.473	0.003	56	355308	10.3	10.3	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.893	5.908	-0.015	94	136033	10.3	9.12	
$ 10 Toluene-d8 (Surr)	98	8.694	8.692	0.002	90	652553	10.3	11.4	
$ 11 4-Bromofluorobenzene (Surr	95	13.045	13.059	-0.014	84	352551	10.3	10.7	
27 Dichlorodifluoromethane	85	1.908	1.923	-0.015	98	153906	5.00	5.55	
30 Chloromethane	50	1.978	1.992	-0.014	89	90534	5.00	5.03	
31 Butadiene	54	2.082	2.097	-0.015	88	58533	NC	NC	
32 Vinyl chloride	62	2.117	2.114	0.003	96	84944	5.00	4.89	
35 Bromomethane	94	2.343	2.340	0.003	88	96169	5.00	5.15	
36 Chloroethane	64	2.395	2.393	0.002	77	56619	5.00	4.76	
37 Dichlorofluoromethane	67	2.552	2.549	0.003	95	218015	5.00	4.56	
38 Trichlorofluoromethane	101	2.604	2.601	0.003	94	195406	5.00	4.75	
40 Ethyl ether	59	2.813	2.810	0.003	82	40488	5.00	5.14	
44 Acrolein	56	2.917	2.915	0.002	91	27827	50.0	59.6	
48 Acetone	43	3.039	3.036	0.003	17	17547	20.0	20.0	
45 1,1-Dichloroethene	96	3.039	3.036	0.003	94	95639	5.00	4.98	
46 1,1,2-Trichloro-1,2,2-trif	151	3.091	3.089	0.002	88	146352	5.00	5.07	
49 Iodomethane	142	3.196	3.193	0.003	98	274231	5.00	5.46	
50 Carbon disulfide	76	3.283	3.280	0.003	98	332672	5.00	5.09	
52 3-Chloro-1-propene	41	3.352	3.350	0.002	79	130872	5.00	4.63	
51 Methyl acetate	43	3.352	3.350	0.002	69	92778	25.0	23.6	
54 Methylene Chloride	84	3.474	3.471	0.003	85	86741	5.00	5.29	
55 2-Methyl-2-propanol	59	3.579	3.558	0.021	1	15423	50.0	36.2	
58 Acrylonitrile	53	3.683	3.680	0.003	94	62311	50.0	49.2	
57 trans-1,2-Dichloroethene	96	3.770	3.767	0.003	99	106345	5.00	5.12	
56 Methyl tert-butyl ether	73	3.787	3.785	0.002	54	139375	5.00	4.71	
59 Hexane	57	4.066	4.063	0.003	87	141059	5.00	4.90	
62 1,1-Dichloroethane	63	4.205	4.202	0.003	92	181307	5.00	4.92	
61 Vinyl acetate	43	4.222	4.220	0.002	61	193494	10.0	10.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 2-Butanone (MEK)	43	4.866	4.881	-0.015	37	37924	20.0	17.7	
65 cis-1,2-Dichloroethene	96	4.884	4.881	0.003	76	100852	5.00	4.93	
66 2,2-Dichloropropane	77	4.901	4.898	0.003	69	193457	5.00	5.68	
70 sec-Butyl Alcohol	45	5.093	5.107	-0.015	49	54630	150.0	144.4	
71 Chlorobromomethane	128	5.180	5.177	0.003	69	50875	5.00	5.16	
72 Tetrahydrofuran	42	5.267	5.264	0.003	29	15660	10.0	11.0	
74 Chloroform	83	5.267	5.264	0.003	90	181145	5.00	4.98	
75 1,1,1-Trichloroethane	97	5.545	5.542	0.003	91	174885	5.00	4.84	
76 Cyclohexane	56	5.649	5.647	0.003	80	157293	5.00	4.74	
78 1,1-Dichloropropene	75	5.736	5.751	-0.015	82	159564	5.00	5.36	
77 Carbon tetrachloride	117	5.789	5.786	0.003	80	180703	5.00	5.04	
80 Isobutyl alcohol	41		5.873				ND	ND	
82 1,2-Dichloroethane	62	5.997	5.995	0.002	39	68054	5.00	4.72	
81 Benzene	78	6.015	6.012	0.003	91	283470	5.00	4.96	
84 n-Heptane	43	6.398	6.395	0.003	52	163753	5.00	4.90	
85 Trichloroethene	95	6.902	6.899	0.003	82	127103	5.00	5.10	
89 2-Pentanone	43	7.146	7.143	0.003	83	88260	20.0	19.1	
90 1,2-Dichloropropane	63	7.198	7.195	0.003	79	96867	5.00	4.91	
87 Methylcyclohexane	55	7.215	7.213	0.002	91	138787	5.00	4.92	
92 Dibromomethane	93	7.372	7.369	0.003	85	54807	5.00	4.97	
94 Dichlorobromomethane	83	7.598	7.595	0.003	94	147191	5.00	4.73	
96 2-Chloroethyl vinyl ether	63	8.051	8.048	0.003	66	32063	5.00	5.14	
97 cis-1,3-Dichloropropene	75	8.277	8.274	0.003	83	132178	5.00	5.41	
98 4-Methyl-2-pentanone (MIBK	43	8.520	8.518	0.002	60	123782	20.0	19.1	
99 Toluene	91	8.799	8.796	0.003	97	313357	5.00	5.14	
100 trans-1,3-Dichloropropene	75	9.129	9.127	0.002	82	95768	5.00	5.49	
101 Ethyl methacrylate	69	9.321	9.318	0.003	71	72912	5.00	5.30	
102 1,1,2-Trichloroethane	97	9.408	9.405	0.003	68	56449	5.00	5.15	
104 1,3-Dichloropropane	76	9.669	9.666	0.003	70	90775	5.00	5.15	
103 Tetrachloroethene	164	9.686	9.701	-0.015	93	124300	5.00	5.76	
105 2-Hexanone	43	9.860	9.840	0.020	64	73299	20.0	17.9	
107 Chlorodibromomethane	129	10.052	10.049	0.003	84	114980	5.00	5.44	
109 Ethylene Dibromide	107	10.226	10.223	0.003	84	74541	5.00	5.33	
111 Chlorobenzene	112	11.061	11.058	0.003	82	227132	5.00	5.42	
110 1-Chlorohexane	91	11.061	11.058	0.003	64	151375	5.00	5.50	
113 1,1,1,2-Tetrachloroethane	131	11.218	11.215	0.003	68	115459	5.00	5.54	
112 Ethylbenzene	106	11.270	11.267	0.003	94	110353	5.00	5.35	
114 m-Xylene & p-Xylene	106	11.479	11.476	0.003	97	147201	5.00	5.39	
115 o-Xylene	106	12.157	12.154	0.003	88	133244	5.00	5.62	
116 Styrene	104	12.175	12.172	0.003	89	204784	5.00	5.46	
117 Bromoform	173	12.470	12.450	0.020	90	60542	5.00	5.43	
118 Isopropylbenzene	105	12.818	12.816	0.002	90	414003	5.00	5.12	
119 Cyclohexanone	55	12.940	12.937	0.003	59	30963	200.0	182.9	
121 Bromobenzene	156	13.306	13.303	0.003	84	114656	5.00	5.35	
122 1,1,2,2-Tetrachloroethane	83	13.306	13.320	-0.014	44	72215	5.00	4.90	
124 1,2,3-Trichloropropane	110	13.358	13.372	-0.014	40	17287	5.00	5.10	
125 trans-1,4-Dichloro-2-buten	53	13.410	13.425	-0.015	1	14289	5.00	5.45	
123 N-Propylbenzene	120	13.549	13.546	0.003	87	115244	5.00	5.31	
126 2-Chlorotoluene	126	13.671	13.668	0.003	56	96718	5.00	5.28	a
128 4-Chlorotoluene	126	13.845	13.860	-0.015	98	115813	5.00	5.57	
127 1,3,5-Trimethylbenzene	105	13.880	13.877	0.003	90	320043	5.00	5.11	
129 tert-Butylbenzene	119	14.437	14.451	-0.014	89	379027	5.00	5.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 1,2,4-Trimethylbenzene	105	14.524	14.538	-0.014	91	304728	5.00	5.02	
131 sec-Butylbenzene	134	14.854	14.851	0.003	73	105235	5.00	5.37	
132 1,3-Dichlorobenzene	146	14.993	15.008	-0.015	65	201033	5.00	5.49	
133 4-Isopropyltoluene	119	15.115	15.130	-0.015	86	431828	5.00	5.22	
134 1,4-Dichlorobenzene	146	15.150	15.165	-0.015	69	240569	5.00	5.48	
138 1,2-Dichlorobenzene	146	15.794	15.808	-0.014	95	183529	5.00	5.73	
137 n-Butylbenzene	91	15.846	15.843	0.003	93	370549	5.00	5.22	
139 1,2-Dibromo-3-Chloropropan	157	16.925	16.940	-0.015	57	13373	5.00	5.46	
141 1,2,4-Trichlorobenzene	180	17.865	17.862	0.003	94	135829	5.00	6.09	
142 Hexachlorobutadiene	225	18.073	18.071	0.002	93	134520	5.00	6.21	
143 Naphthalene	128	18.091	18.088	0.003	77	129234	5.00	6.04	
144 1,2,3-Trichlorobenzene	180	18.352	18.349	0.003	91	103759	5.00	6.09	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		20.0	20.6	
S 150 Xylenes, Total (URS)	1				0		10.0	11.0	
S 148 1,3-Dichloropropene, Total	1				0		10.0	10.9	
S 145 1,2-Dichloroethene, Total	1				0		10.0	10.1	
S 146 Xylenes, Total	106				0		10.0	11.0	
S 147 1,2-Dichloroethene, Total	96				0		10.0	10.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

