ANALYTICAL REPORT

Job Number: 280-68518-1

Job Description: GSI - McConnell AFB (SWMU 207)

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

Attention: Anna Zabierek

Approved for release.
Stephanie D Sanders
Project Manager I
5/21/2015 12:38 PM

Designee for
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05/21/2015

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 (SWMU 207)
Report Number: 280-68518-1

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

The samples were received on 04/29/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

The Chain of Custody lists samples 54401-SB46-0415-41 (280-68518-13) and 54401-SB46-0415-54 (280-68518-14) with a prefix of "54401-". Per instructions received on Wednesday, April 29, 2015, the samples were logged with a prefix of "54400-".

The Chain of Custody and container labels list the collection time for sample 54400-MW178-0415 (280-68518-10) as 15:23. Per instructions received on Wednesday, April 29, 2015, the sample collection time was updated to 17:23, as the incorrect time was listed on the COC and labels.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples 54403-TB08-0415 (280-68518-1), 54400-MW69-0415 (280-68518-2), 54400-BH0206S-0415 (280-68518-3), 54400-MW223-0415 (280-68518-4), 54400-MW224-0415 (280-68518-5), 54400-MW45D-0415 (280-68518-6), 54400-MW45S-0415 (280-68518-7), 54400-MW42-0415 (280-68518-8), 54400-MW67-0415 (280-68518-9), 54400-MW178-0415 (280-68518-10), 54400-BH0202S-0415 (280-68518-11) and 54400-MW182-0415 (280-68518-12) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 05/06/2015, 05/07/2015 and 05/08/2015.

Sample 54400-MW178-0415 (280-68518-10) required a dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL ORGANIC CARBON

Samples 54401-SB46-0415-41 (280-68518-13) and 54401-SB46-0415-54 (280-68518-14) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 05/19/2015.

No 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.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 274661

Lab Sample ID: IC 280-274661/11 Client Sample ID:

Date Analyzed: 04/27/15 08:22 Lab File ID: Z6765.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.90	Baseline	moanm	04/27/15 11:34
Carbon tetrachloride	5.78	Assign Peak	moanm	05/02/15 06:53
2-Chlorotoluene	13.65	Assign Peak	moanm	04/27/15 11:38

Lab Sample ID: IC 280-274661/12 Client Sample ID:

Date Analyzed: 04/27/15 08:45 Lab File ID: Z6766.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.91	Baseline	moanm	04/27/15 11:35
tert-Butyl alcohol	3.58	Poor chromatography	moanm	04/27/15 14:11
Carbon tetrachloride	5.77	Assign Peak	moanm	05/02/15 06:54
2-Chlorotoluene	13.64	Assign Peak	moanm	04/27/15 11:38

Lab Sample ID: IC 280-274661/13 Client Sample ID:

Date Analyzed: 04/27/15 09:07 Lab File ID: Z6767.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	3.56	Poor chromatography	moanm	04/27/15 14:13
Carbon tetrachloride	5.77	Assign Peak	moanm	05/02/15 06:54
2-Chlorotoluene	13.65	Assign Peak	moanm	04/27/15 11:38

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 274661

Lab Sample ID: IC 280-274661/14 Client Sample ID:

Date Analyzed: 04/27/15 09:30 Lab File ID: Z6768.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	3.58	Poor chromatography	moanm	04/27/15 13:58
Carbon tetrachloride	5.79	Assign Peak	moanm	05/02/15 06:53
2-Chlorotoluene	13.65	Assign Peak	moanm	04/27/15 11:38

Lab Sample ID: IC 280-274661/15 Client Sample ID:

Date Analyzed: 04/27/15 09:53 Lab File ID: Z6769.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	04/27/15 11:36
tert-Butyl alcohol	3.57	Poor chromatography	moanm	04/27/15 14:15
Carbon tetrachloride	5.77	Assign Peak	moanm	05/02/15 06:54
2-Chlorotoluene	13.65	Assign Peak	moanm	04/27/15 11:38

Lab Sample ID: IC 280-274661/16 Client Sample ID:

Date Analyzed: 04/27/15 10:16 Lab File ID: Z6770.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	04/27/15 11:37
tert-Butyl alcohol	3.59	Baseline	moanm	04/27/15 14:17
Carbon tetrachloride	5.78	Assign Peak	moanm	05/02/15 06:54
2-Chlorotoluene	13.65	Assign Peak	moanm	04/27/15 11:39

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 274661

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

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 274661

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.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 275227

Lab Sample ID: ICV 280-275227/4 Client Sample ID:

Date Analyzed: 04/30/15 07:04 Lab File ID: Z6922.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	3.56	Poor chromatography	moanm	04/30/15 07:41
Carbon tetrachloride	5.77	Wrong peak	moanm	05/02/15 07:06
2-Chlorotoluene	13.66	Assign Peak	moanm	04/30/15 07:41

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 276091

Lab Sample ID: CCV 280-276091/2 Client Sample ID:

Date Analyzed: 05/05/15 20:22 Lab File ID: Z7159.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.98	Shouldering	bergerb	05/05/15 21:18
tert-Butyl alcohol	3.58	Baseline	bergerb	05/05/15 21:18
2-Butanone (MEK)	4.86	Peak Tail	bergerb	05/05/15 21:18
Isobutyl alcohol	5.87	Assign Peak	bergerb	05/05/15 21:18

Lab Sample ID: CCV 280-276091/3 Client Sample ID:

Date Analyzed: 05/05/15 20:45 Lab File ID: Z7160.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	Baseline	bergerb	05/05/15 21:19

Lab Sample ID: LCS 280-276091/4 Client Sample ID:

Date Analyzed: 05/05/15 21:09 Lab File ID: Z7161.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.97	Shouldering	bergerb	05/05/15 21:46
tert-Butyl alcohol	3.54	Split Peak	bergerb	05/05/15 21:46
2-Chlorotoluene	13.68	Assign Peak	bergerb	05/05/15 21:46

Lab Sample ID: CCVC 280-276091/33 Client Sample ID:

Date Analyzed: 05/06/15 07:01 Lab File ID: Z7187.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	3.57	Split Peak	bergerb	05/06/15 15:19
2-Chlorotoluene	13.66	Assign Peak	moanm	05/06/15 07:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Analysis Batch Number: 276534

Lab Sample ID: CCV 280-276534/2 Client Sample ID:

Date Analyzed: 05/07/15 20:29 Lab File ID: Z7283.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.97	Shouldering	bergerb	05/07/15 21:01
tert-Butyl alcohol	3.56	Split Peak	bergerb	05/07/15 21:01
2-Chlorotoluene	13.69	Assign Peak	bergerb	05/07/15 21:01

Lab Sample ID: LCS 280-276534/4 Client Sample ID:

Date Analyzed: 05/07/15 21:14 Lab File ID: Z7285.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	3.56	Split Peak	bergerb	05/07/15 21:39
2-Chlorotoluene	13.69	Assign Peak	bergerb	05/07/15 21:39

Lab Sample ID: CCVC 280-276534/25 Client Sample ID:

Date Analyzed: 05/08/15 04:25 Lab File ID: Z7303.D GC Column: DB-624 (75.53 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.99	Shouldering	bergerb	05/08/15 16:21
4-Bromofluorobenzene (Surr)	13.06	Split Peak	bergerb	05/08/15 16:21
2-Chlorotoluene	13.67	Assign Peak	bergerb	05/08/15 16:21

SAMPLE SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-68518-1TB	54403-TB08-0415	Water	04/27/2015 0000	04/29/2015 0700
280-68518-2	54400-MW69-0415	Water	04/27/2015 1720	04/29/2015 0700
280-68518-3	54400-BH0206S-0415	Water	04/28/2015 0959	04/29/2015 0700
280-68518-4	54400-MW223-0415	Water	04/28/2015 1156	04/29/2015 0700
280-68518-5	54400-MW224-0415	Water	04/28/2015 1035	04/29/2015 0700
280-68518-6	54400-MW45D-0415	Water	04/28/2015 1230	04/29/2015 0700
280-68518-7	54400-MW45S-0415	Water	04/28/2015 1835	04/29/2015 0700
280-68518-8	54400-MW42-0415	Water	04/28/2015 0920	04/29/2015 0700
280-68518-9	54400-MW67-0415	Water	04/27/2015 1755	04/29/2015 0700
280-68518-10	54400-MW178-0415	Water	04/28/2015 1723	04/29/2015 0700
280-68518-11	54400-BH0202S-0415	Water	04/27/2015 1503	04/29/2015 0700
280-68518-12	54400-MW182-0415	Water	04/28/2015 1350	04/29/2015 0700
280-68518-13	54401-SB46-0415-41	Solid	04/24/2015 0915	04/29/2015 0700
280-68518-14	54401-SB46-0415-54	Solid	04/24/2015 1340	04/29/2015 0700

EXECUTIVE SUMMARY - Detections

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-68518-2	**54400-MW69-0415**					
cis-1,2-Dichloroethene		0.26	J	1.0	ug/L	8260B
Trichloroethene		0.85	J	1.0	ug/L	8260B
280-68518-3	**54400-BH0206S-0415**					
Trichloroethene		2.0		1.0	ug/L	8260B
280-68518-4	**54400-MW223-0415**					
1,1-Dichloroethene		9.2		1.0	ug/L	8260B
Carbon tetrachloride		3.8		2.0	ug/L	8260B
Chloroform		0.66	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.41	J	1.0	ug/L	8260B
Trichloroethene		8.7		1.0	ug/L	8260B
280-68518-5	**54400-MW224-0415**					
1,1-Dichloroethene		26		1.0	ug/L	8260B
Carbon tetrachloride		8.0		2.0	ug/L	8260B
Chloroform		1.8		1.0	ug/L	8260B
Trichloroethene		16		1.0	ug/L	8260B
280-68518-6	**54400-MW45D-0415**					
1,1-Dichloroethane		0.20	J	1.0	ug/L	8260B
1,1-Dichloroethene		23		1.0	ug/L	8260B
Carbon tetrachloride		2.2		2.0	ug/L	8260B
Chloroform		0.88	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.18	J	1.0	ug/L	8260B
Trichloroethene		14		1.0	ug/L	8260B
280-68518-7	**54400-MW45S-0415**					
1,1-Dichloroethane		0.21	J	1.0	ug/L	8260B
1,1-Dichloroethene		28		1.0	ug/L	8260B
Carbon tetrachloride		2.5		2.0	ug/L	8260B
Chlorodibromomethane		0.17	J	1.0	ug/L	8260B
Chloroform		1.2		1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.19	J	1.0	ug/L	8260B
Trichloroethene		15		1.0	ug/L	8260B

EXECUTIVE SUMMARY - Detections

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-68518-8	**54400-MW42-0415**					
Bromodichloromethane		0.75	J	1.0	ug/L	8260B
Carbon tetrachloride		0.37	J	2.0	ug/L	8260B
Chlorodibromomethane		0.94	J	1.0	ug/L	8260B
Chloroform		0.62	J	1.0	ug/L	8260B
280-68518-9	**54400-MW67-0415**					
Methyl tert-butyl ether		1.0	J	5.0	ug/L	8260B
280-68518-10	**54400-MW178-0415**					
1,1-Dichloroethane		0.85	J	1.0	ug/L	8260B
1,1-Dichloroethene		140		10	ug/L	8260B
Carbon tetrachloride		13		2.0	ug/L	8260B
Chloroform		2.2		1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.44	J	1.0	ug/L	8260B
Trichloroethene		56		1.0	ug/L	8260B
280-68518-12	**54400-MW182-0415**					
1,1-Dichloroethene		28		1.0	ug/L	8260B
Carbon tetrachloride		9.7		2.0	ug/L	8260B
Chloroform		1.8		1.0	ug/L	8260B
Trichloroethene		15		1.0	ug/L	8260B

METHOD SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Organic Carbon, Total (TOC)	TAL DEN	SW846 9060A	
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: 280-68518-1

Method	Analyst	Analyst ID
SW846 8260B	Berger, Brent B	BBB
SW846 9060A	Janssen, Elizabeth L	ELJ

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54403-TB08-0415**

Lab Sample ID: 280-68518-1TB

Client Matrix: Water

Date Sampled: 04/27/2015 0000

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7178.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0336			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0336				

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: 280-68518-1

Client Sample ID: **54403-TB08-0415**

Lab Sample ID: 280-68518-1TB

Client Matrix: Water

Date Sampled: 04/27/2015 0000

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7178.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0336			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0336				

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)	102		81 - 118
4-Bromofluorobenzene (Surr)	105		85 - 114
Dibromofluoromethane (Surr)	100		80 - 119
Toluene-d8 (Surr)	100		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW69-0415**

Lab Sample ID: 280-68518-2
Client Matrix: Water

Date Sampled: 04/27/2015 1720
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7179.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0358			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0358				

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	0.26	J	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: 280-68518-1

Client Sample ID: **54400-MW69-0415**

Lab Sample ID: 280-68518-2

Client Matrix: Water

Date Sampled: 04/27/2015 1720

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7179.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0358			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0358				

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	0.85	J	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)	113		81 - 118
4-Bromofluorobenzene (Surr)	110		85 - 114
Dibromofluoromethane (Surr)	109		80 - 119
Toluene-d8 (Surr)	104		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-BH0206S-0415**

Lab Sample ID: 280-68518-3
Client Matrix: Water

Date Sampled: 04/28/2015 0959
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7180.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0421			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0421				

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: 280-68518-1

Client Sample ID: **54400-BH0206S-0415**

Lab Sample ID: 280-68518-3

Client Matrix: Water

Date Sampled: 04/28/2015 0959

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7180.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0421			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0421				

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	2.0		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)	104		81 - 118
4-Bromofluorobenzene (Surr)	107		85 - 114
Dibromofluoromethane (Surr)	102		80 - 119
Toluene-d8 (Surr)	98		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW223-0415**

Lab Sample ID: 280-68518-4
Client Matrix: Water

Date Sampled: 04/28/2015 1156
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7181.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0444			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0444				

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	9.2		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	3.8		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	0.66	J	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.41	J	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: 280-68518-1

Client Sample ID: **54400-MW223-0415**

Lab Sample ID: 280-68518-4

Client Matrix: Water

Date Sampled: 04/28/2015 1156

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7181.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0444			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0444				

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	8.7		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)	105		81 - 118
4-Bromofluorobenzene (Surr)	105		85 - 114
Dibromofluoromethane (Surr)	102		80 - 119
Toluene-d8 (Surr)	99		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW224-0415**

Lab Sample ID: 280-68518-5
Client Matrix: Water

Date Sampled: 04/28/2015 1035
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7182.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0507			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0507				

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	26		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	8.0		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	1.8		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: 280-68518-1

Client Sample ID: **54400-MW224-0415**

Lab Sample ID: 280-68518-5

Client Matrix: Water

Date Sampled: 04/28/2015 1035

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7182.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0507			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0507				

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	16		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)	113		81 - 118
4-Bromofluorobenzene (Surr)	111		85 - 114
Dibromofluoromethane (Surr)	109		80 - 119
Toluene-d8 (Surr)	106		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW45D-0415**

Lab Sample ID: 280-68518-6
Client Matrix: Water

Date Sampled: 04/28/2015 1230
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7183.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0529			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0529				

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	0.20	J	0.16	1.0
1,1-Dichloroethene	23		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	2.2		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	0.88	J	0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.18	J	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: 280-68518-1

Client Sample ID: **54400-MW45D-0415**

Lab Sample ID: 280-68518-6

Client Matrix: Water

Date Sampled: 04/28/2015 1230

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7183.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0529			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0529				

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	14		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)	108		81 - 118
4-Bromofluorobenzene (Surr)	106		85 - 114
Dibromofluoromethane (Surr)	105		80 - 119
Toluene-d8 (Surr)	97		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW45S-0415**

Lab Sample ID: 280-68518-7
Client Matrix: Water

Date Sampled: 04/28/2015 1835
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7184.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0552			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0552				

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	0.21	J	0.16	1.0
1,1-Dichloroethene	28		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	2.5		0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.17	J	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	1.2		0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.19	J	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: 280-68518-1

Client Sample ID: **54400-MW45S-0415**

Lab Sample ID: 280-68518-7

Client Matrix: Water

Date Sampled: 04/28/2015 1835

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7184.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0552			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0552				

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	15		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)	106		81 - 118
4-Bromofluorobenzene (Surr)	112		85 - 114
Dibromofluoromethane (Surr)	106		80 - 119
Toluene-d8 (Surr)	103		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: 54400-MW42-0415

Lab Sample ID: 280-68518-8
Client Matrix: Water

Date Sampled: 04/28/2015 0920
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7185.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0615			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0615				

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	0.75	J	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	0.37	J	0.19	2.0
Chlorobenzene	0.40	U	0.17	1.0
Chlorodibromomethane	0.94	J	0.17	1.0
Chloroethane	1.6	U	0.41	2.0
Chloroform	0.62	J	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: 280-68518-1

Client Sample ID: **54400-MW42-0415**

Lab Sample ID: 280-68518-8

Client Matrix: Water

Date Sampled: 04/28/2015 0920

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7185.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0615			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0615				

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)	99		81 - 118
4-Bromofluorobenzene (Surr)	105		85 - 114
Dibromofluoromethane (Surr)	99		80 - 119
Toluene-d8 (Surr)	94		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW67-0415**

Lab Sample ID: 280-68518-9
Client Matrix: Water

Date Sampled: 04/27/2015 1755
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7186.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0638			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0638				

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: 280-68518-1

Client Sample ID: **54400-MW67-0415**

Lab Sample ID: 280-68518-9

Client Matrix: Water

Date Sampled: 04/27/2015 1755

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7186.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/06/2015 0638			Final Weight/Volume:	20 mL
Prep Date:	05/06/2015 0638				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.40	U	0.19	1.0
Methyl tert-butyl ether	1.0	J	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)	106		81 - 118
4-Bromofluorobenzene (Surr)	112		85 - 114
Dibromofluoromethane (Surr)	105		80 - 119
Toluene-d8 (Surr)	103		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW178-0415**

Lab Sample ID: 280-68518-10
Client Matrix: Water

Date Sampled: 04/28/2015 1723
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7288.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2245			Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2245				

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	0.85	J	0.16	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	13		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	2.2		0.16	1.0
Chloromethane	0.80	U	0.30	2.0
cis-1,2-Dichloroethene	0.44	J	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
Isopropylbenzene	0.40	U	0.19	1.0

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: 54400-MW178-0415

Lab Sample ID: 280-68518-10
Client Matrix: Water

Date Sampled: 04/28/2015 1723
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7288.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2245			Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2245				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
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	56		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)	94		81 - 118
4-Bromofluorobenzene (Surr)	106		85 - 114
Dibromofluoromethane (Surr)	103		80 - 119
Toluene-d8 (Surr)	102		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: **54400-MW178-0415**

Lab Sample ID: 280-68518-10

Client Matrix: Water

Date Sampled: 04/28/2015 1723

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7289.D
Dilution:	1.0			Initial Weight/Volume:	2 mL
Analysis Date:	05/07/2015 2307	Run Type:	DL	Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2307				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1-Dichloroethene	140		1.4	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		81 - 118
4-Bromofluorobenzene (Surr)	102		85 - 114
Dibromofluoromethane (Surr)	103		80 - 119
Toluene-d8 (Surr)	101		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: 54400-BH0202S-0415

Lab Sample ID: 280-68518-11
Client Matrix: Water

Date Sampled: 04/27/2015 1503
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7290.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2330			Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2330				

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: 280-68518-1

Client Sample ID: **54400-BH0202S-0415**

Lab Sample ID: 280-68518-11

Client Matrix: Water

Date Sampled: 04/27/2015 1503

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7290.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2330			Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2330				

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)	100		81 - 118
4-Bromofluorobenzene (Surr)	105		85 - 114
Dibromofluoromethane (Surr)	108		80 - 119
Toluene-d8 (Surr)	103		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Client Sample ID: 54400-MW182-0415

Lab Sample ID: 280-68518-12
Client Matrix: Water

Date Sampled: 04/28/2015 1350
Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7302.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/08/2015 0402			Final Weight/Volume:	20 mL
Prep Date:	05/08/2015 0402				

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	28		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	9.7		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	1.8		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: 280-68518-1

Client Sample ID: **54400-MW182-0415**

Lab Sample ID: 280-68518-12

Client Matrix: Water

Date Sampled: 04/28/2015 1350

Date Received: 04/29/2015 0700

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z7302.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	05/08/2015 0402			Final Weight/Volume:	20 mL
Prep Date:	05/08/2015 0402				

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	15		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)	100		81 - 118
4-Bromofluorobenzene (Surr)	104		85 - 114
Dibromofluoromethane (Surr)	108		80 - 119
Toluene-d8 (Surr)	102		89 - 112

General Chemistry

Client Sample ID: 54401-SB46-0415-41

Lab Sample ID: 280-68518-13

Client Matrix: Solid

Date Sampled: 04/24/2015 0915

Date Received: 04/29/2015 0700

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Total Organic Carbon	3.4	U	g/Kg	1.7	4.0	1.0	9060A

Analysis Batch: 280-278201 Analysis Date: 05/19/2015 1414 DryWt Corrected: N

General Chemistry

Client Sample ID: **54401-SB46-0415-54**

Lab Sample ID: 280-68518-14

Client Matrix: Solid

Date Sampled: 04/24/2015 1340

Date Received: 04/29/2015 0700

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Total Organic Carbon	3.4	U	g/Kg	1.7	4.0	1.0	9060A

Analysis Batch: 280-278201 Analysis Date: 05/19/2015 1345 DryWt Corrected: N

Client: GSI Environmental, Inc

Job Number: 280-68518-1

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
280-68518-1	54403-TB08-0415	100	102	100	105
280-68518-2	54400-MW69-0415	109	113	104	110
280-68518-3	54400-BH0206S-0415	102	104	98	107
280-68518-4	54400-MW223-0415	102	105	99	105
280-68518-5	54400-MW224-0415	109	113	106	111
280-68518-6	54400-MW45D-0415	105	108	97	106
280-68518-7	54400-MW45S-0415	106	106	103	112
280-68518-8	54400-MW42-0415	99	99	94	105
280-68518-9	54400-MW67-0415	105	106	103	112
280-68518-10	54400-MW178-0415	103	94	102	106
280-68518-10 DL	54400-MW178-0415 DL	103	95	101	102
280-68518-11	54400-BH0202S-0415	108	100	103	105
280-68518-12	54400-MW182-0415	108	100	102	104
MB 280-276091/6		100	95	100	103
MB 280-276534/6		106	101	102	106
LCS 280-276091/4		104	106	110	106
LCS 280-276534/4		105	100	107	101

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: 280-68518-1

Method Blank - Batch: 280-276091

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-276091/6	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7164.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/05/2015 2218	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/05/2015 2218				
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: 280-68518-1

Method Blank - Batch: 280-276091

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-276091/6	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7164.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/05/2015 2218	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/05/2015 2218				
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)	95	81 - 118
4-Bromofluorobenzene (Surr)	103	85 - 114
Dibromofluoromethane (Surr)	100	80 - 119
Toluene-d8 (Surr)	100	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Lab Control Sample - Batch: 280-276091

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-276091/4	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7161.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/05/2015 2109	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/05/2015 2109				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	5.00	5.24	105	78 - 124	
1,1,1-Trichloroethane	5.00	4.72	94	74 - 131	
1,1,2,2-Tetrachloroethane	5.00	5.11	102	71 - 121	
1,1,2-Trichloroethane	5.00	4.91	98	80 - 119	
1,1-Dichloroethane	5.00	4.85	97	77 - 125	
1,1-Dichloroethene	5.00	4.62	92	71 - 131	
1,1-Dichloropropene	5.00	5.01	100	79 - 125	
1,2,3-Trichlorobenzene	5.00	5.35	107	69 - 129	
1,2,3-Trichloropropane	5.00	4.92	98	73 - 122	
1,2,4-Trichlorobenzene	5.00	5.19	104	69 - 130	
1,2,4-Trimethylbenzene	5.00	4.83	97	76 - 124	
1,2-Dibromo-3-Chloropropane	5.00	5.45	109	62 - 128	
1,2-Dibromoethane	5.00	5.09	102	77 - 121	
1,2-Dichlorobenzene	5.00	5.29	106	80 - 119	
1,2-Dichloroethane	5.00	4.85	97	73 - 128	
1,2-Dichloropropane	5.00	4.73	95	78 - 122	
1,3,5-Trimethylbenzene	5.00	4.88	98	75 - 124	
1,3-Dichlorobenzene	5.00	5.15	103	80 - 119	
1,3-Dichloropropane	5.00	4.96	99	80 - 119	
1,4-Dichlorobenzene	5.00	5.28	106	79 - 118	
2,2-Dichloropropane	5.00	4.70	94	60 - 139	
2-Butanone (MEK)	20.0	19.1	96	56 - 143	
2-Chlorotoluene	5.00	5.21	104	79 - 122	M
2-Hexanone	20.0	19.4	97	57 - 139	
4-Chlorotoluene	5.00	5.00	100	78 - 122	
4-Methyl-2-pentanone (MIBK)	20.0	19.5	97	67 - 130	
Acetone	20.0	15.7	79	39 - 160	
Benzene	5.00	4.92	98	79 - 120	
Bromobenzene	5.00	5.25	105	80 - 120	
Bromochloromethane	5.00	4.88	98	78 - 123	
Bromodichloromethane	5.00	5.01	100	79 - 125	
Bromoform	5.00	5.50	110	66 - 130	
Bromomethane	5.00	5.40	108	53 - 141	
Carbon disulfide	5.00	4.71	94	64 - 133	
Carbon tetrachloride	5.00	5.03	101	72 - 136	
Chlorobenzene	5.00	5.17	103	82 - 118	
Chlorodibromomethane	5.00	5.59	112	74 - 126	
Chloroethane	5.00	5.18	104	60 - 138	
Chloroform	5.00	4.94	99	79 - 124	
Chloromethane	5.00	5.61	112	50 - 139	M
cis-1,2-Dichloroethene	5.00	5.13	103	78 - 123	
cis-1,3-Dichloropropene	5.00	5.11	102	75 - 124	
Dibromomethane	5.00	4.66	93	79 - 123	
Dichlorodifluoromethane	5.00	5.72	114	32 - 152	
Ethylbenzene	5.00	5.07	101	79 - 121	
Hexachlorobutadiene	5.00	5.28	106	66 - 134	

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Lab Control Sample - Batch: 280-276091

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-276091/4	Analysis Batch:	280-276091	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7161.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/05/2015 2109	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/05/2015 2109				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Isopropylbenzene	5.00	4.98	100	72 - 131	
Methyl tert-butyl ether	5.00	4.90	98	71 - 124	J
Methylene Chloride	5.00	5.26	105	74 - 124	
m-Xylene & p-Xylene	5.00	5.04	101	80 - 121	
Naphthalene	5.00	4.99	100	61 - 128	
n-Butylbenzene	5.00	4.85	97	75 - 128	
N-Propylbenzene	5.00	5.06	101	76 - 126	
o-Xylene	5.00	5.31	106	78 - 122	
p-Isopropyltoluene	5.00	4.93	99	77 - 127	
sec-Butylbenzene	5.00	5.06	101	77 - 126	
Styrene	5.00	5.00	100	78 - 123	
tert-Butyl alcohol	50.0	39.6	79	68 - 129	J M
tert-Butylbenzene	5.00	4.89	98	78 - 124	
Tetrachloroethene	5.00	5.28	106	74 - 129	
Toluene	5.00	4.73	95	80 - 121	
trans-1,2-Dichloroethene	5.00	5.15	103	75 - 124	
trans-1,3-Dichloropropene	5.00	5.07	101	73 - 127	
Trichloroethene	5.00	4.91	98	79 - 123	
Trichlorofluoromethane	5.00	5.18	104	65 - 141	
Vinyl chloride	5.00	5.41	108	58 - 137	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106	81 - 118
4-Bromofluorobenzene (Surr)	106	85 - 114
Dibromofluoromethane (Surr)	104	80 - 119
Toluene-d8 (Surr)	110	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Method Blank - Batch: 280-276534

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-276534/6	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7287.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2222	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2222				
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: 280-68518-1

Method Blank - Batch: 280-276534

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-276534/6	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7287.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2222	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2222				
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)	101	81 - 118
4-Bromofluorobenzene (Surr)	106	85 - 114
Dibromofluoromethane (Surr)	106	80 - 119
Toluene-d8 (Surr)	102	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Lab Control Sample - Batch: 280-276534

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-276534/4	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7285.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2114	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2114				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	5.00	5.51	110	78 - 124	
1,1,1-Trichloroethane	5.00	5.16	103	74 - 131	
1,1,2,2-Tetrachloroethane	5.00	5.11	102	71 - 121	
1,1,2-Trichloroethane	5.00	5.26	105	80 - 119	
1,1-Dichloroethane	5.00	5.03	101	77 - 125	
1,1-Dichloroethene	5.00	5.84	117	71 - 131	
1,1-Dichloropropene	5.00	5.28	106	79 - 125	
1,2,3-Trichlorobenzene	5.00	5.15	103	69 - 129	
1,2,3-Trichloropropane	5.00	5.02	100	73 - 122	
1,2,4-Trichlorobenzene	5.00	5.50	110	69 - 130	
1,2,4-Trimethylbenzene	5.00	4.99	100	76 - 124	
1,2-Dibromo-3-Chloropropane	5.00	6.03	121	62 - 128	
1,2-Dibromoethane	5.00	5.34	107	77 - 121	
1,2-Dichlorobenzene	5.00	5.37	107	80 - 119	
1,2-Dichloroethane	5.00	4.96	99	73 - 128	
1,2-Dichloropropane	5.00	4.85	97	78 - 122	
1,3,5-Trimethylbenzene	5.00	5.10	102	75 - 124	
1,3-Dichlorobenzene	5.00	5.42	108	80 - 119	
1,3-Dichloropropane	5.00	4.88	98	80 - 119	
1,4-Dichlorobenzene	5.00	5.52	110	79 - 118	
2,2-Dichloropropane	5.00	5.30	106	60 - 139	
2-Butanone (MEK)	20.0	17.3	86	56 - 143	
2-Chlorotoluene	5.00	5.27	105	79 - 122	M
2-Hexanone	20.0	16.6	83	57 - 139	
4-Chlorotoluene	5.00	5.37	107	78 - 122	
4-Methyl-2-pentanone (MIBK)	20.0	17.3	86	67 - 130	
Acetone	20.0	18.3	91	39 - 160	
Benzene	5.00	5.20	104	79 - 120	
Bromobenzene	5.00	5.52	110	80 - 120	
Bromochloromethane	5.00	5.32	106	78 - 123	
Bromodichloromethane	5.00	5.39	108	79 - 125	
Bromoform	5.00	5.80	116	66 - 130	
Bromomethane	5.00	5.05	101	53 - 141	
Carbon disulfide	5.00	5.35	107	64 - 133	
Carbon tetrachloride	5.00	5.46	109	72 - 136	
Chlorobenzene	5.00	5.41	108	82 - 118	
Chlorodibromomethane	5.00	5.52	110	74 - 126	
Chloroethane	5.00	4.71	94	60 - 138	
Chloroform	5.00	5.21	104	79 - 124	
Chloromethane	5.00	4.86	97	50 - 139	
cis-1,2-Dichloroethene	5.00	5.56	111	78 - 123	
cis-1,3-Dichloropropene	5.00	5.07	101	75 - 124	
Dibromomethane	5.00	5.02	100	79 - 123	
Dichlorodifluoromethane	5.00	5.41	108	32 - 152	
Ethylbenzene	5.00	5.42	108	79 - 121	
Hexachlorobutadiene	5.00	5.74	115	66 - 134	

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Lab Control Sample - Batch: 280-276534

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-276534/4	Analysis Batch:	280-276534	Instrument ID:	VMS_Z
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	Z7285.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	05/07/2015 2114	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	05/07/2015 2114				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Isopropylbenzene	5.00	5.20	104	72 - 131	
Methyl tert-butyl ether	5.00	5.08	102	71 - 124	
Methylene Chloride	5.00	5.88	118	74 - 124	
m-Xylene & p-Xylene	5.00	5.51	110	80 - 121	
Naphthalene	5.00	4.90	98	61 - 128	
n-Butylbenzene	5.00	5.06	101	75 - 128	
N-Propylbenzene	5.00	5.29	106	76 - 126	
o-Xylene	5.00	5.56	111	78 - 122	
p-Isopropyltoluene	5.00	5.27	105	77 - 127	
sec-Butylbenzene	5.00	5.40	108	77 - 126	
Styrene	5.00	5.31	106	78 - 123	
tert-Butyl alcohol	50.0	56.7	113	68 - 129	M
tert-Butylbenzene	5.00	5.08	102	78 - 124	
Tetrachloroethene	5.00	5.91	118	74 - 129	
Toluene	5.00	5.11	102	80 - 121	
trans-1,2-Dichloroethene	5.00	6.04	121	75 - 124	
trans-1,3-Dichloropropene	5.00	5.27	105	73 - 127	
Trichloroethene	5.00	5.39	108	79 - 123	
Trichlorofluoromethane	5.00	4.83	97	65 - 141	
Vinyl chloride	5.00	4.84	97	58 - 137	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100	81 - 118
4-Bromofluorobenzene (Surr)	101	85 - 114
Dibromofluoromethane (Surr)	105	80 - 119
Toluene-d8 (Surr)	107	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Method Blank - Batch: 280-278201

Method: 9060A
Preparation: N/A

Lab Sample ID:	MB 280-278201/4	Analysis Batch:	280-278201	Instrument ID:	WC_Leco
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	051915.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	05/19/2015 1141	Units:	g/Kg	Final Weight/Volume:	0.3333 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Total Organic Carbon	3.4	U	1.7	4.0

Lab Control Sample - Batch: 280-278201

Method: 9060A
Preparation: N/A

Lab Sample ID:	LCS 280-278201/3	Analysis Batch:	280-278201	Instrument ID:	WC_Leco
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	051915.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	05/19/2015 1139	Units:	g/Kg	Final Weight/Volume:	0.2071 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Organic Carbon	123	116	95	46 - 130	

DATA REPORTING QUALIFIERS

Client: GSI Environmental, Inc

Job Number: 280-68518-1

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.
General Chemistry		
	U	Undetected at the Limit of Detection.

Client: GSI Environmental, Inc

Job Number: 280-68518-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-276091					
LCS 280-276091/4	Lab Control Sample	T	Water	8260B	
MB 280-276091/6	Method Blank	T	Water	8260B	
280-68518-1TB	54403-TB08-0415	T	Water	8260B	
280-68518-2	54400-MW69-0415	T	Water	8260B	
280-68518-3	54400-BH0206S-0415	T	Water	8260B	
280-68518-4	54400-MW223-0415	T	Water	8260B	
280-68518-5	54400-MW224-0415	T	Water	8260B	
280-68518-6	54400-MW45D-0415	T	Water	8260B	
280-68518-7	54400-MW45S-0415	T	Water	8260B	
280-68518-8	54400-MW42-0415	T	Water	8260B	
280-68518-9	54400-MW67-0415	T	Water	8260B	
Analysis Batch:280-276534					
LCS 280-276534/4	Lab Control Sample	T	Water	8260B	
MB 280-276534/6	Method Blank	T	Water	8260B	
280-68518-10	54400-MW178-0415	T	Water	8260B	
280-68518-10DL	54400-MW178-0415	T	Water	8260B	
280-68518-11	54400-BH0202S-0415	T	Water	8260B	
280-68518-12	54400-MW182-0415	T	Water	8260B	

Report Basis
T = Total

General Chemistry					
Analysis Batch:280-278201					
LCS 280-278201/3	Lab Control Sample	T	Solid	9060A	
MB 280-278201/4	Method Blank	T	Solid	9060A	
280-68518-13	54401-SB46-0415-41	T	Solid	9060A	
280-68518-14	54401-SB46-0415-54	T	Solid	9060A	

Report Basis
T = Total

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Laboratory Chronicle

Lab ID: 280-68518-1 **Client ID: 54403-TB08-0415**

Sample Date/Time: 04/27/2015 00:00 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-A-1		280-276091		05/06/2015 03:36	1	TAL DEN	BBB
A:8260B	280-68518-A-1		280-276091		05/06/2015 03:36	1	TAL DEN	BBB

Lab ID: 280-68518-2 **Client ID: 54400-MW69-0415**

Sample Date/Time: 04/27/2015 17:20 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-A-2		280-276091		05/06/2015 03:58	1	TAL DEN	BBB
A:8260B	280-68518-A-2		280-276091		05/06/2015 03:58	1	TAL DEN	BBB

Lab ID: 280-68518-3 **Client ID: 54400-BH0206S-0415**

Sample Date/Time: 04/28/2015 09:59 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-A-3		280-276091		05/06/2015 04:21	1	TAL DEN	BBB
A:8260B	280-68518-A-3		280-276091		05/06/2015 04:21	1	TAL DEN	BBB

Lab ID: 280-68518-4 **Client ID: 54400-MW223-0415**

Sample Date/Time: 04/28/2015 11:56 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-C-4		280-276091		05/06/2015 04:44	1	TAL DEN	BBB
A:8260B	280-68518-C-4		280-276091		05/06/2015 04:44	1	TAL DEN	BBB

Lab ID: 280-68518-5 **Client ID: 54400-MW224-0415**

Sample Date/Time: 04/28/2015 10:35 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-A-5		280-276091		05/06/2015 05:07	1	TAL DEN	BBB
A:8260B	280-68518-A-5		280-276091		05/06/2015 05:07	1	TAL DEN	BBB

Lab ID: 280-68518-6 **Client ID: 54400-MW45D-0415**

Sample Date/Time: 04/28/2015 12:30 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-C-6		280-276091		05/06/2015 05:29	1	TAL DEN	BBB
A:8260B	280-68518-C-6		280-276091		05/06/2015 05:29	1	TAL DEN	BBB

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Laboratory Chronicle

Lab ID: 280-68518-7 **Client ID: 54400-MW45S-0415**

Sample Date/Time: 04/28/2015 18:35 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-C-7		280-276091		05/06/2015 05:52	1	TAL DEN	BBB
A:8260B	280-68518-C-7		280-276091		05/06/2015 05:52	1	TAL DEN	BBB

Lab ID: 280-68518-8 **Client ID: 54400-MW42-0415**

Sample Date/Time: 04/28/2015 09:20 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-C-8		280-276091		05/06/2015 06:15	1	TAL DEN	BBB
A:8260B	280-68518-C-8		280-276091		05/06/2015 06:15	1	TAL DEN	BBB

Lab ID: 280-68518-9 **Client ID: 54400-MW67-0415**

Sample Date/Time: 04/27/2015 17:55 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-C-9		280-276091		05/06/2015 06:38	1	TAL DEN	BBB
A:8260B	280-68518-C-9		280-276091		05/06/2015 06:38	1	TAL DEN	BBB

Lab ID: 280-68518-10 **Client ID: 54400-MW178-0415**

Sample Date/Time: 04/28/2015 17:23 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-B-10		280-276534		05/07/2015 22:45	1	TAL DEN	BBB
A:8260B	280-68518-B-10		280-276534		05/07/2015 22:45	1	TAL DEN	BBB
P:5030B	280-68518-B-10	DL	280-276534		05/07/2015 23:07	1	TAL DEN	BBB
A:8260B	280-68518-B-10	DL	280-276534		05/07/2015 23:07	1	TAL DEN	BBB

Lab ID: 280-68518-11 **Client ID: 54400-BH0202S-0415**

Sample Date/Time: 04/27/2015 15:03 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-A-11		280-276534		05/07/2015 23:30	1	TAL DEN	BBB
A:8260B	280-68518-A-11		280-276534		05/07/2015 23:30	1	TAL DEN	BBB

Lab ID: 280-68518-12 **Client ID: 54400-MW182-0415**

Sample Date/Time: 04/28/2015 13:50 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68518-A-12		280-276534		05/08/2015 04:02	1	TAL DEN	BBB
A:8260B	280-68518-A-12		280-276534		05/08/2015 04:02	1	TAL DEN	BBB

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Laboratory Chronicle

Lab ID: 280-68518-13 **Client ID: 54401-SB46-0415-41**

Sample Date/Time: 04/24/2015 09:15 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:9060A	280-68518-A-13		280-278201		05/19/2015 14:14	1	TAL DEN	ELJ

Lab ID: 280-68518-14 **Client ID: 54401-SB46-0415-54**

Sample Date/Time: 04/24/2015 13:40 Received Date/Time: 04/29/2015 07:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:9060A	280-68518-A-14		280-278201		05/19/2015 13:45	1	TAL DEN	ELJ

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 280-276091/6		280-276091		05/05/2015 22:18	1	TAL DEN	BBB
A:8260B	MB 280-276091/6		280-276091		05/05/2015 22:18	1	TAL DEN	BBB
P:5030B	MB 280-276534/6		280-276534		05/07/2015 22:22	1	TAL DEN	BBB
A:8260B	MB 280-276534/6		280-276534		05/07/2015 22:22	1	TAL DEN	BBB
A:9060A	MB 280-278201/4		280-278201		05/19/2015 11:41	1	TAL DEN	ELJ

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 280-276091/4		280-276091		05/05/2015 21:09	1	TAL DEN	BBB
A:8260B	LCS 280-276091/4		280-276091		05/05/2015 21:09	1	TAL DEN	BBB
P:5030B	LCS 280-276534/4		280-276534		05/07/2015 21:14	1	TAL DEN	BBB
A:8260B	LCS 280-276534/4		280-276534		05/07/2015 21:14	1	TAL DEN	BBB
A:9060A	LCS 280-278201/3		280-278201		05/19/2015 11:39	1	TAL DEN	ELJ

Lab References:

TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

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-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
							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_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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	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
							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

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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
							Methacrylonitrile	400 ug/mL
							Methyl methacrylate	80 ug/mL
							n-Butanol	1000 ug/mL
					mv-569728_00001	200 uL	Acetonitrile	500 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

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	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
							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
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
STOC CAL 3_00014	01/05/25	LECO, Lot 1040			(Purchased Reagent)		Total Organic Carbon	12 %
STOC ICV Std_00002	03/07/19	Fisher, Lot 084086			(Purchased Reagent)		Total Organic Carbon	12 %
STOC LCS Std_00009	01/31/17	Leco, Lot 1006			(Purchased Reagent)		Total Organic Carbon	122600 mg/Kg

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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)

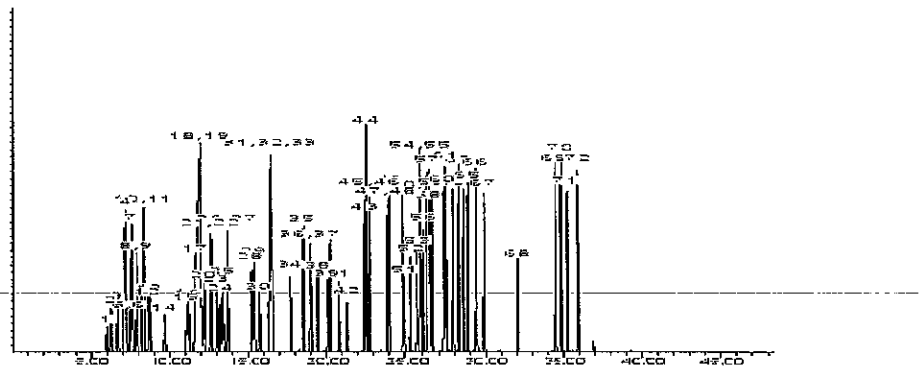
Carrier Gas:
helium-constant pressure 30 psi

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

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

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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.