a - User Assigned ID

Reagents:

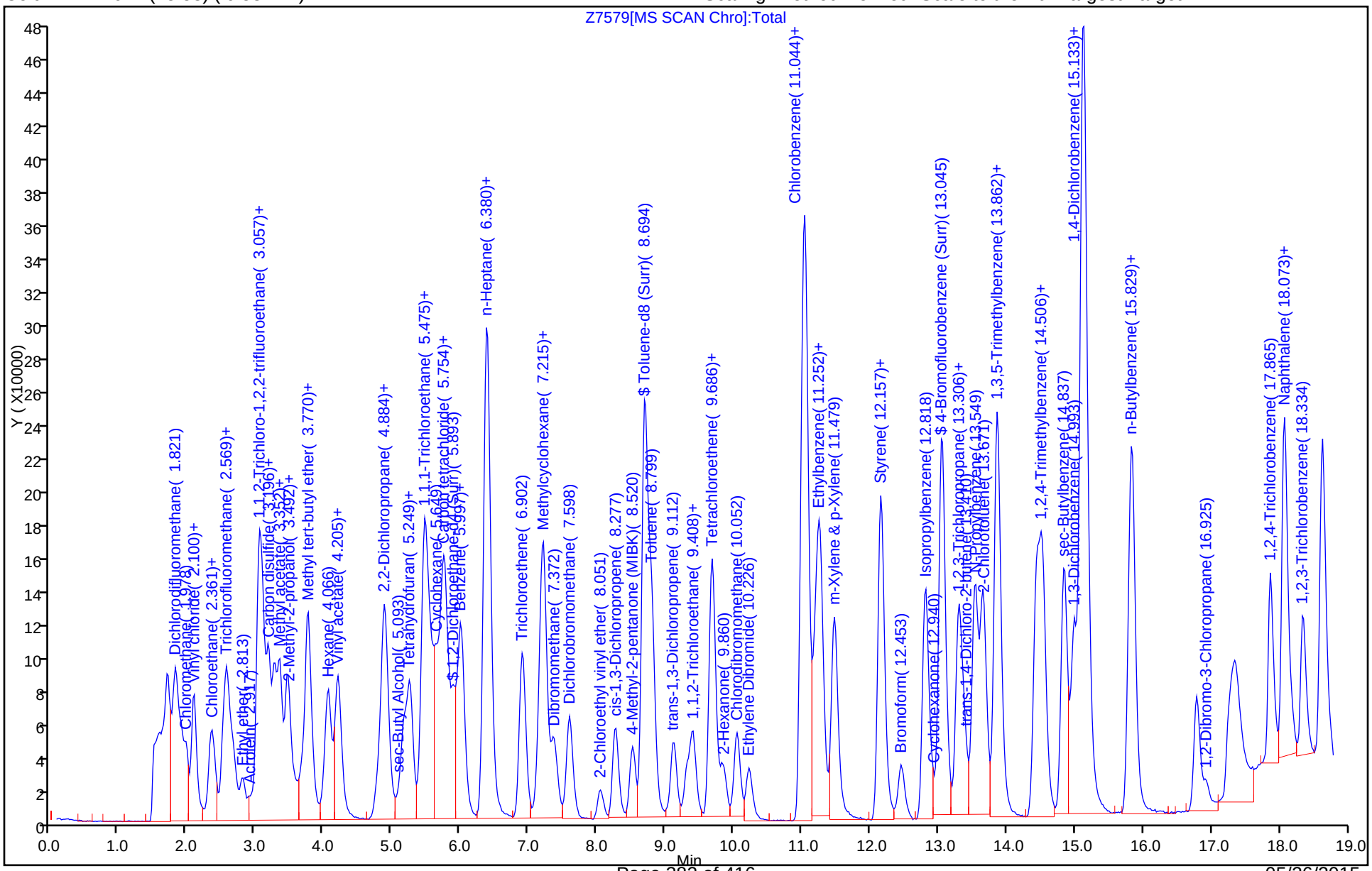
MV-Main B_00009	Amount Added:	2.50	Units: uL	
MV-Gas/Ket B_00019	Amount Added:	2.50	Units: uL	
MV-SS 2-Cleve_00020	Amount Added:	2.50	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.82	Units: uL	Run Reagent

Report Date: 14-May-2015 14:43:07 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7579.D				
Injection Date:	14-May-2015 11:44:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	lcs			Worklist Smp#:	17
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (75.53) (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

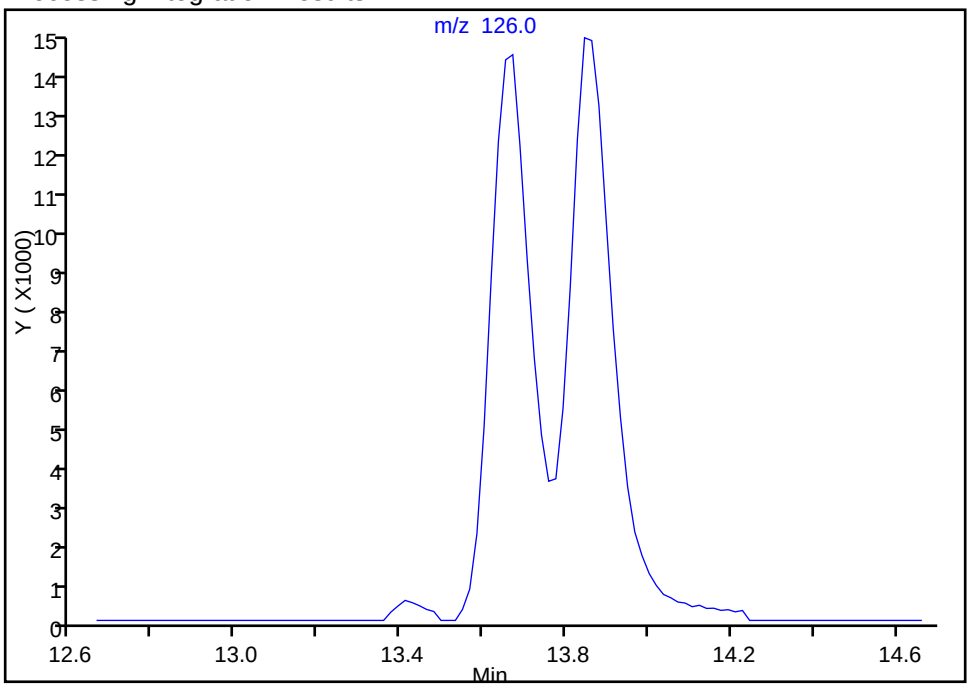
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150514-34999.b\Z7579.D				
Injection Date:	14-May-2015 11:44:30	Instrument ID:	VMS_Z		
Lims ID:	lcs				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSZ_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (75.53) (0.53 mm)	Detector	MS SCAN		