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

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

2x/mL REC 1/6/15

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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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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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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. : 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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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		Gravimetric
			+/- 266.1189 µg/mL		Unstressed
			+/- 266.4123 µg/mL		Stressed

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

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

4x1mL
REC 2/3/15 Cm

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

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

4x/mL
REC 2/3/15 Gme

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Calcium Carbonate ($CaCO_3$)
Pure Compound Series Calibration Material

LECO Corporation; Saint Joseph, Michigan USA

Part No: 501-034
Lot No: 1040

LECO 501-034 Calcium Carbonate calibration material has a minimum purity of 99%. It is intended for use as a calibration sample for elemental analysis.

The theoretical value for this material is as follows:

Category	Value
% Carbon	12.0

Theoretical values are typically used for calibration purposes.

After bottling this material, a random sample was analyzed by the LECO Technical Services Laboratory for conformance on an appropriate LECO elemental determinator.

The data obtained on lot 1040 verified that the bottled material was calcium carbonate.

Expiration:

This calibration material is considered stable if stored in its original bottle at room temperature. No shelf life or expiration date has been determined.

Date: August 29, 2011

Dennis Lawrenz

Approved by: Dennis Lawrenz
Technical Services Laboratory Director

No warranties of description, merchantability, or fitness for a particular purpose or any other express or implied warranties arise out of LECO's sale of this product. Remedies for any claimed defect in this product will be limited to replacement of the product or refund of the purchase price. In no event shall LECO be liable for incidental or consequential damages.

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Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2000 standard by DNV Certificate number CERT-08052-2006-AQ-HOU-ANAB

This is to certify that units of the lot number mentioned below were tested and found to comply with the specifications of the grade listed. Certain data has been supplied by third parties. Fisher Scientific expressly disclaims all warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. Unless otherwise stated, these products are not intended for dialysis, parenteral or injectable use without further processing. The following are the actual analytical results obtained:

Catalog Number C64	**Mfg. Date** 09/15/2008
Lot Number 084086	**Sample ID** S-080911-00065
Description CALCIUM CARBONATE, A.C.S.	

Result Name	Units	Specifications	Test Value
AMMONIUM	%	<= 0.003	<0.0030
APPEARANCE	REPORT	REPORT	WHITE POWDER
ASSAY	%	>= 99.0	100.3
BARIUM (Ba)	%	<= 0.01	<0.001
CHLORIDE	%	<= 0.001	<0.0010
FLUORIDE	%	<= 0.0015	<0.0010
HEAVY METALS (as Pb)	%	<= 0.001	<0.0010
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE IN DILUTE HCL	%	<= 0.01	<0.010
IRON (Fe)	%	<= 0.003	<0.0030
MAGNESIUM	%	<= 0.02	<0.010
POTASSIUM (K)	%	<= 0.01	<0.010
SODIUM (Na)	%	<= 0.1	<0.01
STRONTIUM (Sr)	%	<= 0.1	<0.01
SULFATE (SO4)	%	<= 0.01	<0.010
WATER-SOL TITR BASE	MEQ/G	<= 0.002	<0.0020

CERTIFIED BY

Edgar E Hess
Lab Manager Fair Lawn

Joel Boland
Lab Manager BPF

Note: The data listed is valid for all package sizes of this lot of product, expressed as an extension of the catalog number listed above. If there are any questions with this certificate, please call Chemical Services at 1.800.227.6701.

Calibration Sample Certificate of Traceability

LECO Calibration Samples are traceable to national and or international standard reference materials whenever possible. When these reference materials do not exist or are inadequate for calibration purposes, other reference materials or gas dosing methods are used. The accuracy of the LECO Calibration Sample is greatly influenced by the accuracy of the primary reference material(s) used.

The average result reported is determined from a minimum of three sets of data acquired over different days by different technicians on a variety of LECO instruments.

Part No: 502-309

Lot No: 1006

Description: Soil

Reference Materials: NIST SRM 915a, Calcium Carbonate @ 12% Carbon
LECO 501-034 Lot: 1034 @ 12% Carbon
NIST SRM 2690, Fly Ash @ 0.15% Sulfur
NIST RM 8433, Corn Bran @ 0.884% Nitrogen

Methods: Carbon & Sulfur: Combustion – IR Detection
Nitrogen: Combustion – TC Detection

	% Carbon	% Sulfur	% Nitrogen
Average	*12.26*	*0.218*	*1.03*
2s	*0.27*	*0.010*	*0.03*
n	*40*	*30*	*30*

Date: February 26, 2009

Approved by: Dennis Lawrenz
Technical Services Laboratory Director

- *Note: Dry for one hour at 105° Celsius before using.*
- *Additional information about this calibration sample is available upon request.*
- *No warranties of description, merchantability, or fitness for a particular purpose or any other express or implied warranties arise out of LECO's sale of this product. Remedies for any claimed defect in this product will be limited to replacement of the product or refund of the purchase price. In no event shall LECO be liable for incidental or consequential damages.*

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Certification Summary

Client: GSI Environmental, Inc
Project/Site: GSI - McConnell AFB (SWMU 207)

TestAmerica Job ID: 280-68518-1

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.: 280-68518-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (75. ID: 0.53(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
54403-TB08-0415	280-68518-1	100	102	100	105
54400-MW69-0415	280-68518-2	109	113	104	110
54400-BH0206S-0415	280-68518-3	102	104	98	107
54400-MW223-0415	280-68518-4	102	105	99	105
54400-MW224-0415	280-68518-5	109	113	106	111
54400-MW45D-0415	280-68518-6	105	108	97	106
54400-MW45S-0415	280-68518-7	106	106	103	112
54400-MW42-0415	280-68518-8	99	99	94	105
54400-MW67-0415	280-68518-9	105	106	103	112
54400-MW178-0415	280-68518-10	103	94	102	106
54400-MW178-0415 DL	280-68518-10 DL	103	95	101	102
54400-BH0202S-0415	280-68518-11	108	100	103	105
54400-MW182-0415	280-68518-12	108	100	102	104
	MB 280-276091/6	100	95	100	103
	MB 280-276534/6	106	101	102	106
	LCS 280-276091/4	104	106	110	106
	LCS 280-276534/4	105	100	107	101

	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.: 280-68518-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z7161.D

Lab ID: LCS 280-276091/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.24	105	78-124	
1,1,1-Trichloroethane	5.00	4.72	94	74-131	
1,1,2,2-Tetrachloroethane	5.00	5.11	102	71-121	
1,1,2-Trichloroethane	5.00	4.91	98	80-119	
1,1-Dichloroethane	5.00	4.85	97	77-125	
1,1-Dichloroethene	5.00	4.62	92	71-131	
1,1-Dichloropropene	5.00	5.01	100	79-125	
1,2,3-Trichlorobenzene	5.00	5.35	107	69-129	
1,2,3-Trichloropropane	5.00	4.92	98	73-122	
1,2,4-Trichlorobenzene	5.00	5.19	104	69-130	
1,2,4-Trimethylbenzene	5.00	4.83	97	76-124	
1,2-Dibromo-3-Chloropropane	5.00	5.45	109	62-128	
1,2-Dibromoethane	5.00	5.09	102	77-121	
1,2-Dichlorobenzene	5.00	5.29	106	80-119	
1,2-Dichloroethane	5.00	4.85	97	73-128	
1,2-Dichloropropane	5.00	4.73	95	78-122	
1,3,5-Trimethylbenzene	5.00	4.88	98	75-124	
1,3-Dichlorobenzene	5.00	5.15	103	80-119	
1,3-Dichloropropane	5.00	4.96	99	80-119	
1,4-Dichlorobenzene	5.00	5.28	106	79-118	
2,2-Dichloropropane	5.00	4.70	94	60-139	
2-Butanone (MEK)	20.0	19.1	96	56-143	
2-Chlorotoluene	5.00	5.21	104	79-122	M
2-Hexanone	20.0	19.4	97	57-139	
4-Chlorotoluene	5.00	5.00	100	78-122	
4-Methyl-2-pentanone (MIBK)	20.0	19.5	97	67-130	
Acetone	20.0	15.7	79	39-160	
Benzene	5.00	4.92	98	79-120	
Bromobenzene	5.00	5.25	105	80-120	
Bromochloromethane	5.00	4.88	98	78-123	
Bromodichloromethane	5.00	5.01	100	79-125	
Bromoform	5.00	5.50	110	66-130	
Bromomethane	5.00	5.40	108	53-141	
Carbon disulfide	5.00	4.71	94	64-133	
Carbon tetrachloride	5.00	5.03	101	72-136	
Chlorobenzene	5.00	5.17	103	82-118	
Chlorodibromomethane	5.00	5.59	112	74-126	
Chloroethane	5.00	5.18	104	60-138	
Chloroform	5.00	4.94	99	79-124	
Chloromethane	5.00	5.61	112	50-139	M
cis-1,2-Dichloroethene	5.00	5.13	103	78-123	
cis-1,3-Dichloropropene	5.00	5.11	102	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.: 280-68518-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z7161.D

Lab ID: LCS 280-276091/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromomethane	5.00	4.66	93	79-123	
Dichlorodifluoromethane	5.00	5.72	114	32-152	
Ethylbenzene	5.00	5.07	101	79-121	
Hexachlorobutadiene	5.00	5.28	106	66-134	
Isopropylbenzene	5.00	4.98	100	72-131	
Methyl tert-butyl ether	5.00	4.90 J	98	71-124	
Methylene Chloride	5.00	5.26	105	74-124	
m-Xylene & p-Xylene	5.00	5.04	101	80-121	
Naphthalene	5.00	4.99	100	61-128	
n-Butylbenzene	5.00	4.85	97	75-128	
N-Propylbenzene	5.00	5.06	101	76-126	
o-Xylene	5.00	5.31	106	78-122	
p-Isopropyltoluene	5.00	4.93	99	77-127	
sec-Butylbenzene	5.00	5.06	101	77-126	
Styrene	5.00	5.00	100	78-123	
tert-Butyl alcohol	50.0	39.6 J	79	68-129	M
tert-Butylbenzene	5.00	4.89	98	78-124	
Tetrachloroethene	5.00	5.28	106	74-129	
Toluene	5.00	4.73	95	80-121	
trans-1,2-Dichloroethene	5.00	5.15	103	75-124	
trans-1,3-Dichloropropene	5.00	5.07	101	73-127	
Trichloroethene	5.00	4.91	98	79-123	
Trichlorofluoromethane	5.00	5.18	104	65-141	
Vinyl chloride	5.00	5.41	108	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.: 280-68518-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z7285.D

Lab ID: LCS 280-276534/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.51	110	78-124	
1,1,1-Trichloroethane	5.00	5.16	103	74-131	
1,1,2,2-Tetrachloroethane	5.00	5.11	102	71-121	
1,1,2-Trichloroethane	5.00	5.26	105	80-119	
1,1-Dichloroethane	5.00	5.03	101	77-125	
1,1-Dichloroethene	5.00	5.84	117	71-131	
1,1-Dichloropropene	5.00	5.28	106	79-125	
1,2,3-Trichlorobenzene	5.00	5.15	103	69-129	
1,2,3-Trichloropropane	5.00	5.02	100	73-122	
1,2,4-Trichlorobenzene	5.00	5.50	110	69-130	
1,2,4-Trimethylbenzene	5.00	4.99	100	76-124	
1,2-Dibromo-3-Chloropropane	5.00	6.03	121	62-128	
1,2-Dibromoethane	5.00	5.34	107	77-121	
1,2-Dichlorobenzene	5.00	5.37	107	80-119	
1,2-Dichloroethane	5.00	4.96	99	73-128	
1,2-Dichloropropane	5.00	4.85	97	78-122	
1,3,5-Trimethylbenzene	5.00	5.10	102	75-124	
1,3-Dichlorobenzene	5.00	5.42	108	80-119	
1,3-Dichloropropane	5.00	4.88	98	80-119	
1,4-Dichlorobenzene	5.00	5.52	110	79-118	
2,2-Dichloropropane	5.00	5.30	106	60-139	
2-Butanone (MEK)	20.0	17.3	86	56-143	
2-Chlorotoluene	5.00	5.27	105	79-122	M
2-Hexanone	20.0	16.6	83	57-139	
4-Chlorotoluene	5.00	5.37	107	78-122	
4-Methyl-2-pentanone (MIBK)	20.0	17.3	86	67-130	
Acetone	20.0	18.3	91	39-160	
Benzene	5.00	5.20	104	79-120	
Bromobenzene	5.00	5.52	110	80-120	
Bromochloromethane	5.00	5.32	106	78-123	
Bromodichloromethane	5.00	5.39	108	79-125	
Bromoform	5.00	5.80	116	66-130	
Bromomethane	5.00	5.05	101	53-141	
Carbon disulfide	5.00	5.35	107	64-133	
Carbon tetrachloride	5.00	5.46	109	72-136	
Chlorobenzene	5.00	5.41	108	82-118	
Chlorodibromomethane	5.00	5.52	110	74-126	
Chloroethane	5.00	4.71	94	60-138	
Chloroform	5.00	5.21	104	79-124	
Chloromethane	5.00	4.86	97	50-139	
cis-1,2-Dichloroethene	5.00	5.56	111	78-123	
cis-1,3-Dichloropropene	5.00	5.07	101	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.: 280-68518-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z7285.D

Lab ID: LCS 280-276534/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromomethane	5.00	5.02	100	79-123	
Dichlorodifluoromethane	5.00	5.41	108	32-152	
Ethylbenzene	5.00	5.42	108	79-121	
Hexachlorobutadiene	5.00	5.74	115	66-134	
Isopropylbenzene	5.00	5.20	104	72-131	
Methyl tert-butyl ether	5.00	5.08	102	71-124	
Methylene Chloride	5.00	5.88	118	74-124	
m-Xylene & p-Xylene	5.00	5.51	110	80-121	
Naphthalene	5.00	4.90	98	61-128	
n-Butylbenzene	5.00	5.06	101	75-128	
N-Propylbenzene	5.00	5.29	106	76-126	
o-Xylene	5.00	5.56	111	78-122	
p-Isopropyltoluene	5.00	5.27	105	77-127	
sec-Butylbenzene	5.00	5.40	108	77-126	
Styrene	5.00	5.31	106	78-123	
tert-Butyl alcohol	50.0	56.7	113	68-129	M
tert-Butylbenzene	5.00	5.08	102	78-124	
Tetrachloroethene	5.00	5.91	118	74-129	
Toluene	5.00	5.11	102	80-121	
trans-1,2-Dichloroethene	5.00	6.04	121	75-124	
trans-1,3-Dichloropropene	5.00	5.27	105	73-127	
Trichloroethene	5.00	5.39	108	79-123	
Trichlorofluoromethane	5.00	4.83	97	65-141	
Vinyl chloride	5.00	4.84	97	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.: 280-68518-1

SDG No.:

Lab File ID: Z7164.D Lab Sample ID: MB 280-276091/6

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

Instrument ID: VMS_Z Date Analyzed: 05/05/2015 22:18

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 280-276091/4	Z7161.D	05/05/2015 21:09
54403-TB08-0415	280-68518-1	Z7178.D	05/06/2015 03:36
54400-MW69-0415	280-68518-2	Z7179.D	05/06/2015 03:58
54400-BH0206S-0415	280-68518-3	Z7180.D	05/06/2015 04:21
54400-MW223-0415	280-68518-4	Z7181.D	05/06/2015 04:44
54400-MW224-0415	280-68518-5	Z7182.D	05/06/2015 05:07
54400-MW45D-0415	280-68518-6	Z7183.D	05/06/2015 05:29
54400-MW45S-0415	280-68518-7	Z7184.D	05/06/2015 05:52
54400-MW42-0415	280-68518-8	Z7185.D	05/06/2015 06:15
54400-MW67-0415	280-68518-9	Z7186.D	05/06/2015 06:38

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab File ID: Z7287.D Lab Sample ID: MB 280-276534/6

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

Instrument ID: VMS_Z Date Analyzed: 05/07/2015 22:22

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 280-276534/4	Z7285.D	05/07/2015 21:14
54400-MW178-0415	280-68518-10	Z7288.D	05/07/2015 22:45
54400-MW178-0415 DL	280-68518-10 DL	Z7289.D	05/07/2015 23:07
54400-BH0202S-0415	280-68518-11	Z7290.D	05/07/2015 23:30
54400-MW182-0415	280-68518-12	Z7302.D	05/08/2015 04:02

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

Lab Name: TestAmerica Denver Job No.: 280-68518-1

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 280-274661/10	Z6764.D	04/27/2015	07:59
	IC 280-274661/11	Z6765.D	04/27/2015	08:22
	IC 280-274661/12	Z6766.D	04/27/2015	08:45
	IC 280-274661/13	Z6767.D	04/27/2015	09:07
	IC 280-274661/14	Z6768.D	04/27/2015	09:30
	IC 280-274661/15	Z6769.D	04/27/2015	09:53
	IC 280-274661/16	Z6770.D	04/27/2015	10:16
	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.: 280-68518-1

SDG No.:

Lab File ID: Z6919.D BFB Injection Date: 04/30/2015

Instrument ID: VMS_Z BFB Injection Time: 06:12

Analysis Batch No.: 275227

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.0	
75	30.0 - 60.0 % of mass 95	48.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	72.8	
175	5.0 - 9.0 % of mass 174	5.5	(7.5)1
176	95.0 - 101.0 % of mass 174	71.6	(98.4)1
177	5.0 - 9.0 % of mass 176	4.8	(6.8)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 280-275227/4	Z6922.D	04/30/2015	07:04