126 2-Chlorotoluene, CAS: 95-49-8

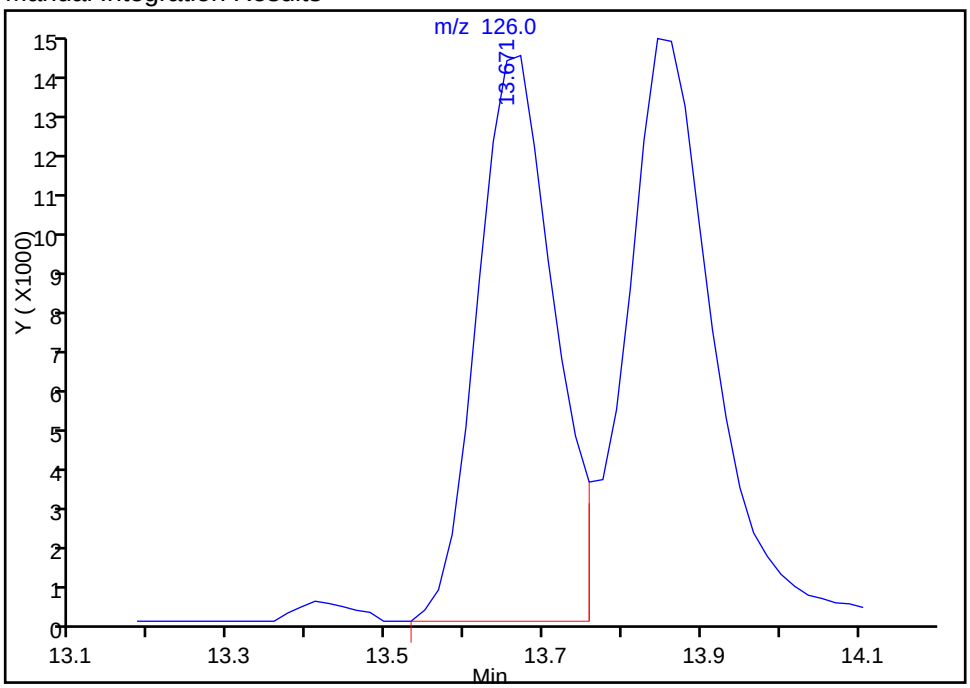
Not Detected
Expected RT: 13.67

Processing Integration Results



RT: 13.67
Area: 96718
Amount: 5.281837
Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 14-May-2015 12:57:08
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 04/28/2015 13:12

Analysis Batch Number: 274898 End Date: 04/29/2015 00:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-274898/1		04/28/2015 13:12	1	G2_3684.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/9		04/28/2015 13:46	1		DB-624 (60.25) 0.25(mm)
IC 280-274898/10		04/28/2015 14:06	1		DB-624 (60.25) 0.25(mm)
IC 280-274898/11		04/28/2015 14:25	1		DB-624 (60.25) 0.25(mm)
IC 280-274898/12		04/28/2015 14:44	1		DB-624 (60.25) 0.25(mm)
IC 280-274898/13		04/28/2015 15:03	1		DB-624 (60.25) 0.25(mm)
IC 280-274898/14		04/28/2015 15:22	1		DB-624 (60.25) 0.25(mm)
IC 280-274898/15		04/28/2015 15:41	1		DB-624 (60.25) 0.25(mm)
ICV 280-274898/16		04/28/2015 16:00	1		DB-624 (60.25) 0.25(mm)
IC 280-274898/17		04/28/2015 16:19	1	G2_3693.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/18		04/28/2015 16:38	1	G2_3694.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/19		04/28/2015 16:58	1	G2_3695.D	DB-624 (60.25) 0.25(mm)
ICIS 280-274898/20		04/28/2015 17:17	1	G2_3696.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/21		04/28/2015 17:36	1	G2_3697.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/22		04/28/2015 17:55	1	G2_3698.D	DB-624 (60.25) 0.25(mm)
ICV 280-274898/23		04/28/2015 18:14	1	G2_3699.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 18:38	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 19:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 19:50	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 20:31	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 20:49	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 21:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 21:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 21:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 22:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 22:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 22:44	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 23:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 23:22	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 23:41	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/29/2015 00:00	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/29/2015 00:19	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/29/2015 00:38	1		DB-624 (60.25) 0.25(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 05/11/2015 05:48

Analysis Batch Number: 276788 End Date: 05/11/2015 16:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-276788/1		05/11/2015 05:48	1	G2_4148.D	DB-624 (60.25) 0.25(mm)
CCV 280-276788/3		05/11/2015 06:30	1		DB-624 (60.25) 0.25(mm)
IC 280-276788/9		05/11/2015 07:45	1	G2_4152.D	DB-624 (60.25) 0.25(mm)
IC 280-276788/10		05/11/2015 08:04	1	G2_4153.D	DB-624 (60.25) 0.25(mm)
IC 280-276788/11		05/11/2015 08:23	1	G2_4154.D	DB-624 (60.25) 0.25(mm)
IC 280-276788/12		05/11/2015 08:42	1	G2_4155.D	DB-624 (60.25) 0.25(mm)
IC 280-276788/13		05/11/2015 09:01	1	G2_4156.D	DB-624 (60.25) 0.25(mm)
IC 280-276788/14		05/11/2015 09:20	1	G2_4157.D	DB-624 (60.25) 0.25(mm)
IC 280-276788/15		05/11/2015 09:39	1	G2_4158.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 10:29	1		DB-624 (60.25) 0.25(mm)
ICV 280-276788/16		05/11/2015 10:51	1	G2_4161.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 11:10	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 11:36	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 11:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 12:17	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 12:36	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 12:55	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 13:14	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 13:33	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 13:52	2		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 14:11	20		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 14:31	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 14:50	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 15:09	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 15:28	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/11/2015 16:06	1		DB-624 (60.25) 0.25(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 05/12/2015 17:47

Analysis Batch Number: 277119 End Date: 05/13/2015 04:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-277119/1		05/12/2015 17:47	1	G2_4242.D	DB-624 (60.25) 0.25(mm)
CCV 280-277119/2		05/12/2015 18:12	1	G2_4243.D	DB-624 (60.25) 0.25(mm)
CCV 280-277119/3		05/12/2015 18:32	1	G2_4244.D	DB-624 (60.25) 0.25(mm)
LCS 280-277119/4		05/12/2015 18:53	1	G2_4245.D	DB-624 (60.25) 0.25(mm)
MB 280-277119/6		05/12/2015 19:13	1	G2_4246.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 19:34	1		DB-624 (60.25) 0.25(mm)
280-68855-2	54402-EB12-0515	05/12/2015 19:54	1	G2_4248.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 20:13	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 20:32	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 20:51	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 21:10	2		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 21:29	20		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 21:48	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 22:07	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 22:26	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 22:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 23:05	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 23:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/12/2015 23:43	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 00:02	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 00:21	2		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 00:40	20		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 00:59	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 01:18	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 01:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 01:57	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 02:16	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 02:35	10		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 02:54	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 03:13	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 03:32	2		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 03:52	20		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/13/2015 04:11	1		DB-624 (60.25) 0.25(mm)
280-68855-1	54403-TB12-0515	05/13/2015 04:30	1	G2_4275.D	DB-624 (60.25) 0.25(mm)
CCVC 280-277119/40		05/13/2015 04:49	1	G2_4276.D	DB-624 (60.25) 0.25(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_Z Start Date: 04/27/2015 06:31