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

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab File ID: Z7033.D BFB Injection Date: 05/02/2015

Instrument ID: VMS_Z BFB Injection Time: 05:53

Analysis Batch No.: 275642

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.0	
75	30.0 - 60.0 % of mass 95	49.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	70.8	
175	5.0 - 9.0 % of mass 174	5.4	(7.6)1
176	95.0 - 101.0 % of mass 174	69.5	(98.2)1
177	5.0 - 9.0 % of mass 176	4.5	(6.5)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 280-275642/10	Z7039.D	05/02/2015	07:56
	IC 280-275642/11	Z7040.D	05/02/2015	08:19
	IC 280-275642/12	Z7041.D	05/02/2015	08:41
	IC 280-275642/13	Z7042.D	05/02/2015	09:04
	IC 280-275642/14	Z7043.D	05/02/2015	09:27
	ICV 280-275642/15	Z7044.D	05/02/2015	09:50

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

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab File ID: Z7158.D BFB Injection Date: 05/05/2015

Instrument ID: VMS_Z BFB Injection Time: 20:05

Analysis Batch No.: 276091

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.5	
75	30.0 - 60.0 % of mass 95	45.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	76.1	
175	5.0 - 9.0 % of mass 174	5.9	(7.7)1
176	95.0 - 101.0 % of mass 174	74.1	(97.4)1
177	5.0 - 9.0 % of mass 176	4.9	(6.6)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-276091/2	Z7159.D	05/05/2015	20:22
	CCV 280-276091/3	Z7160.D	05/05/2015	20:45
	LCS 280-276091/4	Z7161.D	05/05/2015	21:09
	MB 280-276091/6	Z7164.D	05/05/2015	22:18
54403-TB08-0415	280-68518-1	Z7178.D	05/06/2015	03:36
54400-MW69-0415	280-68518-2	Z7179.D	05/06/2015	03:58
54400-BH0206S-0415	280-68518-3	Z7180.D	05/06/2015	04:21
54400-MW223-0415	280-68518-4	Z7181.D	05/06/2015	04:44
54400-MW224-0415	280-68518-5	Z7182.D	05/06/2015	05:07
54400-MW45D-0415	280-68518-6	Z7183.D	05/06/2015	05:29
54400-MW45S-0415	280-68518-7	Z7184.D	05/06/2015	05:52
54400-MW42-0415	280-68518-8	Z7185.D	05/06/2015	06:15
54400-MW67-0415	280-68518-9	Z7186.D	05/06/2015	06:38
	CCVC 280-276091/33	Z7187.D	05/06/2015	07:01

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

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab File ID: Z7282.D BFB Injection Date: 05/07/2015

Instrument ID: VMS_Z BFB Injection Time: 20:08

Analysis Batch No.: 276534

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.9	
75	30.0 - 60.0 % of mass 95	45.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	76.8	
175	5.0 - 9.0 % of mass 174	5.9	(7.7)1
176	95.0 - 101.0 % of mass 174	75.4	(98.1)1
177	5.0 - 9.0 % of mass 176	5.2	(6.9)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 280-276534/2	Z7283.D	05/07/2015	20:29
	CCV 280-276534/3	Z7284.D	05/07/2015	20:52
	LCS 280-276534/4	Z7285.D	05/07/2015	21:14
	MB 280-276534/6	Z7287.D	05/07/2015	22:22
54400-MW178-0415	280-68518-10	Z7288.D	05/07/2015	22:45
54400-MW178-0415 DL	280-68518-10 DL	Z7289.D	05/07/2015	23:07
54400-BH0202S-0415	280-68518-11	Z7290.D	05/07/2015	23:30
54400-MW182-0415	280-68518-12	Z7302.D	05/08/2015	04:02
	CCVC 280-276534/25	Z7303.D	05/08/2015	04:25

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

Lab Name: TestAmerica Denver Job No.: 280-68518-1

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 280-275227/4		132244	3.49	800813	6.38	172427	11.01
ICV 280-275642/15		133867	3.49	792688	6.38	178206	11.01
CCV 280-276091/3		122521	3.49	732389	6.38	167426	11.02
LCS 280-276091/4		128975	3.47	768609	6.37	166836	11.04
MB 280-276091/6		115675	3.48	729280	6.37	167077	11.02
280-68518-1	54403-TB08-0415	128357	3.47	776427	6.36	176261	11.01
280-68518-2	54400-MW69-0415	144092	3.48	758129	6.37	180435	11.02
280-68518-3	54400-BH0206S-0415	132312	3.47	763778	6.37	180632	11.00
280-68518-4	54400-MW223-0415	138358	3.48	777636	6.37	182209	11.02
280-68518-5	54400-MW224-0415	137964	3.47	760985	6.38	176137	11.01
280-68518-6	54400-MW45D-0415	140659	3.48	759684	6.37	181743	11.02
280-68518-7	54400-MW45S-0415	130733	3.48	744893	6.37	175332	11.02
280-68518-8	54400-MW42-0415	137175	3.48	753694	6.37	180715	11.02
280-68518-9	54400-MW67-0415	138810	3.49	754701	6.38	176359	11.02
CCVC 280-276091/33		145158	3.48	764985	6.39	172674	11.02
CCV 280-276534/2		150683	3.49	816105	6.39	183849	11.04
CCV 280-276534/3		135072	3.48	783024	6.37	181435	11.02
LCS 280-276534/4		133527	3.49	737902	6.39	166253	11.02
MB 280-276534/6		115778	3.48	674660	6.39	157003	11.02
280-68518-10	54400-MW178-0415	91520	3.48	667626	6.39	152952	11.02
280-68518-10 DL	54400-MW178-0415 DL	101714	3.50	653258	6.39	150915	11.02
280-68518-11	54400-BH0202S-0415	119046	3.48	670896	6.39	157400	11.02
280-68518-12	54400-MW182-0415	116943	3.49	660583	6.38	155383	11.02
CCVC 280-276534/25		121761	3.49	664457	6.38	151897	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.: 280-68518-1

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 280-275227/4		319469	15.12				
ICV 280-275642/15		321158	15.10				
CCV 280-276091/3		300314	15.13				
LCS 280-276091/4		315280	15.12				
MB 280-276091/6		301148	15.12				
280-68518-1	54403-TB08-0415	314416	15.11				
280-68518-2	54400-MW69-0415	316780	15.13				
280-68518-3	54400-BH0206S-0415	311025	15.11				
280-68518-4	54400-MW223-0415	320576	15.11				
280-68518-5	54400-MW224-0415	317455	15.11				
280-68518-6	54400-MW45D-0415	318711	15.11				
280-68518-7	54400-MW45S-0415	309151	15.12				
280-68518-8	54400-MW42-0415	313823	15.12				
280-68518-9	54400-MW67-0415	311774	15.11				
CCVC 280-276091/33		332657	15.12				
CCV 280-276534/2		348127	15.15				
CCV 280-276534/3		330504	15.14				
LCS 280-276534/4		320963	15.13				
MB 280-276534/6		286264	15.13				
280-68518-10	54400-MW178-0415	276500	15.12				
280-68518-10 DL	54400-MW178-0415 DL	278662	15.13				
280-68518-11	54400-BH0202S-0415	293049	15.13				
280-68518-12	54400-MW182-0415	297554	15.13				
CCVC 280-276534/25		314084	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.: 280-68518-1
SDG No.:
Client Sample ID: 54403-TB08-0415 | Lab Sample ID: 280-68518-1
Matrix: Water | Lab File ID: Z7178.D
Analysis Method: 8260B | Date Collected: 04/27/2015 00:00
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 03:36
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.: 276091 | 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.: 280-68518-1
SDG No.:
Client Sample ID: 54403-TB08-0415 | Lab Sample ID: 280-68518-1
Matrix: Water | Lab File ID: Z7178.D
Analysis Method: 8260B | Date Collected: 04/27/2015 00:00
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 03:36
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.: 276091 | 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.: 280-68518-1

SDG No.:

Client Sample ID: 54403-TB08-0415 | Lab Sample ID: 280-68518-1

Matrix: Water | Lab File ID: Z7178.D

Analysis Method: 8260B | Date Collected: 04/27/2015 00:00

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 03:36

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.: 276091 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		81-118
460-00-4	4-Bromofluorobenzene (Surr)	105		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7178.D
Lims ID: 280-68518-A-1 Lab Sample ID: 280-68518-1
Client ID: 54403-TB08-0415
Sample Type: Client
Inject. Date: 06-May-2015 03:36:30 ALS Bottle#: 20 Worklist Smp#: 23
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-A-1 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:25:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.471	3.483	-0.012	90	128357	250.0	
* 2 Fluorobenzene	96	6.360	6.389	-0.029	98	776427	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.006	11.017	-0.011	88	176261	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.112	15.124	-0.012	96	314416	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.455	5.466	-0.011	93	362367	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.890	5.901	-0.011	95	154295	10.7	
$ 10 Toluene-d8 (Surr)	98	8.691	8.703	-0.012	93	694242	10.5	
$ 11 4-Bromofluorobenzene (Surr	95	13.041	13.053	-0.012	86	378325	11.0	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96		3.048				ND	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63		4.196				ND	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96		4.875				ND	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83		5.257				ND	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117		5.780				ND	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95		6.911				ND	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129		10.060				ND	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

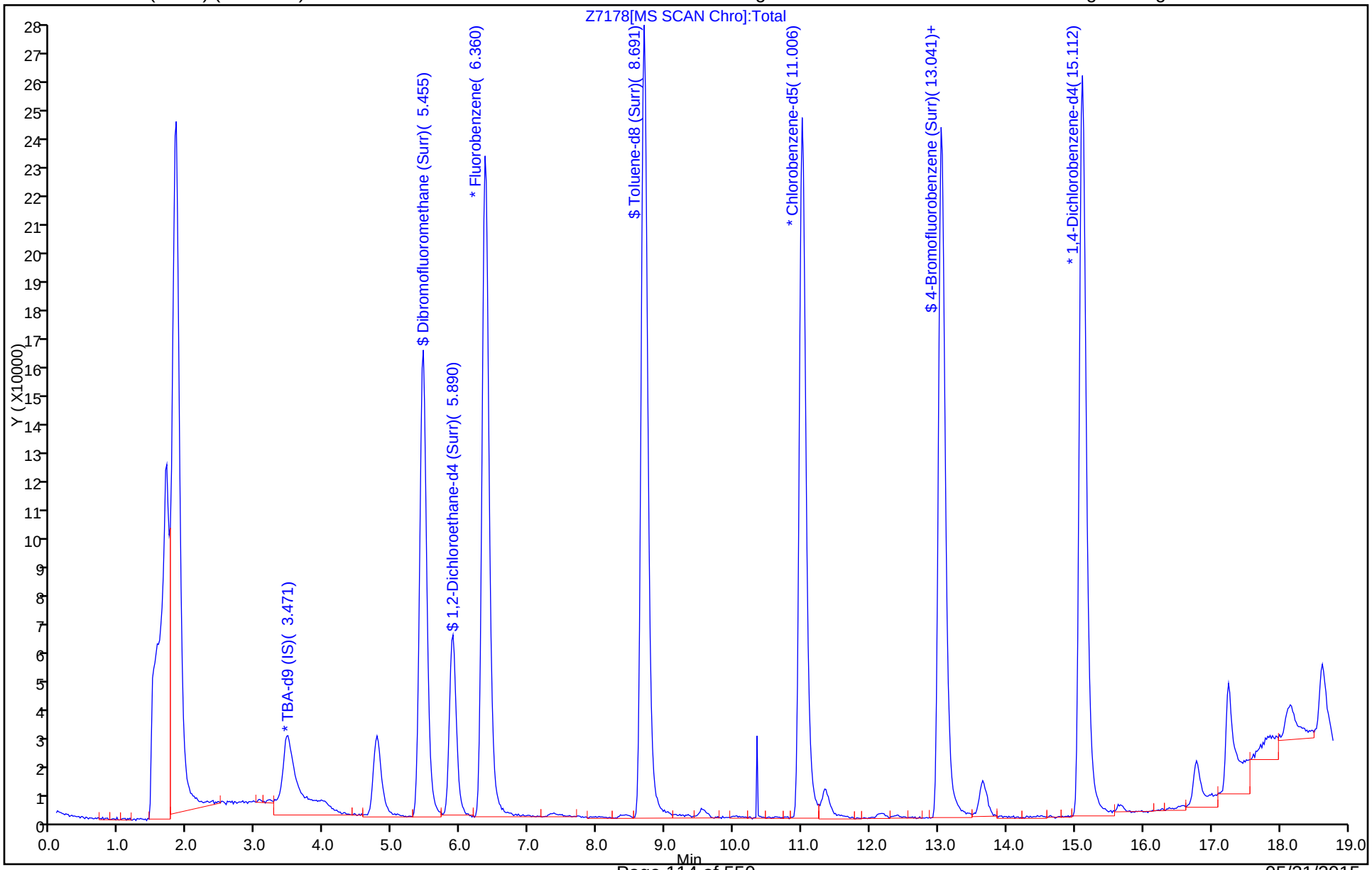
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:25:35 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7178.D				
Injection Date:	06-May-2015 03:36:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-A-1	Lab Sample ID:	280-68518-1	Worklist Smp#:	23
Client ID:	54403-TB08-0415				
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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW69-0415 | Lab Sample ID: 280-68518-2
Matrix: Water | Lab File ID: Z7179.D
Analysis Method: 8260B | Date Collected: 04/27/2015 17:20
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 03:58
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.: 276091 | 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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW69-0415 | Lab Sample ID: 280-68518-2
Matrix: Water | Lab File ID: Z7179.D
Analysis Method: 8260B | Date Collected: 04/27/2015 17:20
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 03:58
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.: 276091 | 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	0.26	J	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	0.85	J	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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-MW69-0415 | Lab Sample ID: 280-68518-2

Matrix: Water | Lab File ID: Z7179.D

Analysis Method: 8260B | Date Collected: 04/27/2015 17:20

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 03:58

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.: 276091 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		81-118
460-00-4	4-Bromofluorobenzene (Surr)	110		85-114
1868-53-7	Dibromofluoromethane (Surr)	109		80-119
2037-26-5	Toluene-d8 (Surr)	104		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7179.D
Lims ID: 280-68518-A-2 Lab Sample ID: 280-68518-2
Client ID: 54400-MW69-0415
Sample Type: Client
Inject. Date: 06-May-2015 03:58:30 ALS Bottle#: 22 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-A-2 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:25:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.484	3.483	0.001	89	144092	250.0	
* 2 Fluorobenzene	96	6.372	6.389	-0.017	99	758129	12.5	
* 3 1,4-Dioxane-d8	96	7.364	7.292	0.072	29	5369	0	
* 4 Chlorobenzene-d5	119	11.018	11.017	0.001	89	180435	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.125	15.124	0.001	96	316780	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.450	5.466	-0.016	93	386793	11.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.885	5.901	-0.016	95	167346	11.9	
$ 10 Toluene-d8 (Surr)	98	8.704	8.703	0.001	94	738755	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.054	13.053	0.001	87	398696	11.6	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96		3.048				ND	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63		4.196				ND	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96	4.841	4.875	-0.034	75	5408	0.2648	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83		5.257				ND	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117		5.780				ND	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95	6.894	6.911	-0.017	96	22661	0.8541	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129		10.060				ND	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

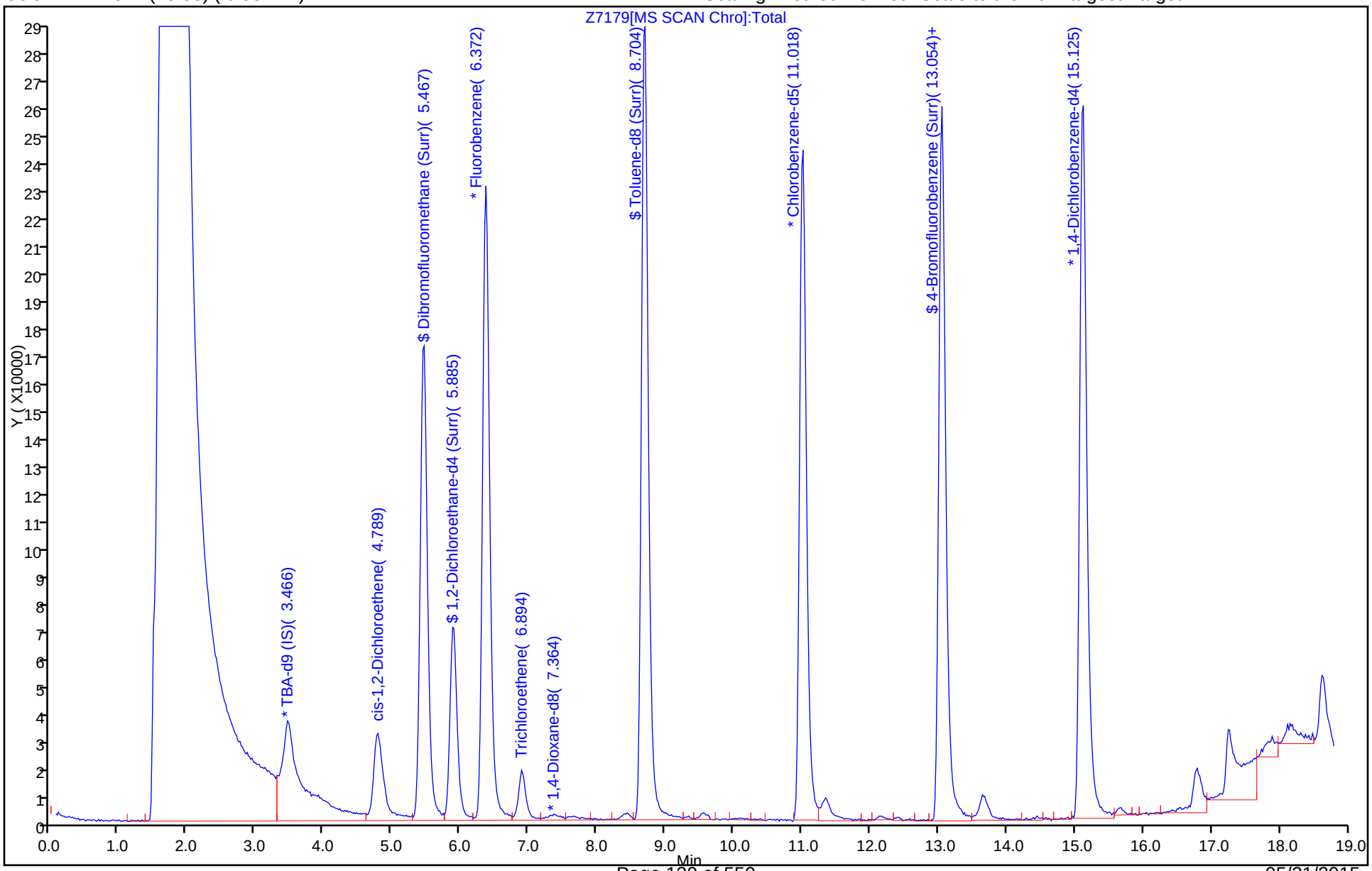
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:25:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7179.D				
Injection Date:	06-May-2015 03:58:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-A-2	Lab Sample ID:	280-68518-2	Worklist Smp#:	24
Client ID:	54400-MW69-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
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