Analysis Batch Number: 274661 End Date: 04/27/2015 14:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-274661/1		04/27/2015 06:31	1	Z6760.D	DB-624 (75.53) 0.53(mm)
IC 280-274661/10		04/27/2015 07:59	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 07:59	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/11		04/27/2015 08:22	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 08:22	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/12		04/27/2015 08:45	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 08:45	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/13		04/27/2015 09:07	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 09:07	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/14		04/27/2015 09:30	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/15		04/27/2015 09:53	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/16		04/27/2015 10:16	1		DB-624 (75.53) 0.53(mm)
ICV 280-274661/17		04/27/2015 11:01	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/18		04/27/2015 11:28	1	Z6773.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 11:28	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/19		04/27/2015 11:51	1	Z6774.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 11:51	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/20		04/27/2015 12:13	1	Z6775.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 12:13	1		DB-624 (75.53) 0.53(mm)
ICIS 280-274661/21		04/27/2015 12:36	1	Z6776.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		04/27/2015 12:36	1		DB-624 (75.53) 0.53(mm)
IC 280-274661/22		04/27/2015 12:59	1	Z6777.D	DB-624 (75.53) 0.53(mm)
IC 280-274661/23		04/27/2015 13:21	1	Z6778.D	DB-624 (75.53) 0.53(mm)
ICV 280-274661/24		04/27/2015 14:12	1	Z6780.D	DB-624 (75.53) 0.53(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68855-1

SDG No.:

Instrument ID: VMS_Z Start Date: 05/14/2015 07:49

Analysis Batch Number: 277378 End Date: 05/14/2015 14:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-277378/1		05/14/2015 07:49	1	Z7568.D	DB-624 (75.53) 0.53(mm)
CCV 280-277378/3		05/14/2015 07:56	1	Z7569.D	DB-624 (75.53) 0.53(mm)
IC 280-277378/9		05/14/2015 08:19	1	Z7570.D	DB-624 (75.53) 0.53(mm)
IC 280-277378/10		05/14/2015 08:42	1	Z7571.D	DB-624 (75.53) 0.53(mm)
IC 280-277378/11		05/14/2015 09:05	1	Z7572.D	DB-624 (75.53) 0.53(mm)
IC 280-277378/12		05/14/2015 09:28	1	Z7573.D	DB-624 (75.53) 0.53(mm)
IC 280-277378/13		05/14/2015 09:50	1	Z7574.D	DB-624 (75.53) 0.53(mm)
IC 280-277378/14		05/14/2015 10:13	1	Z7575.D	DB-624 (75.53) 0.53(mm)
IC 280-277378/15		05/14/2015 10:35	1	Z7576.D	DB-624 (75.53) 0.53(mm)
ICV 280-277378/16		05/14/2015 11:21	1	Z7578.D	DB-624 (75.53) 0.53(mm)
LCS 280-277378/17		05/14/2015 11:44	1	Z7579.D	DB-624 (75.53) 0.53(mm)
280-68855-3	54400-MW44D-0515	05/14/2015 12:33	1	Z7581.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		05/14/2015 13:37	1		DB-624 (75.53) 0.53(mm)
280-68855-5	54402-EB13-0515	05/14/2015 14:01	1	Z7584.D	DB-624 (75.53) 0.53(mm)
MB 280-277378/18		05/14/2015 14:24	1	Z7585.D	DB-624 (75.53) 0.53(mm)
CCVC 280-277378/22		05/14/2015 14:47	1	Z7586.D	DB-624 (75.53) 0.53(mm)

8260B

GC/MS VOA Continuing Calibration Review Checklist *TestAmerica Denver*

Instrument ID and Date: G2 5/12/15 PM Work List 34948

Check Method Used: Analysis ☐ 624 ☑ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☑ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	---- Level 1 ---- Yes	No	N/A	Level 2	Comments
Continuing Calibration					
1. BFB meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	✓			✓	
4. Does %D meet criteria for non-CCC compounds?	✓			✓	
5. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	✓			✓	
6. Label number of standard used recorded?	✓		✓	✓	
7. Manual integrations documented and checked?			✓	✓	
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	
9. Does this CCV pass Q4 criteria?	✓			✓	Q5

1st Level Reviewer: AOO Date: 5/12/15

2nd Level Reviewer: [signature] Date: 05/12/15

Revision 2
4/2/2013
G:\QA\Edit\FORMS\Data Review\MS VOA\GCMS VOA CCV Rev2.doc

Sequence Name: C:\MSDCHEM\1\SEQUENCE\051215PM.S
Comment:
Operator: DUKESA
Data Path: C:\MSDchem\1\data\051215PM\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: G2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 1747-0449
Tune Date: 277/19

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	G2_4242	BFB	BFB
2	Sample	10	G2_4243	8260B2	CCV
3	Sample	11	G2_4244	8260B2	CCV
4	Sample	12	G2_4245	8260B2	LCS
5	Sample	13	G2_4246	8260B2	MB
6	Sample	14	G2_4247	8260B2	280-68855-b-1 PH<2 SST,RRCEND
7	Sample	15	G2_4248	8260B2	280-68855-c-2 PH<2
8	Sample	16	G2_4249	8260B2	280-68637-h-1 PH<2 SST,ND,IST,NT AOO 5/13/16
9	Sample	17	G2_4250	8260B2	280-68937-c-6 PH<2
10	Sample	18	G2_4251	8260B2	280-68741-e-1 PH<2
11	Sample	19	G2_4252	8260B2	280-68741-c-2 10ML PH<2 E
12	Sample	20	G2_4253	8260B2	280-68741-c-2 1ML PH<2
13	Sample	21	G2_4254	8260B2	280-68741-b-3 PH<2
14	Sample	22	G2_4255	8260B2	280-68741-b-3 5ML PH<2 NotNeeded
15	Sample	23	G2_4256	8260B2	280-68741-e-4 PH<2
16	Sample	24	G2_4257	8260B2	280-68741-d-5 PH<2
17	Sample	25	G2_4258	8260B2	280-68741-d-5 5ML PH<2 NotNeeded
18	Sample	26	G2_4259	8260B2	280-68741-b-6 PH<2
19	Sample	27	G2_4260	8260B2	280-68741-c-7 PH<2
20	Sample	28	G2_4261	8260B2	280-68741-c-8 PH<2
21	Sample	29	G2_4262	8260B2	280-68741-c-9 10ML PH<2 E
22	Sample	30	G2_4263	8260B2	280-68741-c-9 1ML PH<2
23	Sample	31	G2_4264	8260B2	280-68741-d-10 PH<2 E
24	Sample	32	G2_4265	8260B2	280-68741-d-10 5ML PH<2
25	Sample	33	G2_4266	8260B2	280-68741-c-11 PH<2
26	Sample	34	G2_4267	8260B2	280-68741-e-12 PH<2 IST,NT
27	Sample	35	G2_4268	8260B2	280-68741-c-13 PH<2 E
28	Sample	36	G2_4269	8260B2	280-68741-c-13 2ML PH<2
29	Sample	37	G2_4270	8260B2	280-68741-e-14 PH<2 E
30	Sample	38	G2_4271	8260B2	280-68741-e-14 4ML PH<2
31	Sample	39	G2_4272	8260B2	280-68741-b-15 10ML PH<2 IST,NT E
32	Sample	40	G2_4273	8260B2	280-68741-b-15 1ML PH<2
33	Sample	41	G2_4274	8260B2	280-68741-c-16 PH<2 IST,NT
34	Sample	42	G2_4275	8260B2	280-68855-b-1 PH<2
35	Sample	43	G2_4276	8260B2	CCVC

TestAmerica Laboratories
Worklist Report

Worklist Name: 051215PM Worklist Number: 34948
Instrument Name: VMS_G2 Chrom Method: AQ_VMSG2_8260
Purge Volume: 20.00 Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_G2\20150512-34948.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00043 Amount Added: 0.800000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034948-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034948-002	# 2 CCV	MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	CCV		voaWater	20.00	mL	1.000000
280-0034948-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034948-004	# 4 LCS	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCS		voaWater	20.00	mL	1.000000
280-0034948-005	# 5 LCSD	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCSD		voaWater	20.00	mL	1.000000
280-0034948-006	# 6 MB		MB		voaWater	20.00	mL	1.000000
280-0034948-007	# 7 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034948-008	# 8 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034948-009	# 9 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034948-010	#10 280-68855-B-1		Client		voaWater	20.00	mL	1.000000
280-0034948-011	#11 280-68855-C-2		Client		voaWater	20.00	mL	1.000000
280-0034948-012	#12 280-68637-H-1		Client		voaWater	20.00	mL	1.000000
280-0034948-013	#13 280-68937-C-6		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034948-014	#14 280-68741-E-1		Client		voaWater	20.00	mL	1.000000
280-0034948-015	#15 280-68741-C-2		Client		voaWater	10.00	mL	1.000000
280-0034948-016	#16 280-68741-C-2		Client		voaWater	1.000000	mL	1.000000
280-0034948-017	#17 280-68741-B-3		Client		voaWater	20.00	mL	1.000000
280-0034948-018	#18 280-68741-B-3		Client		voaWater	5.000000	mL	1.000000
280-0034948-019	#19 280-68741-E-4		Client		voaWater	20.00	mL	1.000000
280-0034948-021	#21 280-68741-D-5		Client		voaWater	20.00	mL	1.000000
280-0034948-022	#22 280-68741-D-5		Client		voaWater	5.000000	mL	1.000000
280-0034948-023	#23 280-68741-B-6		Client		voaWater	20.00	mL	1.000000
280-0034948-024	#24 280-68741-C-7		Client		voaWater	20.00	mL	1.000000
280-0034948-025	#25 280-68741-C-8		Client		voaWater	20.00	mL	1.000000
280-0034948-026	#26 280-68741-C-9		Client		voaWater	10.00	mL	1.000000
280-0034948-027	#27 280-68741-C-9		Client		voaWater	1.000000	mL	1.000000
280-0034948-028	#28 280-68741-D-10		Client		voaWater	20.00	mL	1.000000
280-0034948-029	#29 280-68741-D-10		Client		voaWater	5.000000	mL	1.000000
280-0034948-030	#30 280-68741-C-11		Client		voaWater	20.00	mL	1.000000
280-0034948-031	#31 280-68741-E-12		Client		voaWater	20.00	mL	1.000000
280-0034948-032	#32 280-68741-C-13		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034948-033	#33 280-68741-C-13		Client		voaWater	2.000000	mL	1.000000
280-0034948-034	#34 280-68741-E-14		Client		voaWater	20.00	mL	1.000000
280-0034948-035	#35 280-68741-E-14		Client		voaWater	4.000000	mL	1.000000
280-0034948-036	#36 280-68741-B-15		Client		voaWater	10.00	mL	1.000000
280-0034948-037	#37 280-68741-B-15		Client		voaWater	1.000000	mL	1.000000
280-0034948-038	#38 280-68741-C-16		Client		voaWater	20.00	mL	1.000000
280-0034948-039	#39 CCVC	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	CCVC		voaWater	20.00	mL	1.000000

Supp only

GC/MS VOA Continuing Calibration Review Checklist *TestAmerica Denver*

Instrument ID and Date: Z Work List 34999

Check Method Used: Analysis ☐ 624 ☒ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Continuing Calibration					
1. BFB meets criteria?	+			/	
2. ICAL date and instrument ID verified?	+			/	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	+			/	
4. Does %D meet criteria for non-CCC compounds?	+			/	
5. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	+			/	
6. Label number of standard used recorded?	+			/	
7. Manual integrations documented and checked?			+	/	
8. Do the Internal Standards meet criteria for %D against ICAL?	+			/	
9. Does this CCV pass Q4 criteria?	+			/	

1st Level Reviewer: MM Date: 5-14-15

2nd Level Reviewer: [signature] Date: 5/14/15

Revision 2
4/2/2013
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TestAmerica Denver **Main/2-Cleve/SS**

GC/MS Initial Calibration Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Instrument ID and Date: Z 5/14/15 ICAL Batch/ICV lines **277378 ICV 16**
Calibration Event 22305 Work List 34999 2nd Day Batch/ICV lines **N/A**.
Check Method Used: Analysis ☐ 624 ■ 8260B ☐ Other VOA **NA**.

VOA Preparation ☐ 5mL ■ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	----- Level 1 ----- Yes	No	N/A	Level 2	Comments
Initial Calibration					
1. BFB meets criteria?	X			α	
2. ICAL date and instrument ID verified?	X			α	
3. Does the Form VI match the data in the Chrom source method?	X			α	
4. Sufficient number of calibration points used?	X			α	
5. Reasons for removal of points documented?	X			α	Some points <RL removed
6. %RSD or correlation coefficient within method limits?	X			α	
7. Response factors meet criteria?	X			α	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	X			α	
9. Data checked for detector saturation?	X			α	
10. Label number of standards used recorded?	X			α	
11. Manual integrations documented and checked?	X			α	Numerous, see TALS batch
12. 2nd source ICV recovery 80-120% (±20%drift) for DoD projects, 65-135% (±35%,or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	X			α	

Not calibrated for 1,4-Dioxane

1st Level Reviewer: [signature] Date: 5-14-15

2nd Level Reviewer: [signature] Date: 5-14-15

Revision 4
03/27/2013
C:\Users\moanm\Desktop\GCMS VOA ICAL Rev 4.doc

Sequence Name: C:\HPCHEM\1\SEQUENCE\051415am.S
Comment:
Operator: moanm
Data Path: C:\HPCHEM\1\data\051415am\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: Z
DV-MS-0010 (8260/8/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 7:49 - 14:47
Lims Batch: 277378
WL 34999

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	Z7563	BFB	bfb
2	Sample	1	Z7564	8260	ccv
3	Sample	2	Z7565	8260	blk
4	Sample	3	Z7566	8260	ic
5	Sample	4	Z7567	8260	ic
6	Sample	99	Z7568	BFB	bfb
7	Sample	1	Z7569	8260	ccv
8	Sample	2	Z7570	8260	ic
9	Sample	3	Z7571	8260	ic
10	Sample	4	Z7572	8260	ic
11	Sample	5	Z7573	8260	ic
12	Sample	6	Z7574	8260	ic
13	Sample	7	Z7575	8260	ic
14	Sample	8	Z7576	8260	ic
15	Sample	9	Z7577	8260	blk
16	Sample	10	Z7578	8260	icv
17	Sample	11	Z7579	8260	lcs
18	Sample	12	Z7580	8260	mb - DMT, not needed
19	Sample	13	Z7581	8260	280-68855-B-3 ph<2
20	Sample	14	Z7582	8260	mb - DMT, not needed
21	Sample	15	Z7583	8260	280-68855-B-4 ph<2
22	Sample	16	Z7584	8260	280-68855-B-5 ph<2
23	Sample	17	Z7585	8260	mb
24	Sample	18	Z7586	8260	ccvc

TestAmerica Laboratories
Worklist Report

Worklist Name: 051415am
Worklist Number: 34999
Instrument Name: VMS_Z
Chrom Method: AQ_VMSZ_8260
Purge Volume: 20.00
Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_Z\20150514-34999.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_Z
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00042 Amount Added: 0.840000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034999-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034999-002	# 2 CCV	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	CCV		voaWater	20.00	mL	1.000000
280-0034999-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034999-004	# 4 LCS	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020	LCS		voaWater	20.00	mL	1.000000
280-0034999-005	# 5 LCSD	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020	LCSD		voaWater	20.00	mL	1.000000
280-0034999-006	# 6 MB		MB		voaWater	20.00	mL	1.000000
280-0034999-007	# 7 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034999-008	# 8 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034999-009	# 9 ic	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	1	voaWater	20.00	mL	1.000000
280-0034999-010	#10 ic	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009 MV-ARCH SS A_00042	IC	2	voaWater	20.00	mL	1.000000
280-0034999-011	#11 ic	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009 MV-ARCH SS A_00042	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034999-012	#12 ic	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009 MV-ARCH SS A_00042	IC	4	voaWater	20.00	mL	1.000000
280-0034999-013	#13 ic	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009 MV-ARCH SS A_00042	IC	5	voaWater	20.00	mL	1.000000
280-0034999-014	#14 ic	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009 MV-ARCH SS A_00042	IC	6	voaWater	20.00	mL	1.000000
280-0034999-015	#15 ic	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009 MV-ARCH SS A_00042	IC	7	voaWater	20.00	mL	1.000000
280-0034999-016	#16 icv	MV-567649-D_00001 MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020 MV-ARCH SS A_00042	ICV		voaWater	20.00	mL	1.000000
280-0034999-017	#17 lcs	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020	LCS		voaWater	20.00	mL	1.000000
280-0034999-018	#18 mb		MB		voaWater	20.00	mL	1.000000
280-0034999-019	#19 Samp 19		Client		voaWater	20.00	mL	1.000000

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Instrument ID and Date: Z 04/27/15 i Supp ICAL Batch/ICV lines: 274661 **isis 21 icv 24** .
Calibration Event 22133 Work List 34370 2nd Day Batch/ICV lines _____.