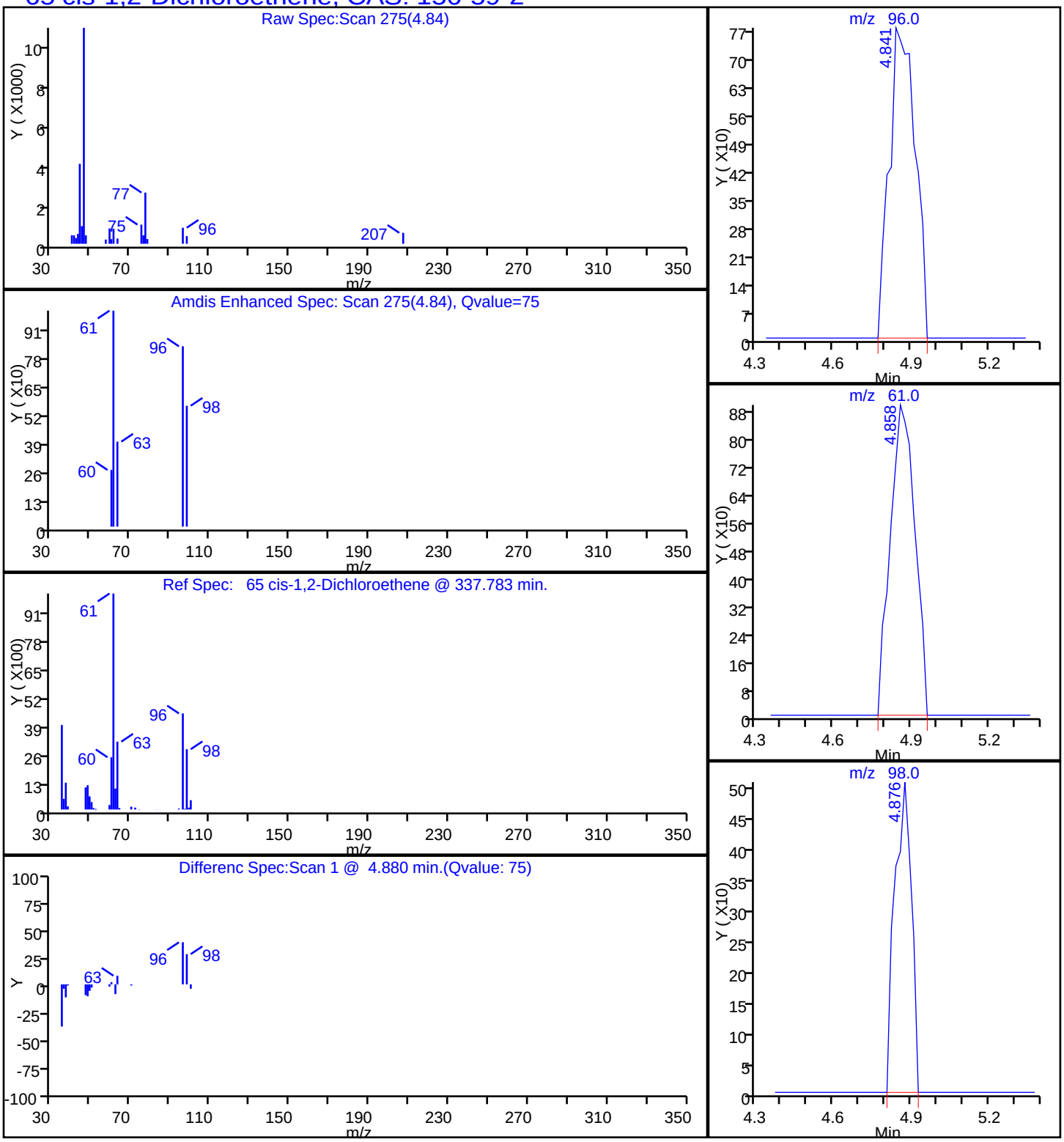


Report Date: 06-May-2015 15:25:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7179.D				
Injection Date:	06-May-2015 03:58:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-2	Lab Sample ID:	280-68518-2		
Client ID:	54400-MW69-0415				
Operator ID:	bergerb	ALS Bottle#:	22	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		

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

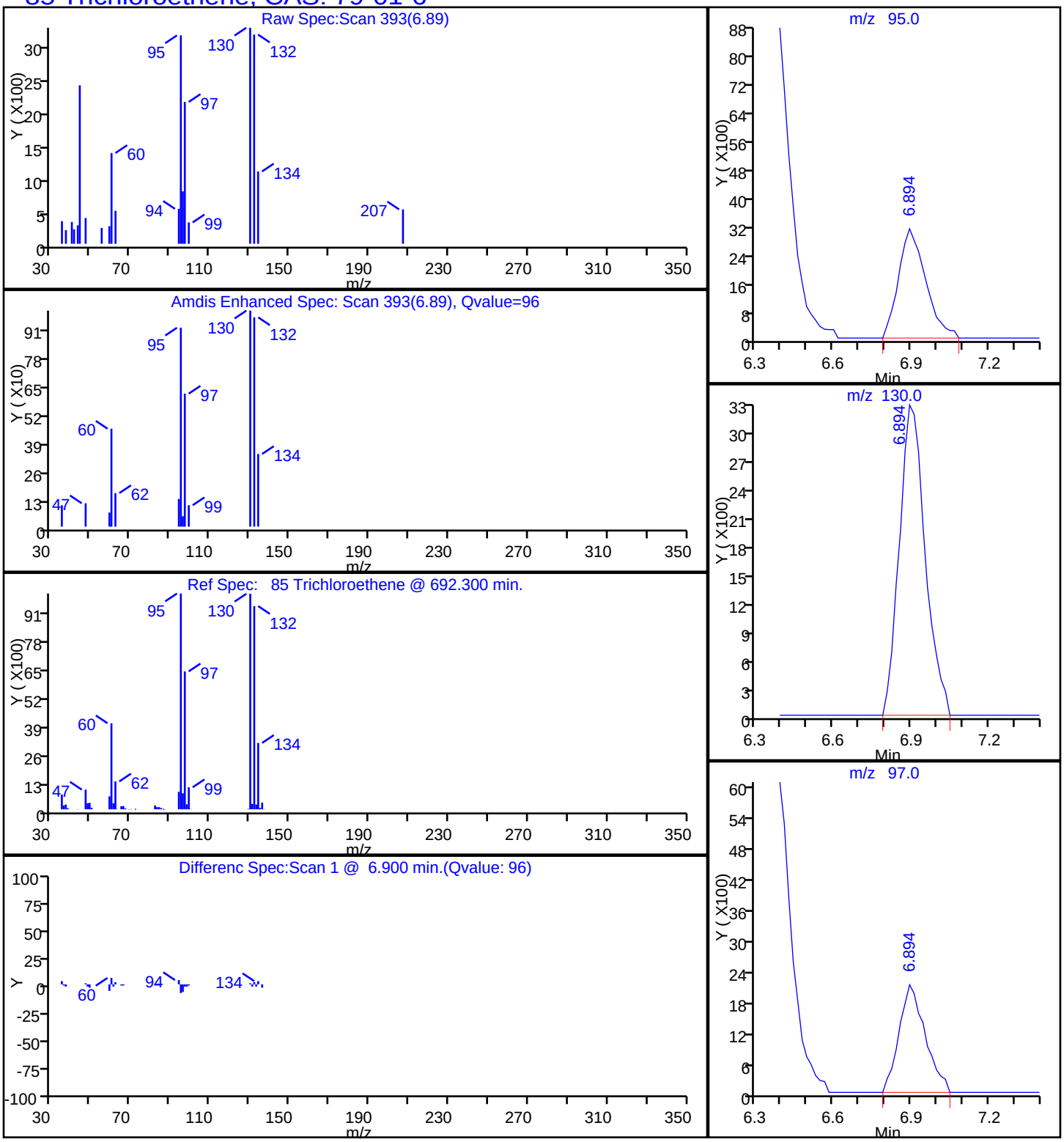


Report Date: 06-May-2015 15:25:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7179.D				
Injection Date:	06-May-2015 03:58:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-2	Lab Sample ID:	280-68518-2		
Client ID:	54400-MW69-0415				
Operator ID:	bergerb	ALS Bottle#:	22	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		

85 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1

SDG No.:

Client Sample ID: 54400-BH0206S-0415 | Lab Sample ID: 280-68518-3

Matrix: Water | Lab File ID: Z7180.D

Analysis Method: 8260B | Date Collected: 04/28/2015 09:59

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 04:21

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.: 276091 | 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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-BH0206S-0415 | Lab Sample ID: 280-68518-3
Matrix: Water | Lab File ID: Z7180.D
Analysis Method: 8260B | Date Collected: 04/28/2015 09:59
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 04:21
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.: 276091 | 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	2.0		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-BH0206S-0415
Lab Sample ID: 280-68518-3
Matrix: Water
Lab File ID: Z7180.D
Analysis Method: 8260B
Date Collected: 04/28/2015 09:59
Sample wt/vol: 20(mL)
Date Analyzed: 05/06/2015 04:21
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.: 276091
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		81-118
460-00-4	4-Bromofluorobenzene (Surr)	107		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	98		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7180.D
Lims ID: 280-68518-A-3 Lab Sample ID: 280-68518-3
Client ID: 54400-BH0206S-0415
Sample Type: Client
Inject. Date: 06-May-2015 04:21:30 ALS Bottle#: 23 Worklist Smp#: 25
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-A-3 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:24:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.468	3.483	-0.015	90	132312	250.0	
* 2 Fluorobenzene	96	6.374	6.389	-0.015	98	763778	12.5	
* 3 1,4-Dioxane-d8	96	7.331	7.292	0.039	1	2986	0	
* 4 Chlorobenzene-d5	119	11.003	11.017	-0.014	89	180632	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.109	15.124	-0.015	96	311025	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.469	5.466	0.003	93	363075	10.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.887	5.901	-0.014	95	154610	10.9	
$ 10 Toluene-d8 (Surr)	98	8.688	8.703	-0.015	94	695896	10.3	
$ 11 4-Bromofluorobenzene (Surr	95	13.039	13.053	-0.014	86	380076	11.2	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96		3.048				ND	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63		4.196				ND	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96		4.875				ND	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83		5.257				ND	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117		5.780				ND	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95	6.896	6.911	-0.015	97	54143	2.03	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129		10.060				ND	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

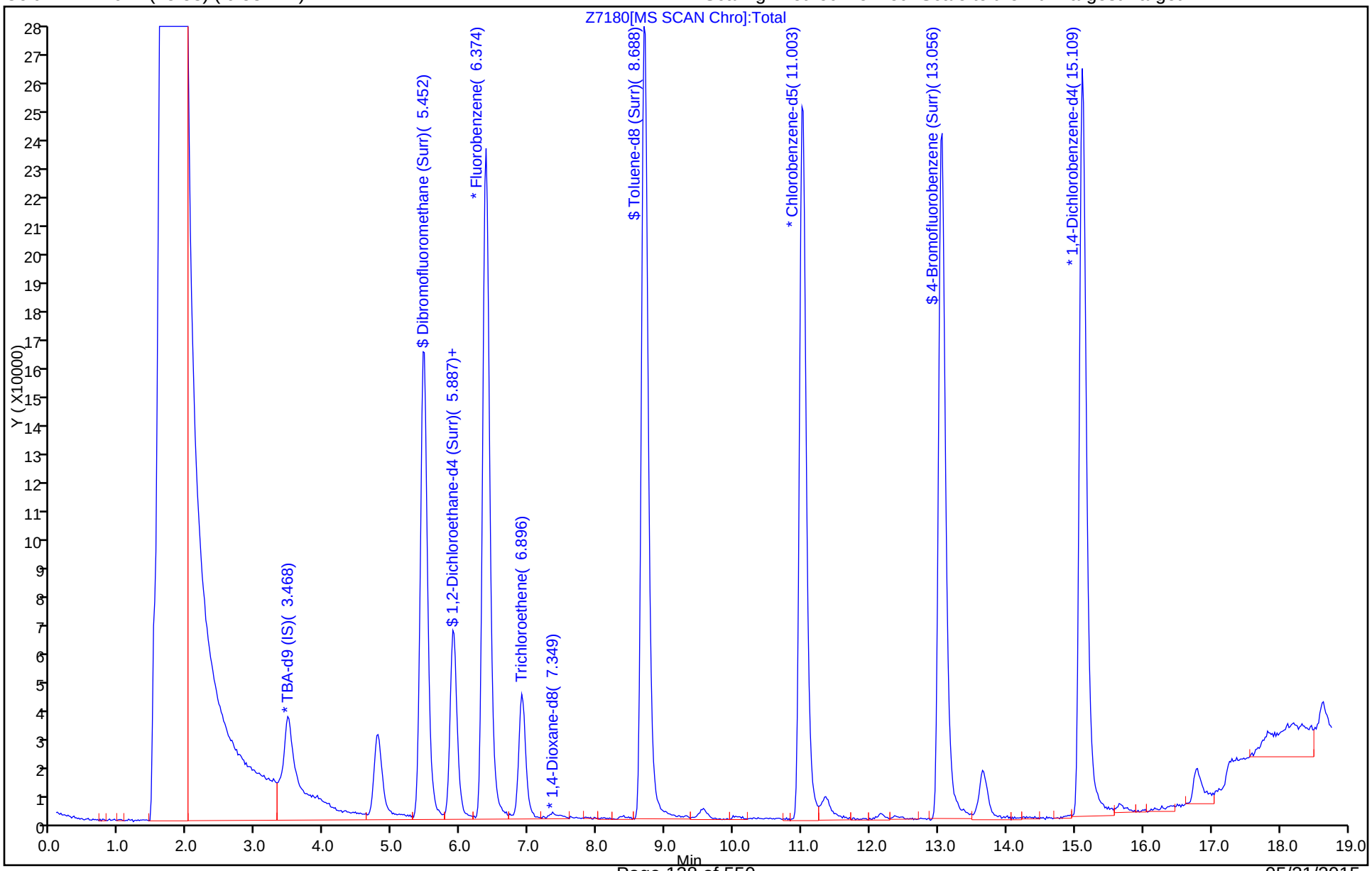
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:24:40 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7180.D				
Injection Date:	06-May-2015 04:21:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-A-3	Lab Sample ID:	280-68518-3	Worklist Smp#:	25
Client ID:	54400-BH0206S-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
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

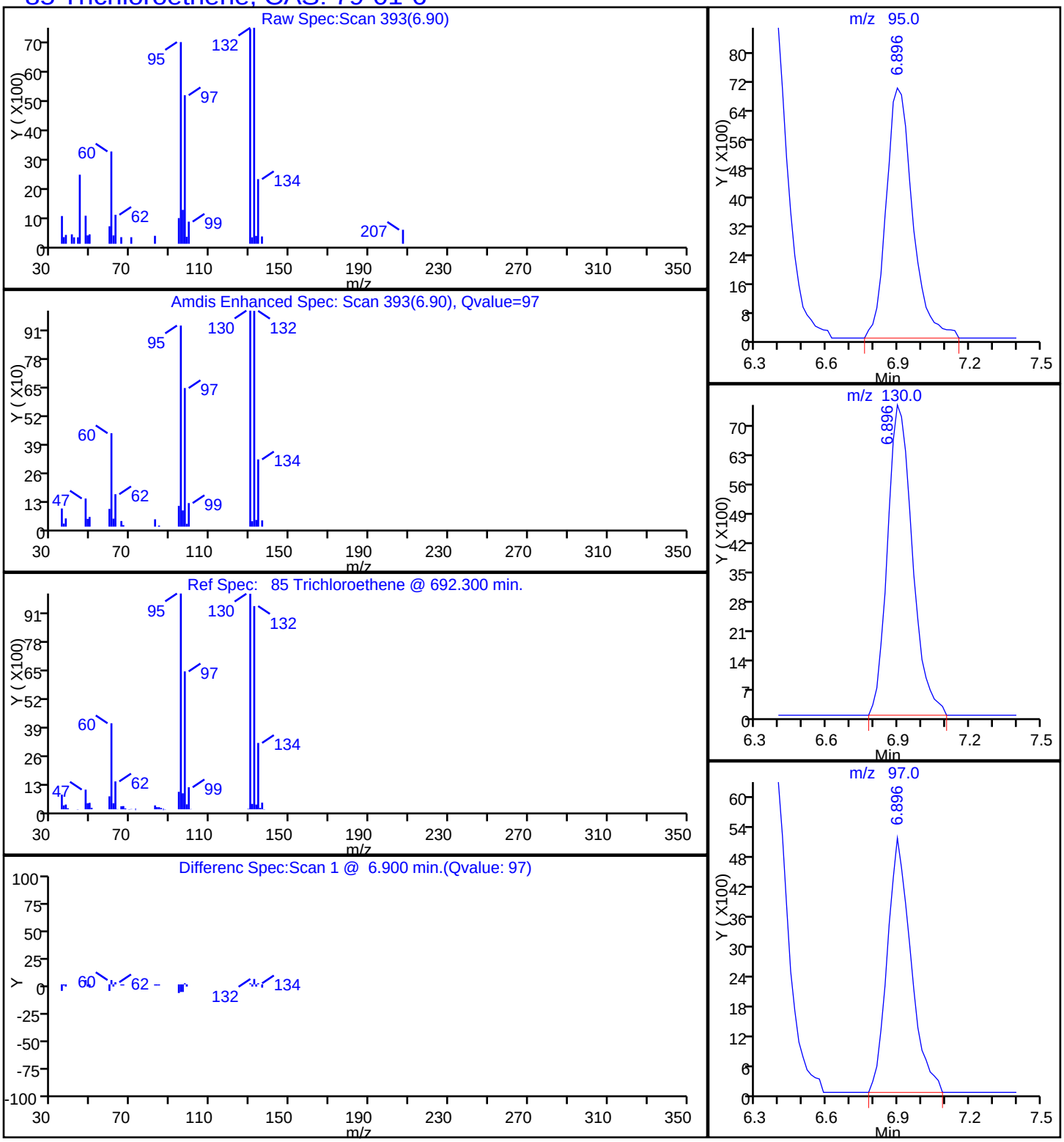


Report Date: 06-May-2015 15:24:40 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7180.D				
Injection Date:	06-May-2015 04:21:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-3	Lab Sample ID:	280-68518-3		
Client ID:	54400-BH0206S-0415				
Operator ID:	bergerb	ALS Bottle#:	23	Worklist Smp#:	25
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		

85 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW223-0415 | Lab Sample ID: 280-68518-4
Matrix: Water | Lab File ID: Z7181.D
Analysis Method: 8260B | Date Collected: 04/28/2015 11:56
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 04:44
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.: 276091 | 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	9.2		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	3.8		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW223-0415 | Lab Sample ID: 280-68518-4
Matrix: Water | Lab File ID: Z7181.D
Analysis Method: 8260B | Date Collected: 04/28/2015 11:56
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 04:44
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.: 276091 | 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	0.66	J	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	0.41	J	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	8.7		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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-MW223-0415 | Lab Sample ID: 280-68518-4

Matrix: Water | Lab File ID: Z7181.D

Analysis Method: 8260B | Date Collected: 04/28/2015 11:56

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 04:44

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.: 276091 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		81-118
460-00-4	4-Bromofluorobenzene (Surr)	105		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7181.D
Lims ID: 280-68518-C-4 Lab Sample ID: 280-68518-4
Client ID: 54400-MW223-0415
Sample Type: Client
Inject. Date: 06-May-2015 04:44:30 ALS Bottle#: 24 Worklist Smp#: 26
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-C-4 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:24:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.483	3.483	0.000	90	138358	250.0	
* 2 Fluorobenzene	96	6.372	6.389	-0.017	98	777636	12.5	
* 3 1,4-Dioxane-d8	96	7.381	7.292	0.089	27	6153	0	
* 4 Chlorobenzene-d5	119	11.018	11.017	0.001	89	182209	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.107	15.124	-0.017	96	320576	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.466	0.001	93	370943	10.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.884	5.901	-0.017	95	158845	11.0	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	94	708557	10.4	
$ 11 4-Bromofluorobenzene (Surr	95	13.053	13.053	0.000	86	386370	11.1	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96	3.031	3.048	-0.017	96	187843	9.22	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63		4.196				ND	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96	4.875	4.875	0.000	77	8548	0.4080	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83	5.258	5.257	0.001	94	26436	0.6594	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117	5.780	5.780	0.000	98	134521	3.81	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95	6.894	6.911	-0.017	97	237577	8.73	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129		10.060				ND	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