Check Method Used: Analysis ☐ 624 ☒ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	----- Level 1 ----- Yes	No	N/A	Level 2	Comments
Initial Calibration					
1. BFB meets criteria?	/			+	
2. ICAL date and instrument ID verified?	/			+	
3. Does the Form VI match the data in the Chrom source method?	/			+	
4. Sufficient number of calibration points used?	/			+	
5. Reasons for removal of points documented?	/			+	Some points < RL removed. See below
6. %RSD or correlation coefficient within method limits?	/			+	
7. Response factors meet criteria?	/			+	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	/			+	
9. Data checked for detector saturation?	/			+	
10. Label number of standards used recorded?	/			+	
11. Manual integrations documented and checked?	/			+	Tert-amyl methyl ether
12. 2nd source ICV recovery 80-120% (±20%drift) for DoD projects, 65-135% (±35%,or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	/			+	Ethyl acetate -50.29%D Tetrahydrothiophene -23.78%D

1st Level Reviewer: [signature] Date: 4/27/15

2nd Level Reviewer: [signature] Date: 4-27-15

Not Calibrated

Ethanol
Isopropyl Alcohol

Revision 4
03/27/2013
C:\Users\bergerb\Desktop\GCMS VOA ICAL supp.doc

Sequence Name: C:\HPCHEM\1\SEQUENCE\042715i.S
Comment:
Operator: moanm
Data Path: C:\HPCHEM\1\data\042715i\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: Z
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 631
Lims Batch: 274661

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	Z6760	BFB	bfb 631
2	Sample	1	Z6761	8260	blk
3	Sample	2	Z6762	8260	blk
4	Sample	3	Z6763	8260	blk
5	Sample	4	Z6764	8260	ic
6	Sample	5	Z6765	8260	ic
7	Sample	6	Z6766	8260	ic
8	Sample	7	Z6767	8260	ic
9	Sample	8	Z6768	8260	ic
10	Sample	9	Z6769	8260	ic
11	Sample	10	Z6770	8260	ic
12	Sample	11	Z6771	8260	blk
13	Sample	12	Z6772	8260	icv
14	Sample	13	Z6773	8260	ic
15	Sample	14	Z6774	8260	ic
16	Sample	15	Z6775	8260	ic
17	Sample	16	Z6776	8260	icis
18	Sample	17	Z6777	8260	ic
19	Sample	18	Z6778	8260	ic
20	Sample	19	Z6779	8260	icv
21	Sample	20	Z6780	8260	icv
22	Sample	22	Z6781	8260	mdlv
23	Sample	23	Z6782	8260	mdlv
24	Sample	24	Z6783	8260	mdlv
25	Sample	25	Z6784	8260	mdlv
26	Sample	26	Z6785	8260	mdlv
27	Sample	27	Z6786	8260	mdlv
28	Sample	28	Z6787	8260	mdlv
29	Sample	29	Z6788	8260	mdlv
30	Sample	30	Z6789	8260	mdlv
31	Sample	31	Z6790	8260	mdlv

SH 4/27/15

TestAmerica Laboratories
Worklist Report

Worklist Name: 042715i
Worklist Number: 34370
Instrument Name: VMS_Z
Chrom Method: AQ_VMSZ_8260
Purge Volume: 20.00
Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_Z\20150427-34370.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_Z
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00042 Amount Added: 0.800000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034370-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034370-002	# 2 CCV	MV-Main A_00022 MV-2cleve+AVA_00009 MV-Gas/Ket A_00032	CCV		voaWater	20.00	mL	1.000000
280-0034370-003	# 3 CCV	MV-Supp A_00011	CCV		voaWater	20.00	mL	1.000000
280-0034370-004	# 4 LCS	MV-Main B_00009 MV-Gas/Ket B_00018 MV-SS 2-Cleve_00020	LCS		voaWater	20.00	mL	1.000000
280-0034370-005	# 5 LCSD	MV-Main B_00009 MV-Gas/Ket B_00018 MV-SS 2-Cleve_00020	LCSD		voaWater	20.00	mL	1.000000
280-0034370-006	# 6 MB		MB		voaWater	20.00	mL	1.000000
280-0034370-007	# 7 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034370-008	# 8 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034370-009	# 9 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034370-010	#10 ic	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	1	voaWater	20.00	mL	1.000000
280-0034370-011	#11 ic	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	2	voaWater	20.00	mL	1.000000
280-0034370-012	#12 ic	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034370-013	#13 ic	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	4	voaWater	20.00	mL	1.000000
280-0034370-014	#14 ic	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	5	voaWater	20.00	mL	1.000000
280-0034370-015	#15 ic	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	6	voaWater	20.00	mL	1.000000
280-0034370-016	#16 ic	MV-567649-D_00001 MV-Gas/Ket A_00032 MV-Main A_00022 MV-2cleve+AVA_00009	IC	7	voaWater	20.00	mL	1.000000
280-0034370-017	#17 icv	MV-567649-D_00001 MV-Gas/Ket B_00018 MV-Main B_00009 MV-SS 2-Cleve_00020	ICV		voaWater	20.00	mL	1.000000
280-0034370-018	#18 ic	MV-ARCH SS A_00042 MV-567649-D_00001 MV-Supp A_00011	IC	2	voaWater	20.00	mL	1.000000
280-0034370-019	#19 ic	MV-567649-D_00001 MV-ARCH SS A_00042 MV-Supp A_00011	IC	3	voaWater	20.00	mL	1.000000
280-0034370-020	#20 ic	MV-567649-D_00001 MV-ARCH SS A_00042 MV-Supp A_00011	IC	4	voaWater	20.00	mL	1.000000
280-0034370-021	#21 icis	MV-567649-D_00001 MV-ARCH SS A_00042 MV-Supp A_00011	ICIS	5	voaWater	20.00	mL	1.000000
280-0034370-022	#22 ic	MV-567649-D_00001 MV-ARCH SS A_00042 MV-Supp A_00011	IC	6	voaWater	20.00	mL	1.000000
280-0034370-023	#23 ic	MV-567649-D_00001 MV-ARCH SS A_00042 MV-Supp A_00011	IC	7	voaWater	20.00	mL	1.000000
280-0034370-024	#24 icv	MV-567649-D_00001 MV-Supp B_00005 MV-ARCH SS A_00042	ICV		voaWater	20.00	mL	1.000000
280-0034370-025	#25 mdlv	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	MDLV		voaWater	20.00	mL	1.000000
280-0034370-026	#26 mdlv	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	MDLV		voaWater	20.00	mL	1.000000
280-0034370-027	#27 mdlv	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	MDLV		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034370-028	#28 mdlv	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	MDLV		voaWater	20.00	mL	1.000000
280-0034370-029	#29 mdlv	MV-567649-D_00001 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	MDLV		voaWater	20.00	mL	1.000000
280-0034370-030	#30 mdlv	MV-567649-D_00001 MV-Supp B_00005 MV-ARCH SS A_00042	MDLV		voaWater	20.00	mL	1.000000
280-0034370-031	#31 mdlv	MV-567649-D_00001 MV-Supp B_00005 MV-ARCH SS A_00042	MDLV		voaWater	20.00	mL	1.000000
280-0034370-032	#32 mdlv	MV-567649-D_00001 MV-Supp B_00005 MV-ARCH SS A_00042	MDLV		voaWater	20.00	mL	1.000000
280-0034370-033	#33 mdlv	MV-567649-D_00001 MV-Supp B_00005 MV-ARCH SS A_00042	MDLV		voaWater	20.00	mL	1.000000
280-0034370-034	#34 mdlv	MV-567649-D_00001 MV-Supp B_00005	MDLV		voaWater	20.00	mL	1.000000
280-0034370-035	#35 Samp 35		Client		voaWater	20.00	mL	1.000000