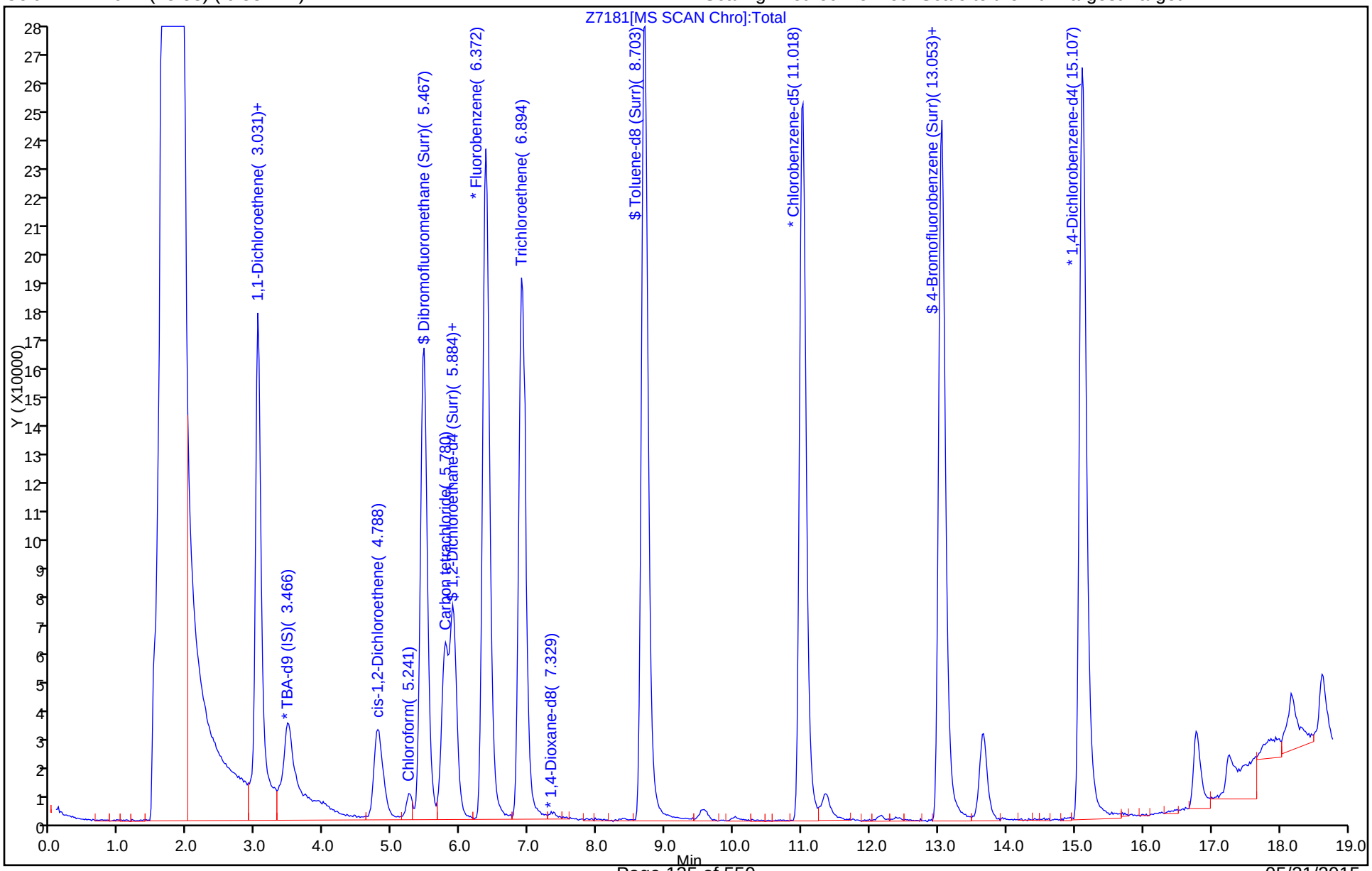
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:24:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7181.D				
Injection Date:	06-May-2015 04:44:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-C-4	Lab Sample ID:	280-68518-4	Worklist Smp#:	26
Client ID:	54400-MW223-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
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

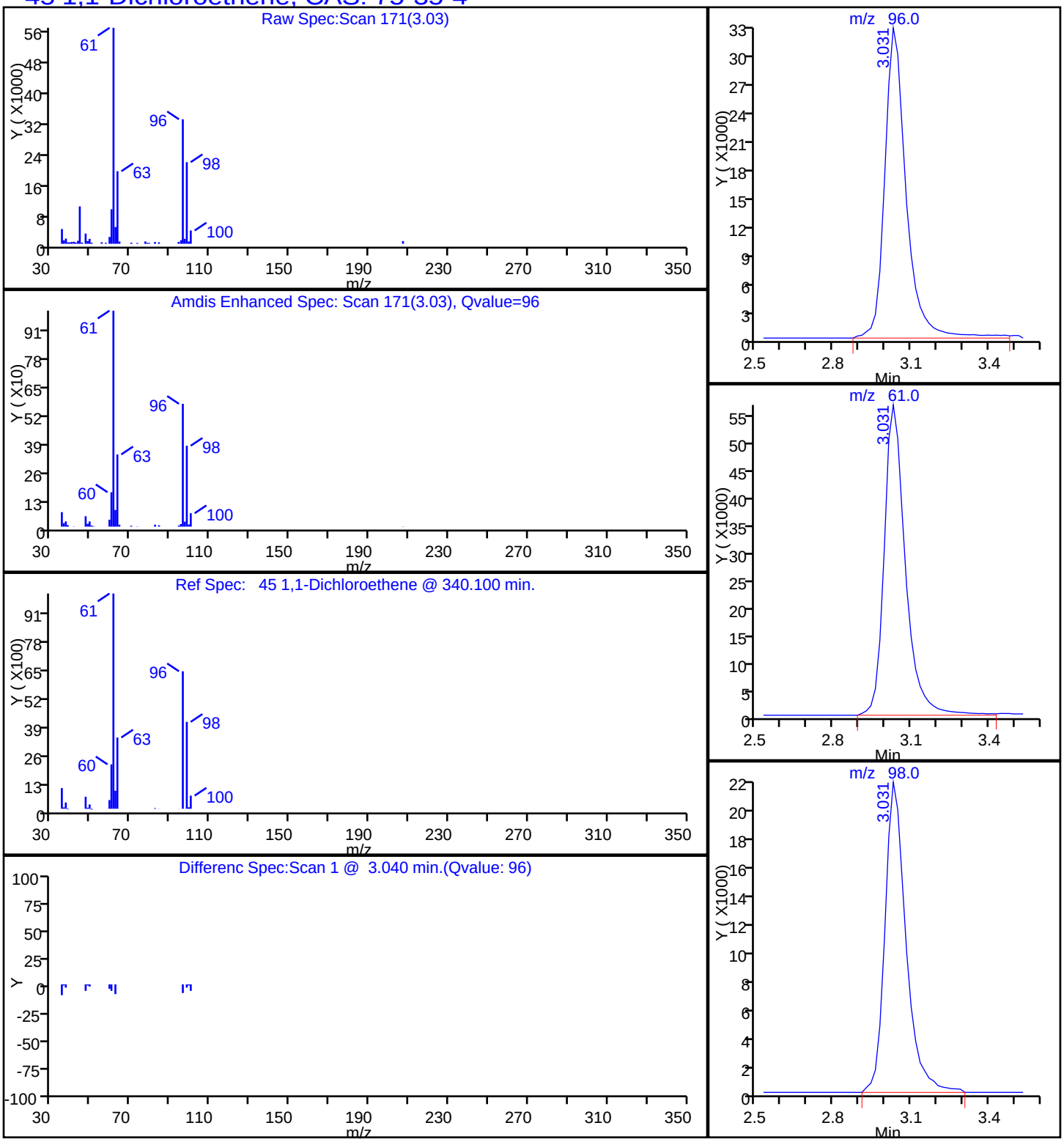


Report Date: 06-May-2015 15:24:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7181.D				
Injection Date:	06-May-2015 04:44:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-4	Lab Sample ID:	280-68518-4		
Client ID:	54400-MW223-0415				
Operator ID:	bergerb	ALS Bottle#:	24	Worklist Smp#:	26
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		

45 1,1-Dichloroethene, CAS: 75-35-4

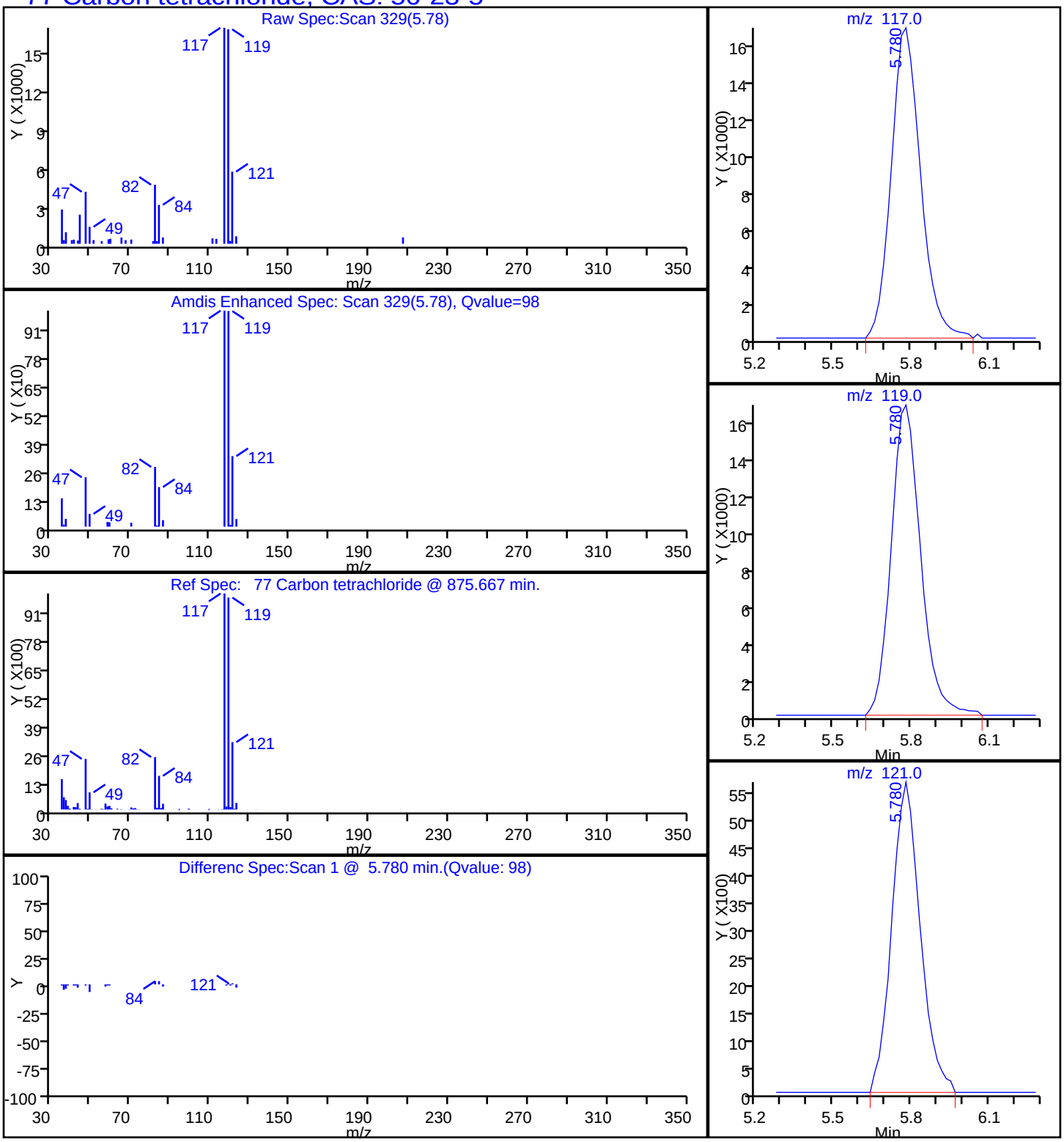


Report Date: 06-May-2015 15:24:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7181.D				
Injection Date:	06-May-2015 04:44:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-4	Lab Sample ID:	280-68518-4		
Client ID:	54400-MW223-0415				
Operator ID:	bergerb	ALS Bottle#:	24	Worklist Smp#:	26
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		

77 Carbon tetrachloride, CAS: 56-23-5

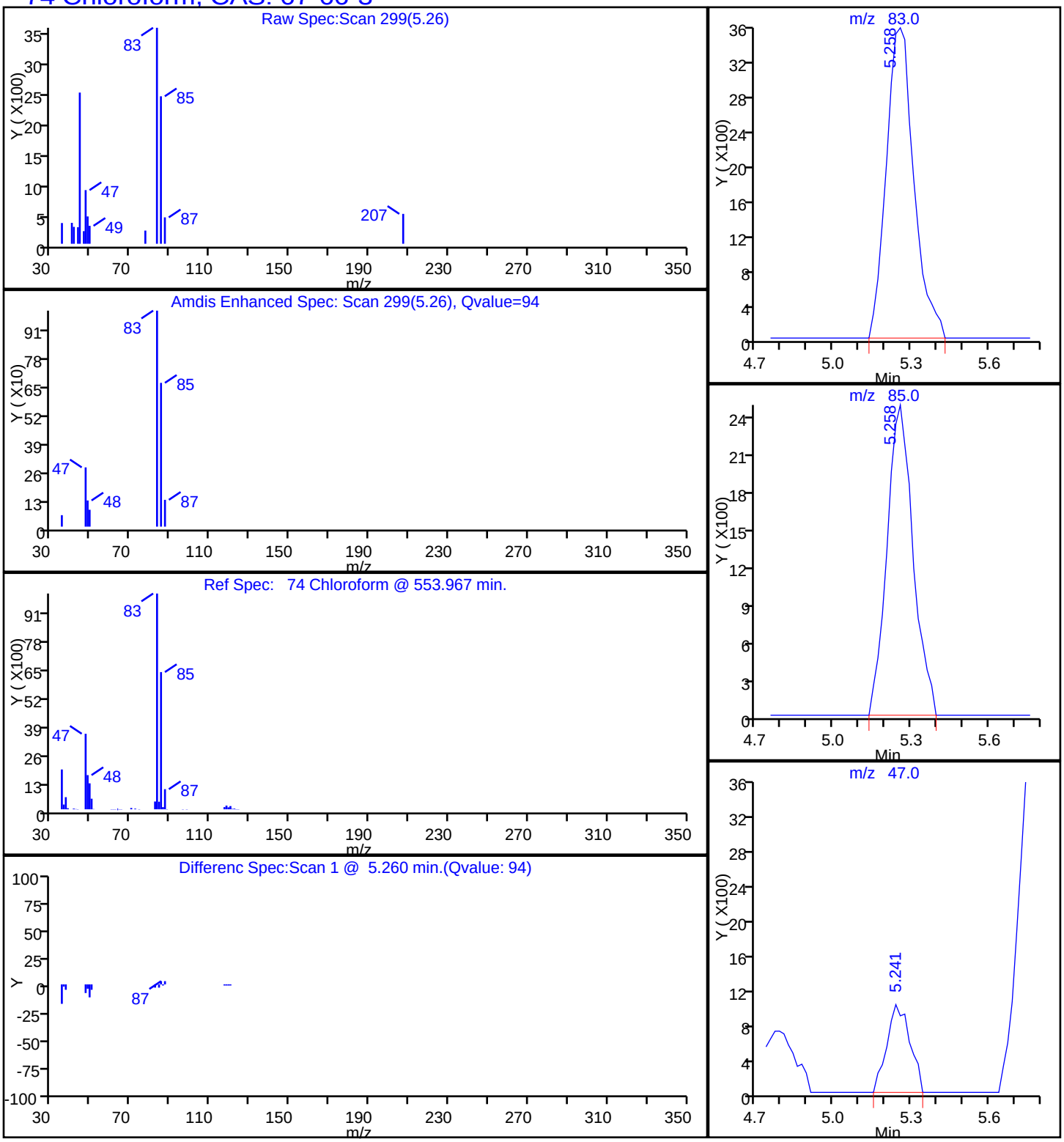


Report Date: 06-May-2015 15:24:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7181.D				
Injection Date:	06-May-2015 04:44:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-4	Lab Sample ID:	280-68518-4		
Client ID:	54400-MW223-0415				
Operator ID:	bergerb	ALS Bottle#:	24	Worklist Smp#:	26
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		

74 Chloroform, CAS: 67-66-3

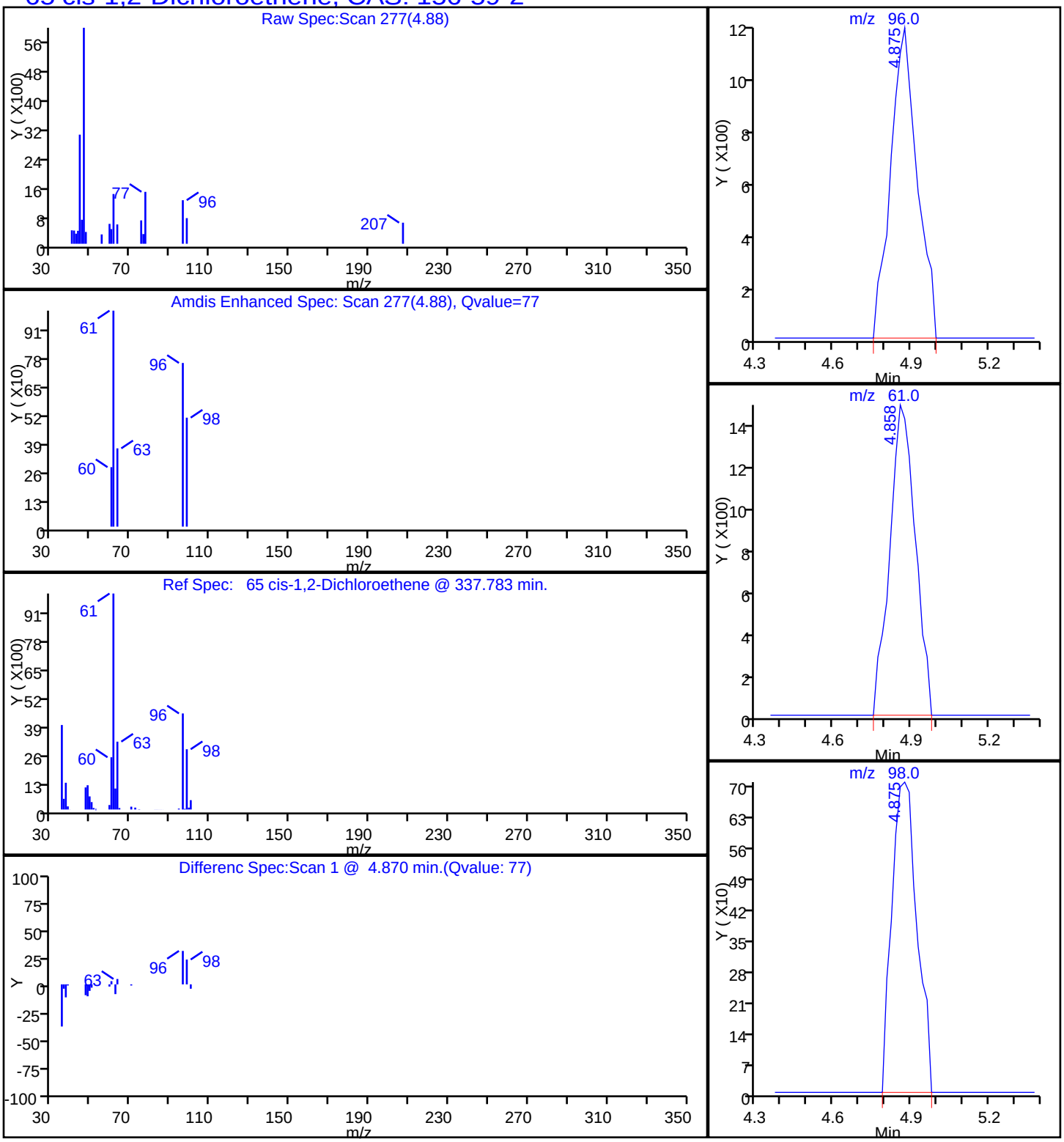


Report Date: 06-May-2015 15:24:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7181.D				
Injection Date:	06-May-2015 04:44:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-4	Lab Sample ID:	280-68518-4		
Client ID:	54400-MW223-0415				
Operator ID:	bergerb	ALS Bottle#:	24	Worklist Smp#:	26
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		

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

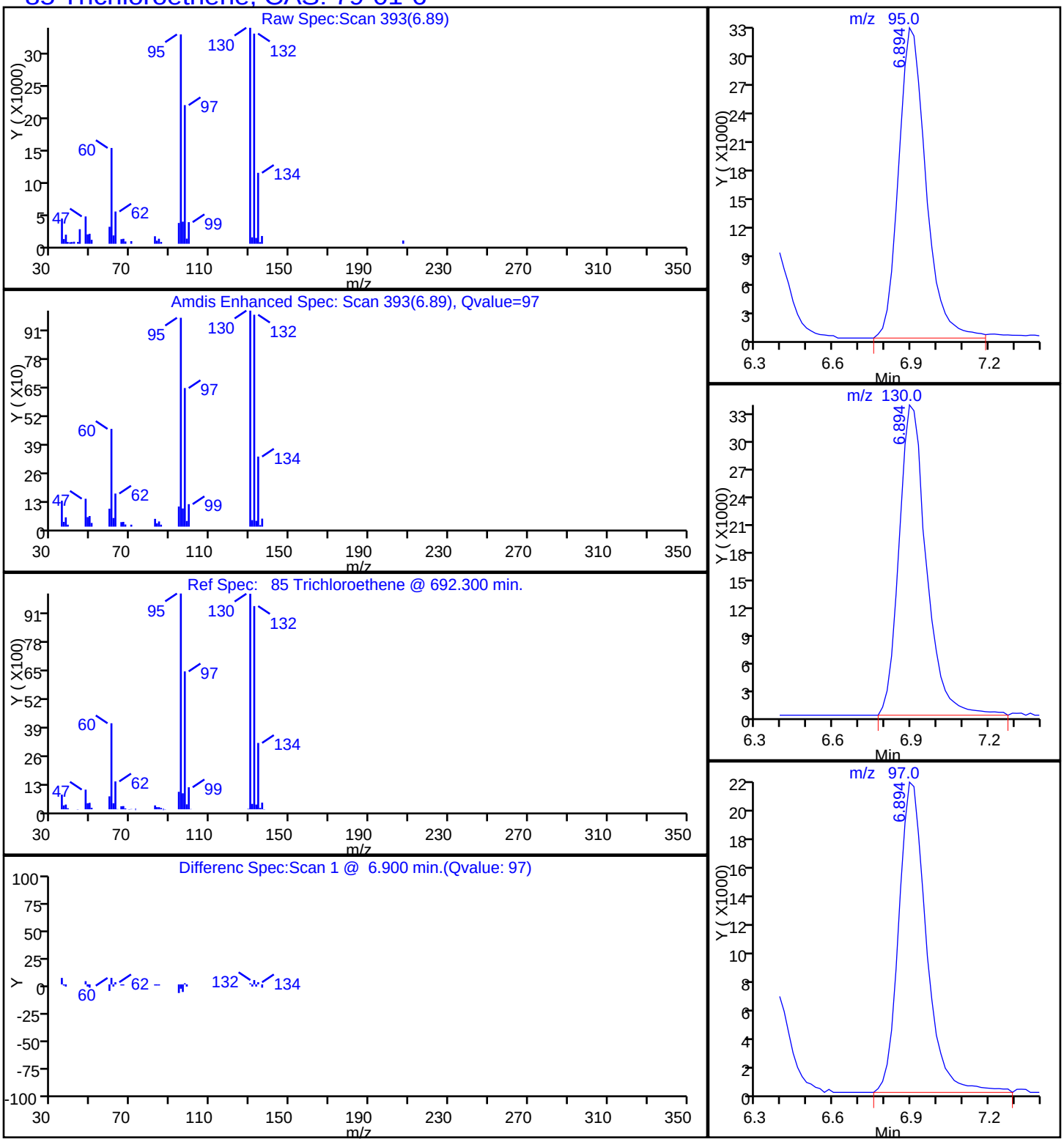


Report Date: 06-May-2015 15:24:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7181.D				
Injection Date:	06-May-2015 04:44:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-4	Lab Sample ID:	280-68518-4		
Client ID:	54400-MW223-0415				
Operator ID:	bergerb	ALS Bottle#:	24	Worklist Smp#:	26
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		

85 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW224-0415 | Lab Sample ID: 280-68518-5
Matrix: Water | Lab File ID: Z7182.D
Analysis Method: 8260B | Date Collected: 04/28/2015 10:35
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:07
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.: 276091 | 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	26		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	8.0		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW224-0415 | Lab Sample ID: 280-68518-5
Matrix: Water | Lab File ID: Z7182.D
Analysis Method: 8260B | Date Collected: 04/28/2015 10:35
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:07
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.: 276091 | 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	1.8		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	16		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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-MW224-0415 | Lab Sample ID: 280-68518-5

Matrix: Water | Lab File ID: Z7182.D

Analysis Method: 8260B | Date Collected: 04/28/2015 10:35

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:07

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.: 276091 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		81-118
460-00-4	4-Bromofluorobenzene (Surr)	111		85-114
1868-53-7	Dibromofluoromethane (Surr)	109		80-119
2037-26-5	Toluene-d8 (Surr)	106		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7182.D
Lims ID: 280-68518-A-5 Lab Sample ID: 280-68518-5
Client ID: 54400-MW224-0415
Sample Type: Client
Inject. Date: 06-May-2015 05:07:30 ALS Bottle#: 25 Worklist Smp#: 27
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-A-5 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:23:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.471	3.483	-0.012	89	137964	250.0	
* 2 Fluorobenzene	96	6.377	6.389	-0.013	98	760985	12.5	
* 3 1,4-Dioxane-d8	96	7.368	7.292	0.076	28	6311	0	
* 4 Chlorobenzene-d5	119	11.005	11.017	-0.012	88	176137	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.112	15.124	-0.012	96	317455	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.454	5.466	-0.012	93	386929	11.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.889	5.901	-0.012	95	167179	11.8	
$ 10 Toluene-d8 (Surr)	98	8.691	8.703	-0.012	94	733891	11.1	
$ 11 4-Bromofluorobenzene (Surr	95	13.041	13.053	-0.012	93	400010	11.6	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96	3.036	3.048	-0.012	96	520373	26.1	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63		4.196				ND	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96		4.875				ND	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83	5.263	5.257	0.006	96	72529	1.85	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117	5.767	5.780	-0.013	99	275809	7.98	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95	6.899	6.911	-0.012	97	428433	16.1	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129		10.060				ND	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

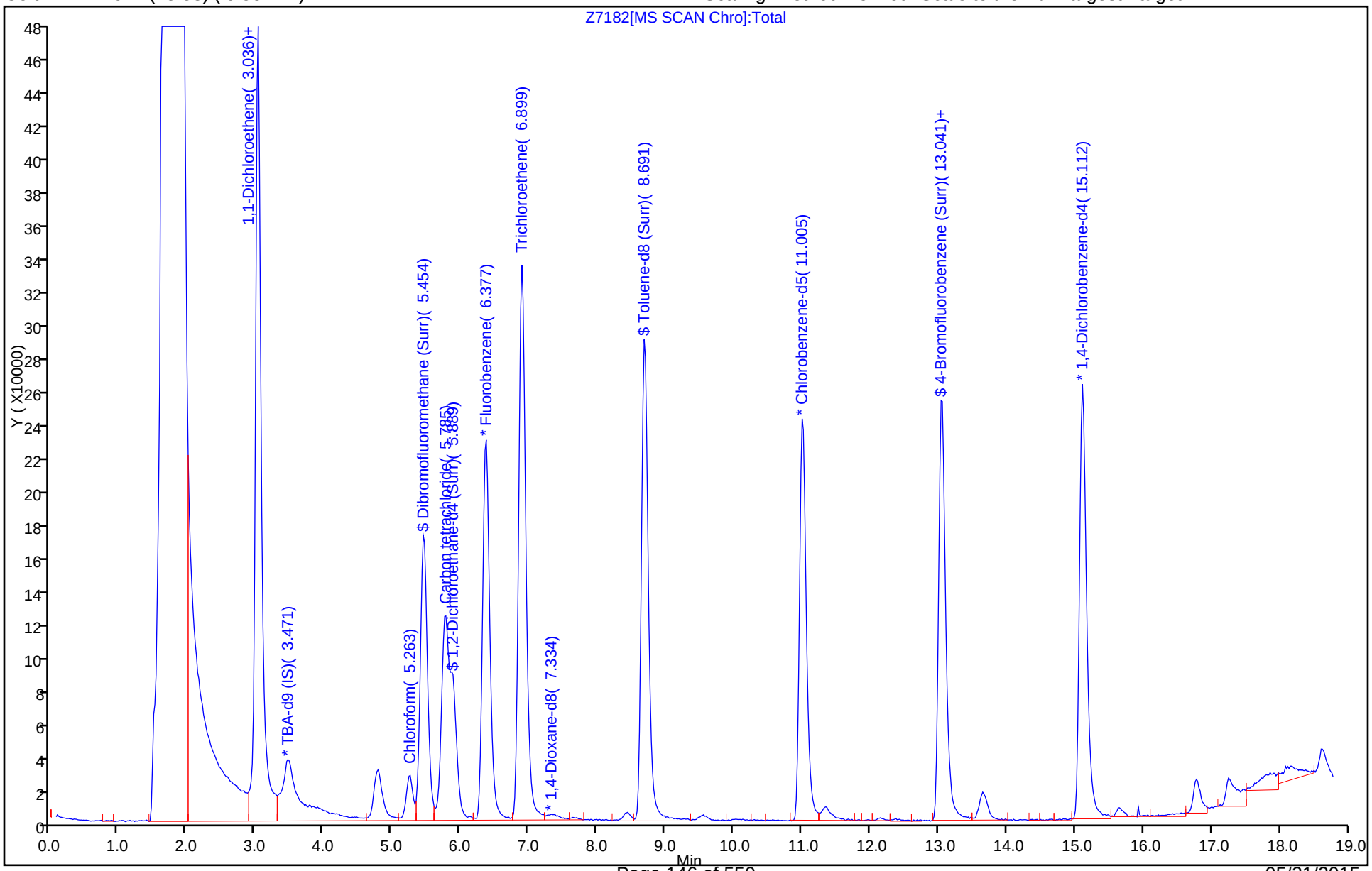
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:23:08 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7182.D				
Injection Date:	06-May-2015 05:07:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-A-5	Lab Sample ID:	280-68518-5	Worklist Smp#:	27
Client ID:	54400-MW224-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
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

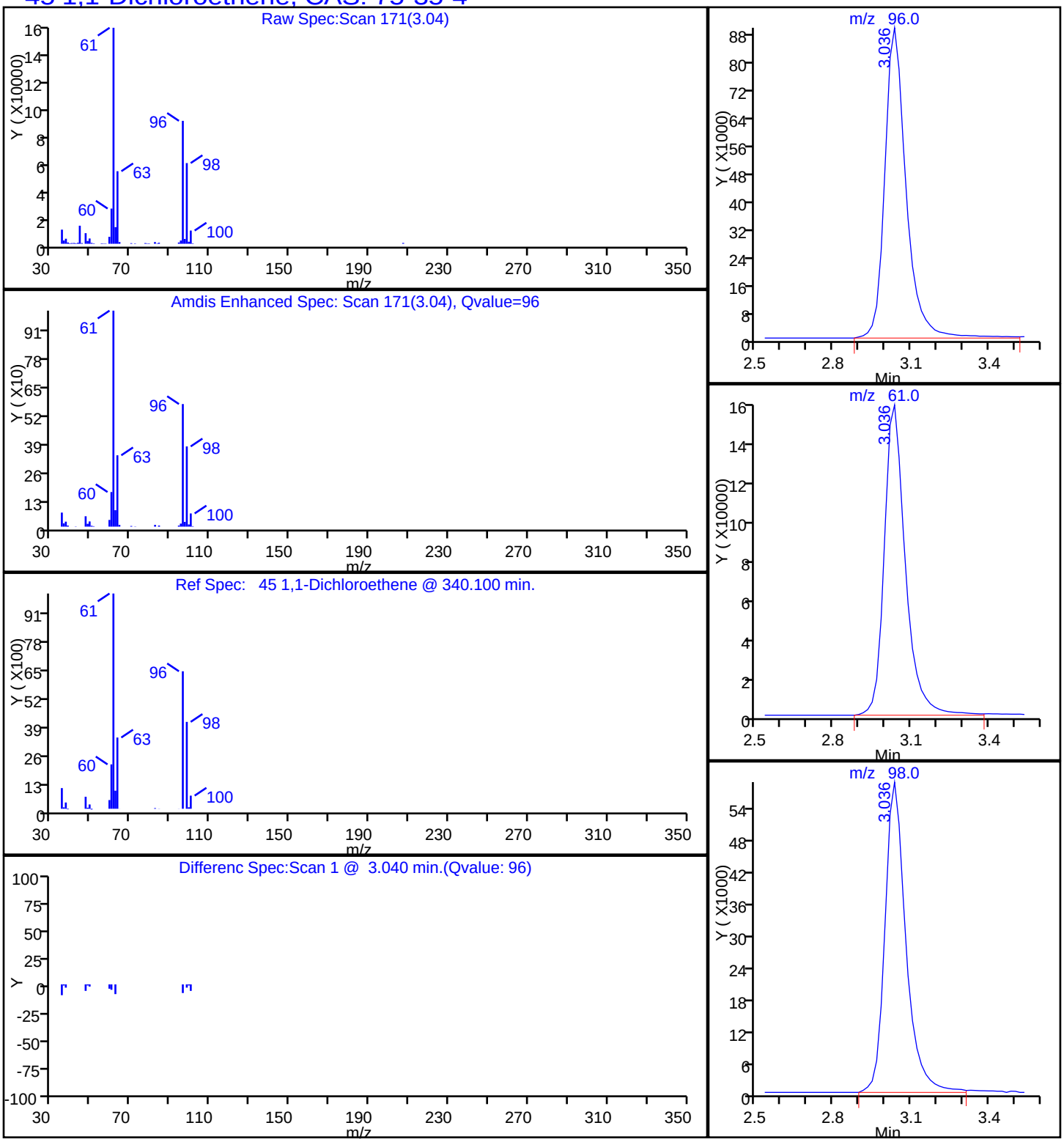


Report Date: 06-May-2015 15:23:08 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7182.D				
Injection Date:	06-May-2015 05:07:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-5	Lab Sample ID:	280-68518-5		
Client ID:	54400-MW224-0415				
Operator ID:	bergerb	ALS Bottle#:	25	Worklist Smp#:	27
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		

45 1,1-Dichloroethene, CAS: 75-35-4

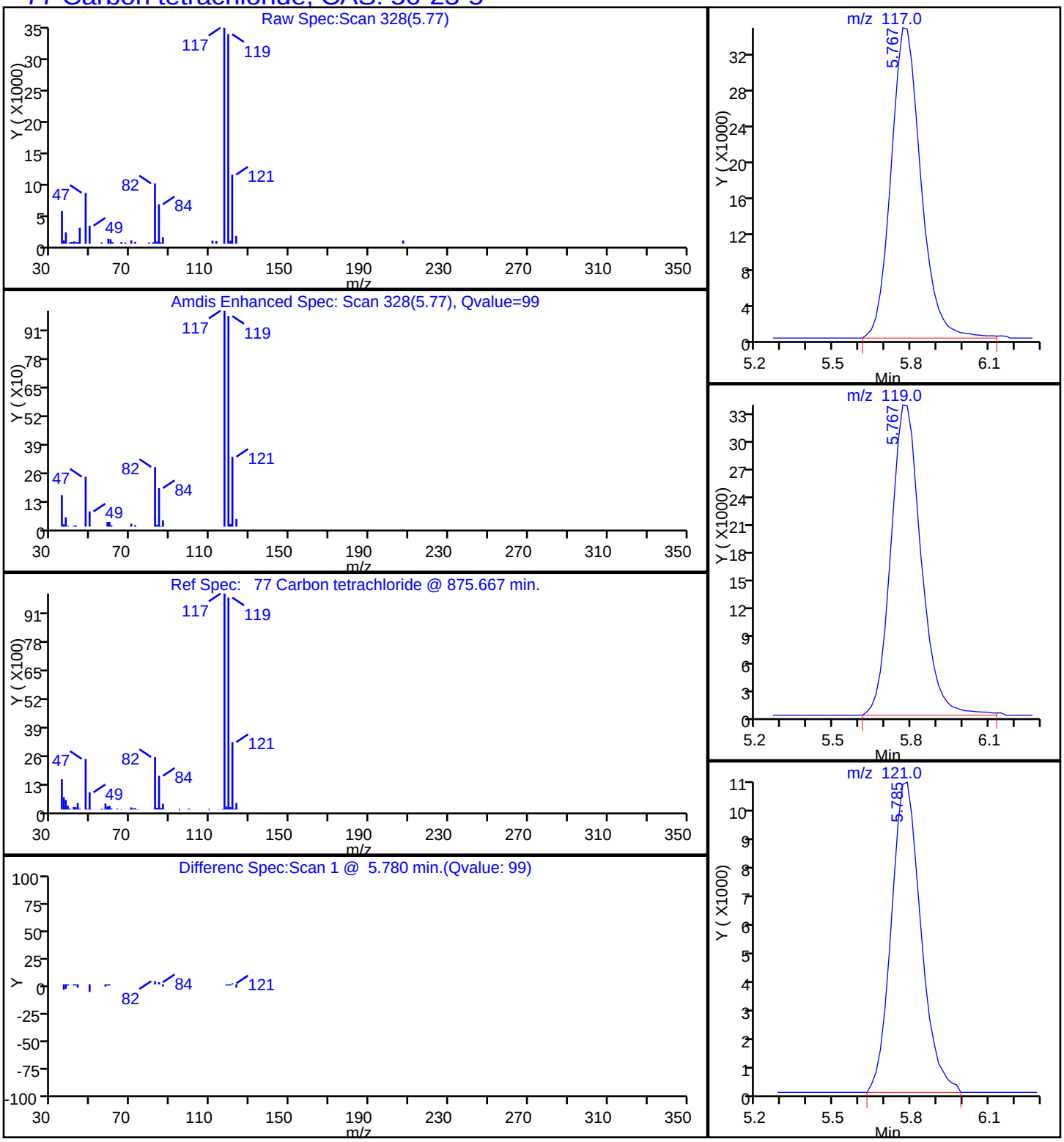


Report Date: 06-May-2015 15:23:08 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7182.D				
Injection Date:	06-May-2015 05:07:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-5	Lab Sample ID:	280-68518-5		
Client ID:	54400-MW224-0415				
Operator ID:	bergerb	ALS Bottle#:	25	Worklist Smp#:	27
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		

77 Carbon tetrachloride, CAS: 56-23-5

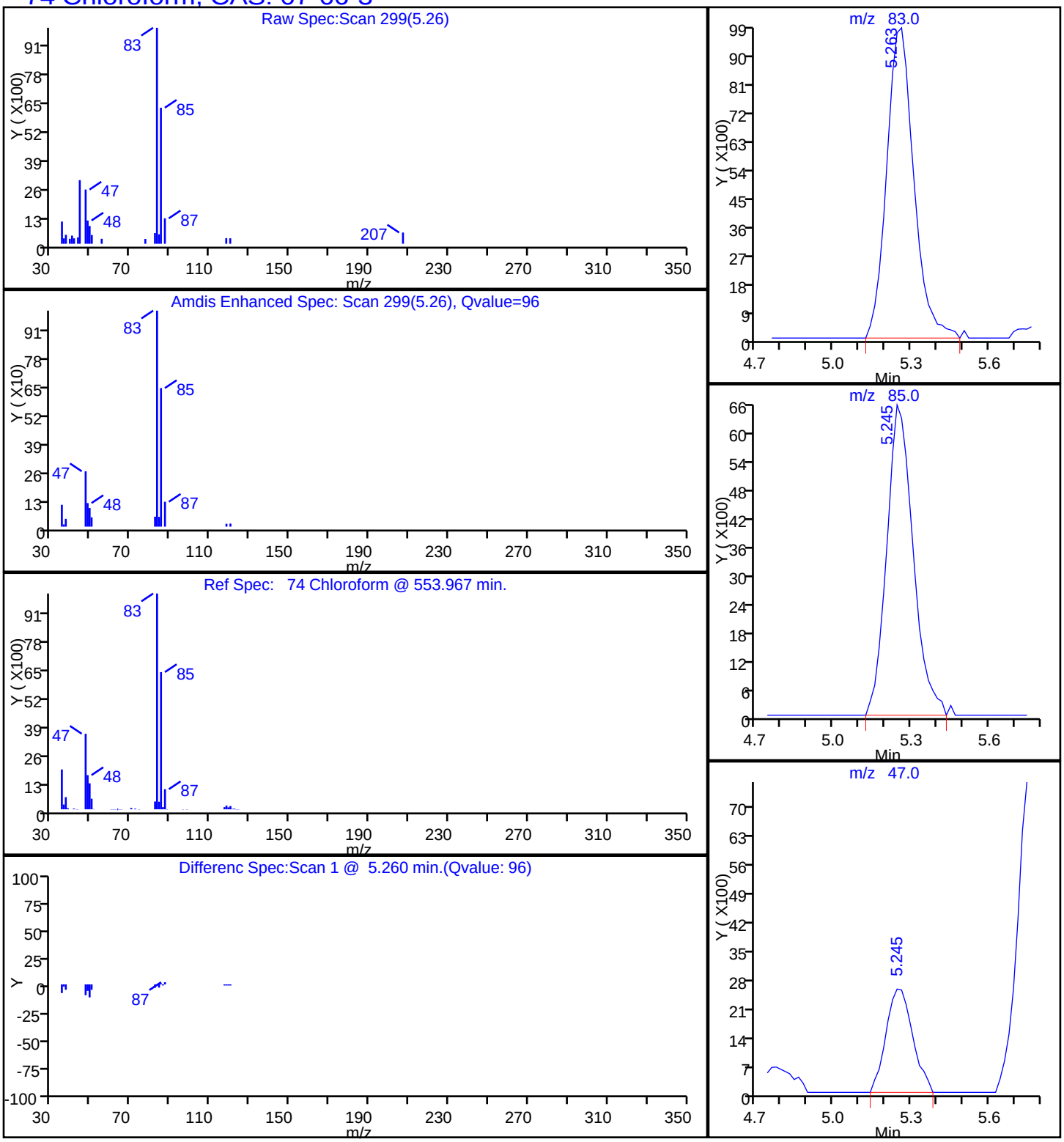


Report Date: 06-May-2015 15:23:08 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7182.D				
Injection Date:	06-May-2015 05:07:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-5	Lab Sample ID:	280-68518-5		
Client ID:	54400-MW224-0415				
Operator ID:	bergerb	ALS Bottle#:	25	Worklist Smp#:	27
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		