SUPP/SWER

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

TestAmerica

Instrument ID and Date: G2 04/28/15 ICAL Batch/ICV lines 274898/ICIS 20 ICV 23
Calibration Event 22148 Work List 34428 2nd Day Batch/ICV lines —

Check Method Used: Analysis ☐ 624 ☑ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☑ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Does the Form VI match the data in the Chrom source method?	✓			✓	
4. Sufficient number of calibration points used?	✓			✓	
5. Reasons for removal of points documented?	✓			✓	Some points < RL removed
6. %RSD or correlation coefficient within method limits?	✓			✓	
7. Response factors meet criteria?	✓			✓	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	✓			✓	
9. Data checked for detector saturation?	✓			✓	
10. Label number of standards used recorded?	✓			✓	
11. Manual integrations documented and checked?	✓			✓	Ethanol pt. 2
12. 2nd source ICV recovery 80-120% (±20%drift) for DoD projects, 65-135% (±35%,or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	✓			✓	Ethyl acetate -45.2%

1st Level Reviewer: _____ Date: 04/28/15

2nd Level Reviewer: _____ Date: 4/29/15

Revision 4
03/27/2013
G:\QA\Edit\FORMS\Data Review\MS VOA\GCMS VOA ICAL Rev 4.doc

Sequence Name: C:\MSDCHEM\1\SEQUENCE\042815I.S
Comment:
Operator: ilczyszyn
Data Path: C:\MSDchem\1\data\042815I\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: 62
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 1312 0036
2745996

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	50	G2_3680	8260B2	pr
2	Sample	51	G2_3681	8260B2	pr
3	Sample	52	G2_3682	8260B2	high pt ck
4	Sample	53	G2_3683	8260B2	blk
5	Sample	100	G2_3684	BFB	BFB
6	Sample	10	G2_3685	8260B2	ic
7	Sample	11	G2_3686	8260B2	ic
8	Sample	12	G2_3687	8260B2	ic
9	Sample	13	G2_3688	8260B2	ic
10	Sample	14	G2_3689	8260B2	ic
11	Sample	15	G2_3690	8260B2	ic
12	Sample	16	G2_3691	8260B2	ic
13	Sample	17	G2_3692	8260B2	icv
14	Sample	18	G2_3693	8260B2	ic
15	Sample	19	G2_3694	8260B2	ic
16	Sample	20	G2_3695	8260B2	ic
17	Sample	21	G2_3696	8260B2	icis
18	Sample	22	G2_3697	8260B2	ic
19	Sample	23	G2_3698	8260B2	ic
20	Sample	24	G2_3699	8260B2	icv
21	Sample	25	G2_3700	8260B2	mb
22	Sample	26	G2_3701	8260B2	lcs
23	Sample	27	G2_3702	8260B2	lcsd
24	Sample	28	G2_3703	8260B2	lcs rr
25	Sample	29	G2_3704	8260B2	280-67827-D-5 pH2
26	Sample	30	G2_3705	8260B2	280-67896-B-1 pH2
27	Sample	31	G2_3706	8260B2	280-67896-F-2 pH2
28	Sample	32	G2_3707	8260B2	280-67896-F-3 pH2
29	Sample	33	G2_3708	8260B2	280-67896-D-4 pH2
30	Sample	34	G2_3709	8260B2	280-67896-F-5 pH2
31	Sample	35	G2_3710	8260B2	280-67827-D-5 pH2
32	Sample	36	G2_3711	8260B2	280-67896-D-6 pH2
33	Sample	37	G2_3712	8260B2	280-67896-E-7 pH2
34	Sample	38	G2_3713	8260B2	280-67895-B-1 pH2
35	Sample	39	G2_3714	8260B2	280-67895-G-2 pH2
36	Sample	40	G2_3715	8260B2	280-67895-G-3 pH2
37	Sample	41	G2_3716	8260B2	280-67895-B-4 pH2
38	Sample	42	G2_3717	8260B2	280-67895-G-5 ph2
39	Sample	43	G2_3718	8260B2	280-67895-G-5 ph2 5mL
40	Sample	44	G2_3719	8260B2	pr
41	Sample	45	G2_3720	8260B2	pr

TestAmerica Laboratories
Worklist Report

Worklist Name: 042815I
Worklist Number: 34428
Instrument Name: VMS_G2
Chrom Method: AQ_VMSG2_8260
Purge Volume: 20.00
Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_G2\20150428-34428.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00043 Amount Added: 0.800000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034428-002	# 2 CCV	MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	CCV		voaWater	20.00	mL	1.000000
280-0034428-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034428-004	# 4 LCS	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCS		voaWater	20.00	mL	1.000000
280-0034428-024	#24 LCSD	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCSD		voaWater	20.00	mL	1.000000
280-0034428-005	# 5 MB		MB		voaWater	20.00	mL	1.000000
280-0034428-006	# 6 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034428-007	# 7 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034428-008	# 8 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034428-009	# 9 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	1	voaWater	20.00	mL	1.000000
280-0034428-010	#10 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	2	voaWater	20.00	mL	1.000000
280-0034428-011	#11 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-012	#12 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	4	voaWater	20.00	mL	1.000000
280-0034428-013	#13 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	5	voaWater	20.00	mL	1.000000
280-0034428-014	#14 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	6	voaWater	20.00	mL	1.000000
280-0034428-015	#15 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	7	voaWater	20.00	mL	1.000000
280-0034428-016	#16 icv	MV-567649-D_00001 MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket A_00032	ICV		voaWater	20.00	mL	1.000000
280-0034428-017	#17 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	2	voaWater	20.00	mL	1.000000
280-0034428-018	#18 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	3	voaWater	20.00	mL	1.000000
280-0034428-019	#19 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	4	voaWater	20.00	mL	1.000000
280-0034428-020	#20 icis	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	ICIS	5	voaWater	20.00	mL	1.000000
280-0034428-021	#21 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	6	voaWater	20.00	mL	1.000000
280-0034428-022	#22 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	7	voaWater	20.00	mL	1.000000
280-0034428-023	#23 icv	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp B_00005	ICV		voaWater	20.00	mL	1.000000
280-0034428-025	#25 280-67827-D-5		Client		voaWater	20.00	mL	1.000000
280-0034428-026	#26 280-67896-B-1		Client		voaWater	20.00	mL	1.000000
280-0034428-027	#27 280-67896-F-2		Client		voaWater	20.00	mL	1.000000
280-0034428-028	#28 280-67896-F-3		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-029	#29 280-67896-D-4		Client		voaWater	20.00	mL	1.000000
280-0034428-030	#30 280-67896-F-5		Client		voaWater	20.00	mL	1.000000
280-0034428-031	#31 280-67896-D-6		Client		voaWater	20.00	mL	1.000000
280-0034428-032	#32 280-67896-E-7		Client		voaWater	20.00	mL	1.000000
280-0034428-033	#33 280-67895-B-1		Client		voaWater	20.00	mL	1.000000
280-0034428-034	#34 280-67895-G-2		Client		voaWater	20.00	mL	1.000000
280-0034428-035	#35 280-67895-G-3		Client		voaWater	20.00	mL	1.000000
280-0034428-036	#36 280-67895-B-4		Client		voaWater	20.00	mL	1.000000
280-0034428-037	#37 280-67895-G-5		Client		voaWater	20.00	mL	1.000000
280-0034428-038	#38 280-67895-G-5		Client		voaWater	5.000000	mL	1.000000
280-0034428-039	#39 Samp 39		Client		voaWater	20.00	mL	1.000000

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

MAIN/GAS/CLEV/GURN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Instrument ID and Date: G2 051115 ICAL Batch/ICV lines 2767988 ICV line 16
Calibration Event 22265 Work List 34861 2nd Day Batch/ICV lines

Check Method Used: Analysis ☐ 624 ☒ 8260B ☐ Other VOA

VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Does the Form VI match the data in the Chrom source method?	✓			✓	
4. Sufficient number of calibration points used?	✓			✓	
5. Reasons for removal of points documented?	✓			✓	Some points < RL removed
6. %RSD or correlation coefficient within method limits?	✓			✓	
7. Response factors meet criteria?	✓			✓	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	✓			✓	
9. Data checked for detector saturation?	✓			✓	
10. Label number of standards used recorded?	✓			✓	
11. Manual integrations documented and checked?	✓		✗	✗	m&p xylene level 7
12. 2nd source ICV recovery 80-120% (±20%drift) for DoD projects, 65-135% (±35%,or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	✓		✗ 15-rr 15	✓	<20% unless listed below

1st Level Reviewer: [signature] Date: 5/11/15

2nd Level Reviewer: [signature] Date: 5-11-15

2-pentanone -25.15

ICV spiked at 5ppb

Revision 4
03/27/2013
C:\Documents and Settings\ilczyszynd.TAI\Desktop\GCMS VOA ICAL Rev 4.doc

Sequence Name: C:\MSDCHEM\1\SEQUENCE\051115.S
Comment:
Operator: ilczyszynd
Data Path: C:\MSDchem\1\data\051115\
Pre-Seq Cmd:
Post-Seq Cmd:

Instrument: G2
OV-MS-0010 (~~8260B/624~~) (Circle)
Purge Volume: ~~(20mL/5mL/5g)~~ (Circle)
Tune Time: 548 - 1604
Line Count: 276 788

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	G2_4147	BFB	BFB
2	Sample	100	G2_4148	BFB	BFB
3	Sample	10	G2_4149	8260B2	ccv
4	Sample	11	G2_4150	8260B2	ccv
5	Sample	12	G2_4151	8260B2	lcs
6	Sample	13	G2_4152	8260B2	ic
7	Sample	14	G2_4153	8260B2	ic
8	Sample	15	G2_4154	8260B2	ic
9	Sample	16	G2_4155	8260B2	ic
10	Sample	17	G2_4156	8260B2	ic
11	Sample	18	G2_4157	8260B2	ic
12	Sample	19	G2_4158	8260B2	ic
13	Sample	20	G2_4159	8260B2	icv
14	Sample	21	G2_4160	8260B2	lcs
15	Sample	22	G2_4161	8260B2	icv
16	Sample	23	G2_4162	8260B2	mb
17	Sample	24	G2_4163	8260B2	280-68695-B-1 pH2 SS↓ RR
18	Sample	25	G2_4164	8260B2	280-68695-D-2 pH2
19	Sample	26	G2_4165	8260B2	280-68695-C-3 pH2
20	Sample	27	G2_4166	8260B2	280-68695-D-4 pH2
21	Sample	28	G2_4167	8260B2	280-68695-D-5 pH2
22	Sample	29	G2_4168	8260B2	280-68695-E-6 pH2
23	Sample	30	G2_4169	8260B2	280-68695-E-6 pH2 5ml
24	Sample	31	G2_4170	8260B2	280-68695-E-7 pH2 10ml
25	Sample	32	G2_4171	8260B2	280-68695-E-7 pH2 1ml
26	Sample	33	G2_4172	8260B2	280-68695-N-8 pH2
27	Sample	34	G2_4173	8260B2	280-68695-O-8 ms pH2
28	Sample	35	G2_4174	8260B2	280-68695-O-8 msd pH2
29	Sample	36	G2_4175	8260B2	280-68695-C-9 pH2
30	Sample	37	G2_4176	8260B2	280-68695-C-9 pH2 5ml not needed
31	Sample	38	G2_4177	8260B2	280-68695-E-10 pH2

TestAmerica Laboratories
Worklist Report

Worklist Name: 051115 Worklist Number: 34861
Instrument Name: VMS_G2 Chrom Method: AQ_VMSG2_8260
Purge Volume: 20.00 Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_G2\20150511-34861.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00043 Amount Added: 0.800000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034861-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034861-002	# 2 CCV	MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034861-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034861-004	# 4 LCS	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCS		voaWater	20.00	mL	1.000000
280-0034861-005	# 5 MB		MB		voaWater	20.00	mL	1.000000
280-0034861-006	# 6 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034861-007	# 7 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034861-008	# 8 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034861-009	# 9 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	1	voaWater	20.00	mL	1.000000
280-0034861-010	#10 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	2	voaWater	20.00	mL	1.000000
280-0034861-011	#11 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034861-012	#12 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	4	voaWater	20.00	mL	1.000000
280-0034861-013	#13 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	5	voaWater	20.00	mL	1.000000
280-0034861-014	#14 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	6	voaWater	20.00	mL	1.000000
280-0034861-015	#15 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	IC	7	voaWater	20.00	mL	1.000000
280-0034861-016	#16 icv	MV-567649-D_00001 MV-ARCH SS A_00043 MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	ICV		voaWater	20.00	mL	1.000000
280-0034861-017	#17 280-68695-B-1		Client		voaWater	20.00	mL	1.000000
280-0034861-018	#18 280-68695-D-2		Client		voaWater	20.00	mL	1.000000
280-0034861-019	#19 280-68695-C-3		Client		voaWater	20.00	mL	1.000000
280-0034861-020	#20 280-68695-D-4		Client		voaWater	20.00	mL	1.000000
280-0034861-021	#21 280-68695-D-5		Client		voaWater	20.00	mL	1.000000
280-0034861-022	#22 280-68695-E-6		Client		voaWater	20.00	mL	1.000000
280-0034861-023	#23 280-68695-E-6		Client		voaWater	5.000000	mL	1.000000
280-0034861-024	#24 280-68695-E-7		Client		voaWater	10.00	mL	1.000000
280-0034861-032	#32 280-68695-E-7		Client		voaWater	1.000000	mL	1.000000
280-0034861-025	#25 280-68695-N-8		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034861-026	#26 280-68695-O-8 MS	MV-Gas/Ket B_00017 MV-Main B_00009 MV-SS 2-Cleve_00020	MS		voaWater	20.00	mL	1.000000
280-0034861-027	#27 280-68695-O-8 MSD	MV-Gas/Ket B_00017 MV-Main B_00009 MV-SS 2-Cleve_00020	MSD		voaWater	20.00	mL	1.000000
280-0034861-028	#28 280-68695-C-9		Client		voaWater	20.00	mL	1.000000
280-0034861-029	#29 280-68695-C-9		Client		voaWater	5.000000	mL	1.000000
280-0034861-030	#30 280-68695-E-10		Client		voaWater	20.00	mL	1.000000
280-0034861-031	#31 Samp 31		Client		voaWater	20.00	mL	1.000000

Shipping and Receiving Documents

~~TestAmerica~~ Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Ie	Lab PM: Walker, Elaine M	Carrier Tracking No(s): FedEx #: 806524572460	COC No: 280-36098-14680.6
Client Contact: ~~Mr. Steve Gragert~~ Anna Zabierek	Phone: 512-346-4474	E-Mail: elaine.walker@testamericainc.com		Page: 1
Company: ~~URS Corporation~~ GSI Environmental				Job #: 3969-211
Address: ~~12120 Shamrock Plaza, Suite 300~~ 9600 Great Hills Tr Suite 350E	Due Date Requested:			
City: ~~Omaha~~ Austin	TAT Requested (days): Standard TAT (except noted)			
State, Zip: ~~NE, 68154~~ TX 78759				
Phone: 512-346-4474	PO #: 306387 3969-211			
Email: ~~steve.gragert@urs.com~~ alw@gsi-net.com	WO #: 16170799 / Vendor # 1427536			
Project Name: McConnell AFB LTM & IMPM	Project #: 28003908 3969-211			
Site: SWMU207	SSOW#:			

Analysis Requested

280-68855 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_DADS_VOCs_Water	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
54403-TB12-0515	5/4/15	—	G	W			X		
54402-EB12-0515	5/4/15	1840	↓	↓			↓		
54400-MW44D-0515	5/5/15	1215							
54400-MW48-0515	5/5/15	1830							Rapid TAT
54402-EB13-0515	5/5/15	1830	↓	↓			↓		

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Level IV

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/6/15 1700	Company: GSI	Received by:	Date/Time: 5/7/15 10	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: Minsterbyms 2.7 IR5 +0.2

5/7/15

05/26/2015

Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 280-68855-1

Login Number: 68855
List Number: 1
Creator: Soto, Mayra A

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	