74 Chloroform, CAS: 67-66-3

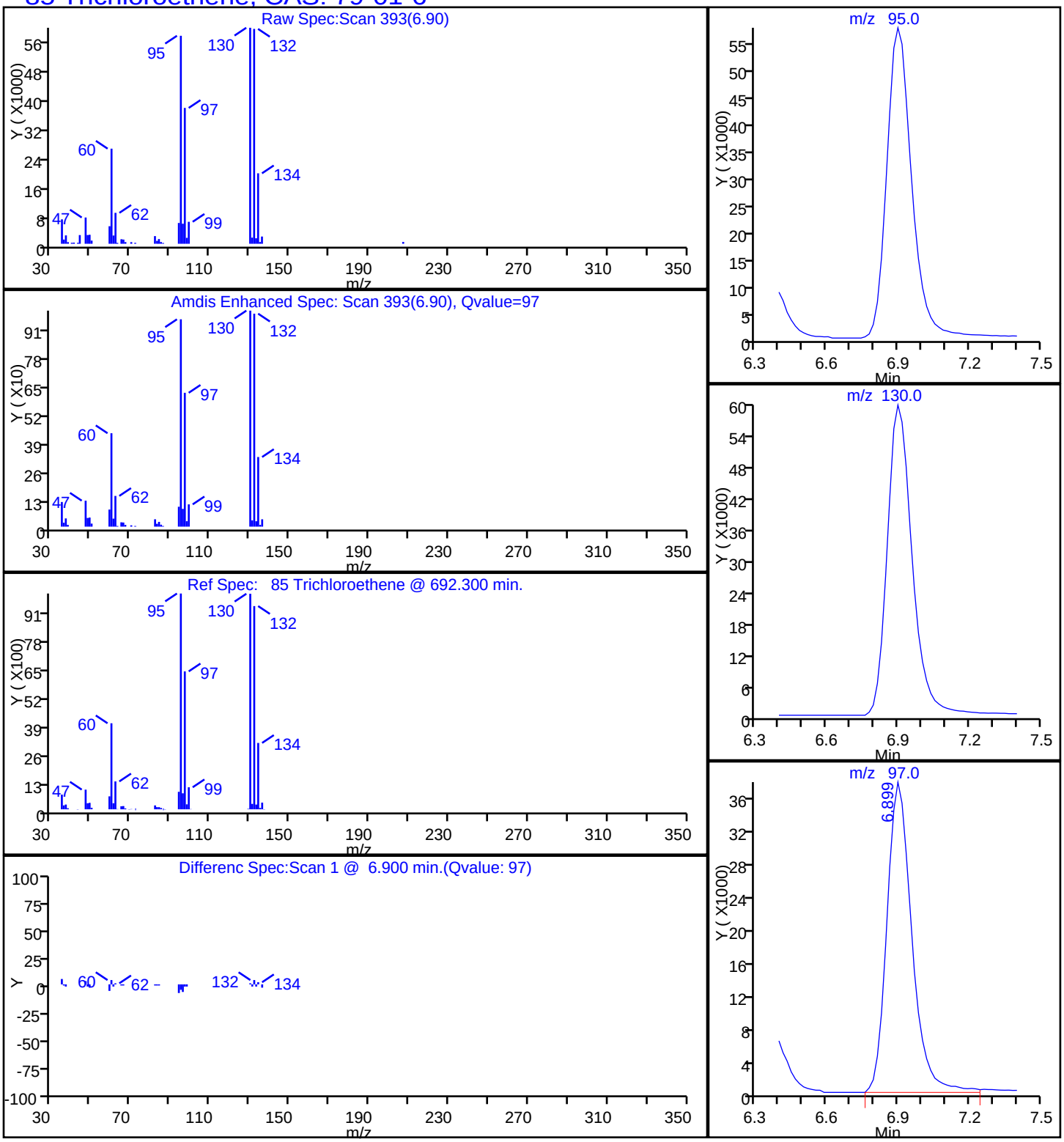


Report Date: 06-May-2015 15:23:08 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7182.D				
Injection Date:	06-May-2015 05:07:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-5	Lab Sample ID:	280-68518-5		
Client ID:	54400-MW224-0415				
Operator ID:	bergerb	ALS Bottle#:	25	Worklist Smp#:	27
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		

85 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW45D-0415 | Lab Sample ID: 280-68518-6
Matrix: Water | Lab File ID: Z7183.D
Analysis Method: 8260B | Date Collected: 04/28/2015 12:30
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:29
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.: 276091 | 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	0.20	J	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	23		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	2.2		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW45D-0415 | Lab Sample ID: 280-68518-6
Matrix: Water | Lab File ID: Z7183.D
Analysis Method: 8260B | Date Collected: 04/28/2015 12:30
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:29
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.: 276091 | 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	0.88	J	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	0.18	J	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	14		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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-MW45D-0415 | Lab Sample ID: 280-68518-6

Matrix: Water | Lab File ID: Z7183.D

Analysis Method: 8260B | Date Collected: 04/28/2015 12:30

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:29

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.: 276091 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		81-118
460-00-4	4-Bromofluorobenzene (Surr)	106		85-114
1868-53-7	Dibromofluoromethane (Surr)	105		80-119
2037-26-5	Toluene-d8 (Surr)	97		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D
Lims ID: 280-68518-C-6 Lab Sample ID: 280-68518-6
Client ID: 54400-MW45D-0415
Sample Type: Client
Inject. Date: 06-May-2015 05:29:30 ALS Bottle#: 26 Worklist Smp#: 28
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-C-6 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:22:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.483	3.483	0.000	89	140659	250.0	
* 2 Fluorobenzene	96	6.371	6.389	-0.018	98	759684	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.017	11.017	0.000	89	181743	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.106	15.124	-0.018	96	318711	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.466	5.466	0.000	93	372894	11.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.901	5.901	0.000	95	160061	11.4	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	695428	10.2	
$ 11 4-Bromofluorobenzene (Surr	95	13.053	13.053	0.000	87	387476	11.2	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96	3.030	3.048	-0.018	97	465035	23.4	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63	4.179	4.196	-0.017	91	7851	0.1971	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96	4.875	4.875	0.000	74	3621	0.1769	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83	5.258	5.257	0.001	93	34622	0.8841	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117	5.780	5.780	0.000	98	76309	2.21	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95	6.893	6.911	-0.018	98	370951	14.0	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129		10.060				ND	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

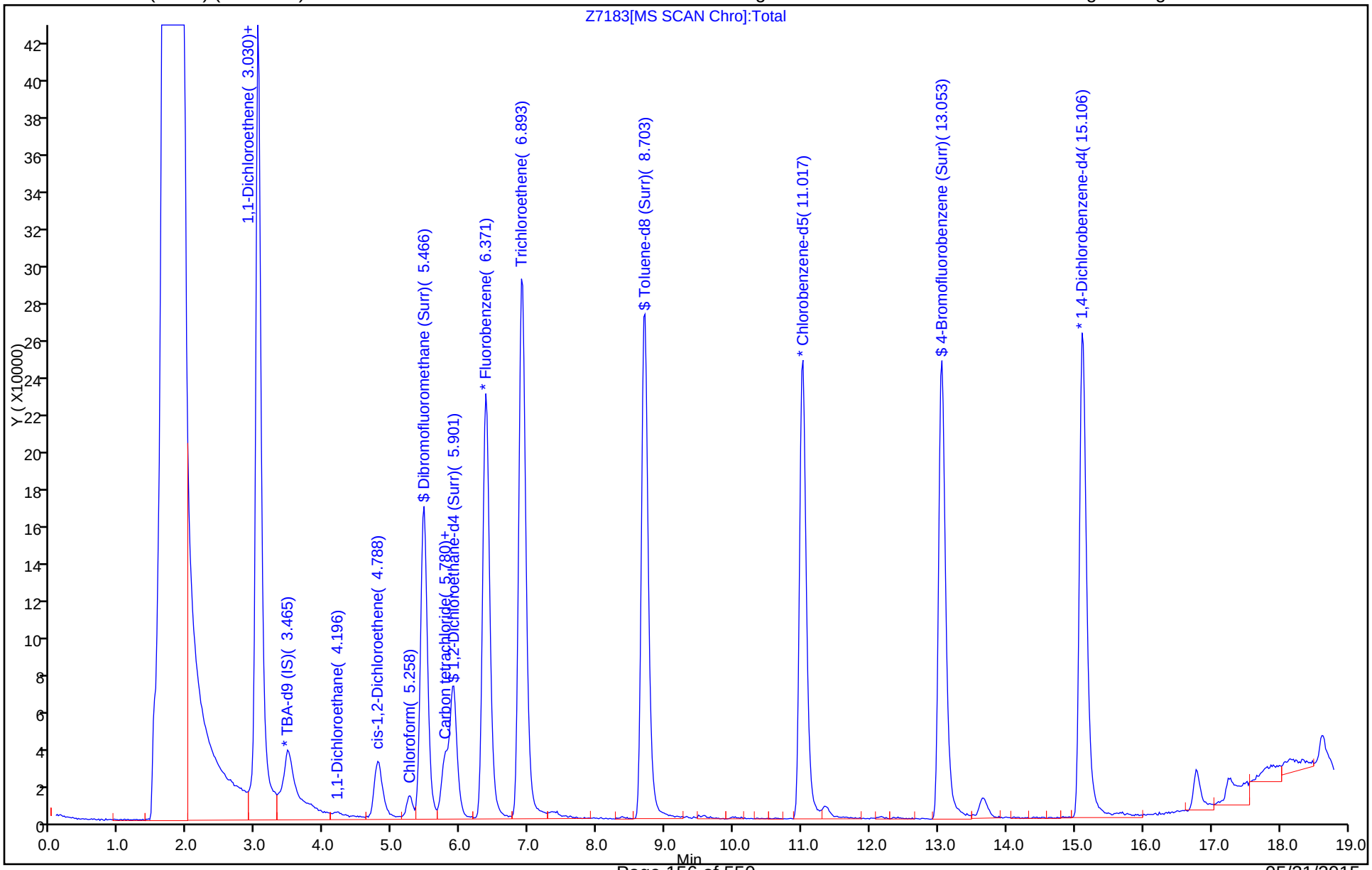
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:22:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D				
Injection Date:	06-May-2015 05:29:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-C-6	Lab Sample ID:	280-68518-6	Worklist Smp#:	28
Client ID:	54400-MW45D-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
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

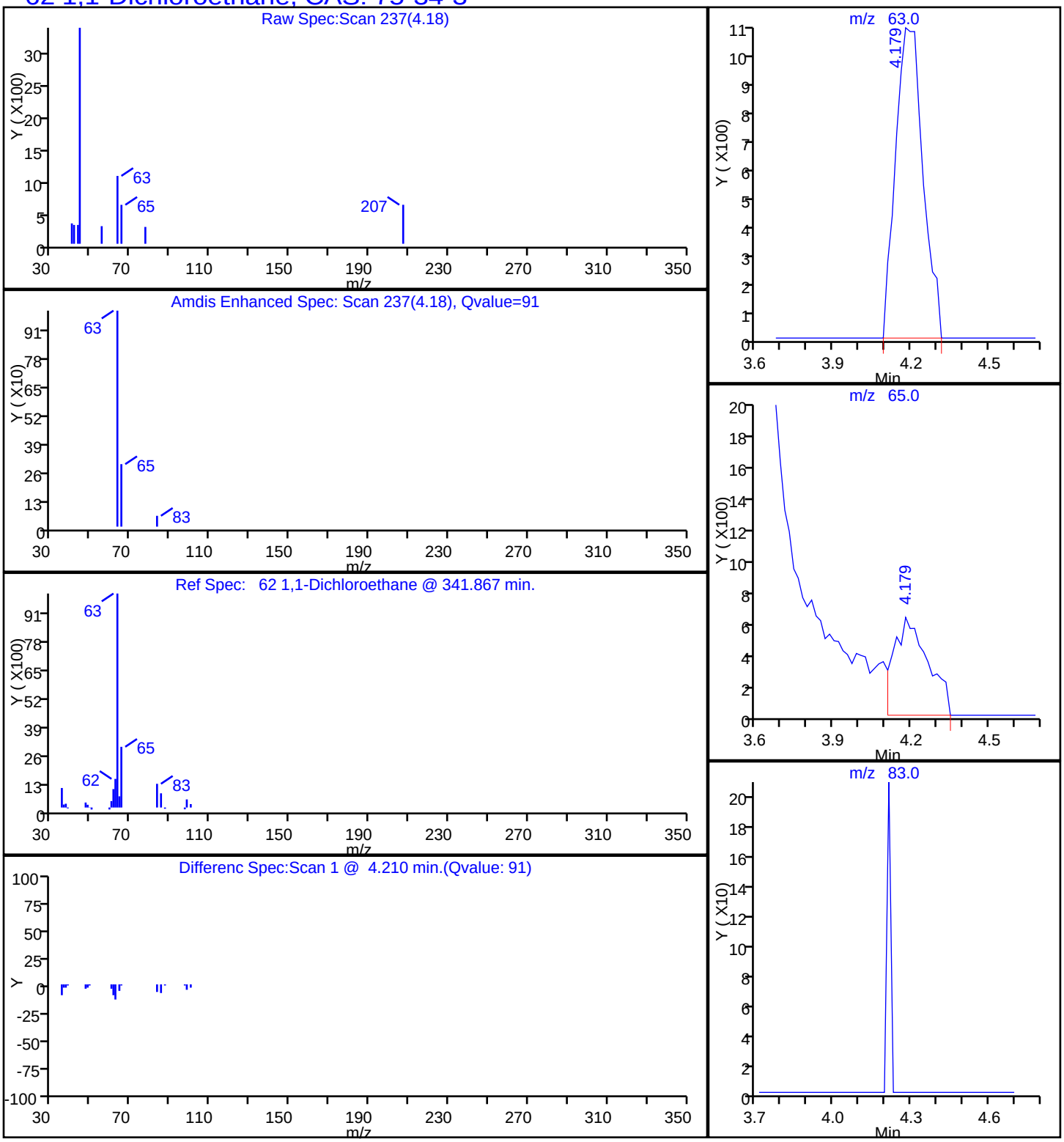


Report Date: 06-May-2015 15:22:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D				
Injection Date:	06-May-2015 05:29:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-6	Lab Sample ID:	280-68518-6		
Client ID:	54400-MW45D-0415				
Operator ID:	bergerb	ALS Bottle#:	26	Worklist Smp#:	28
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		

62 1,1-Dichloroethane, CAS: 75-34-3

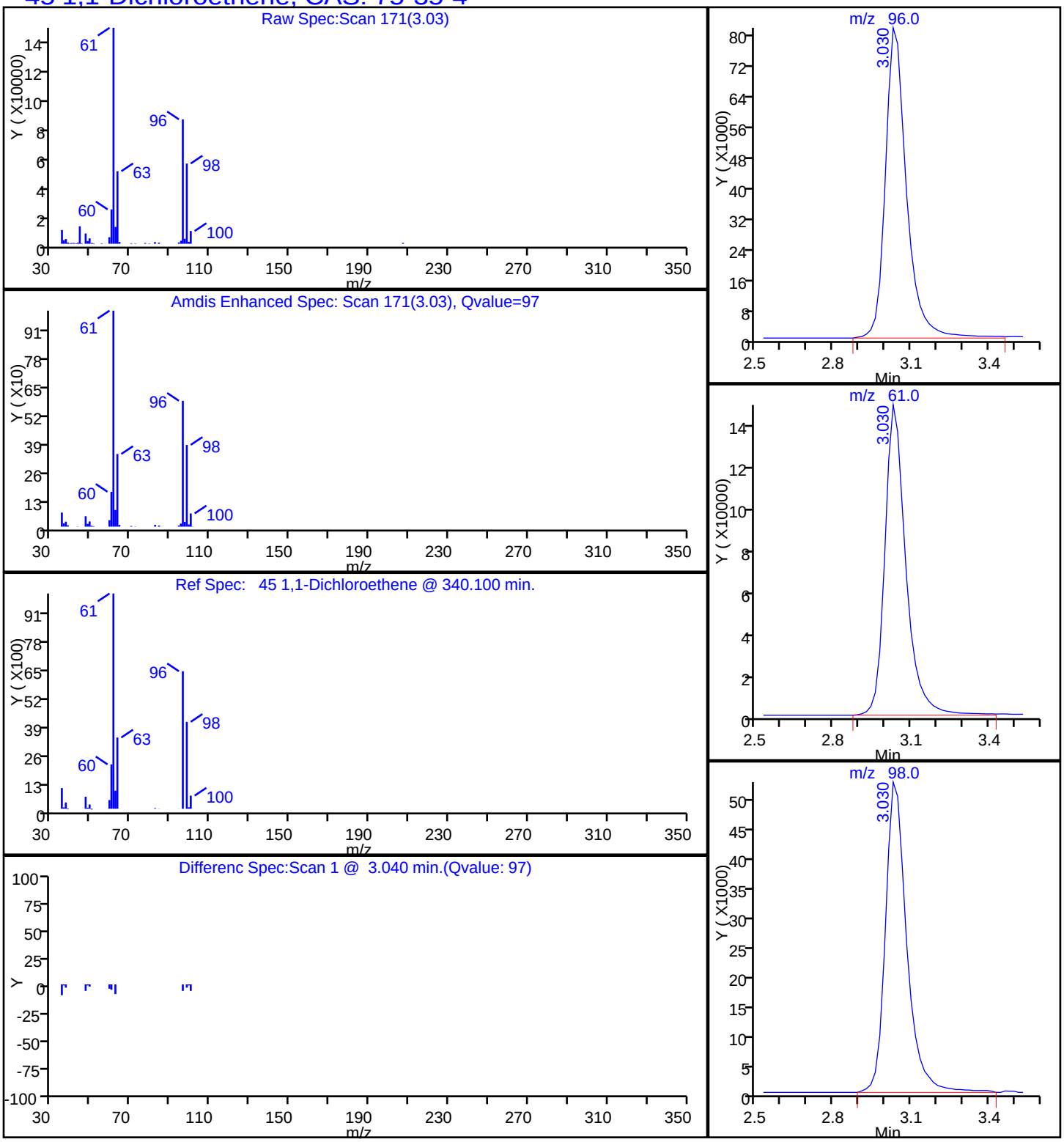


Report Date: 06-May-2015 15:22:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D				
Injection Date:	06-May-2015 05:29:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-6	Lab Sample ID:	280-68518-6		
Client ID:	54400-MW45D-0415				
Operator ID:	bergerb	ALS Bottle#:	26	Worklist Smp#:	28
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		

45 1,1-Dichloroethene, CAS: 75-35-4

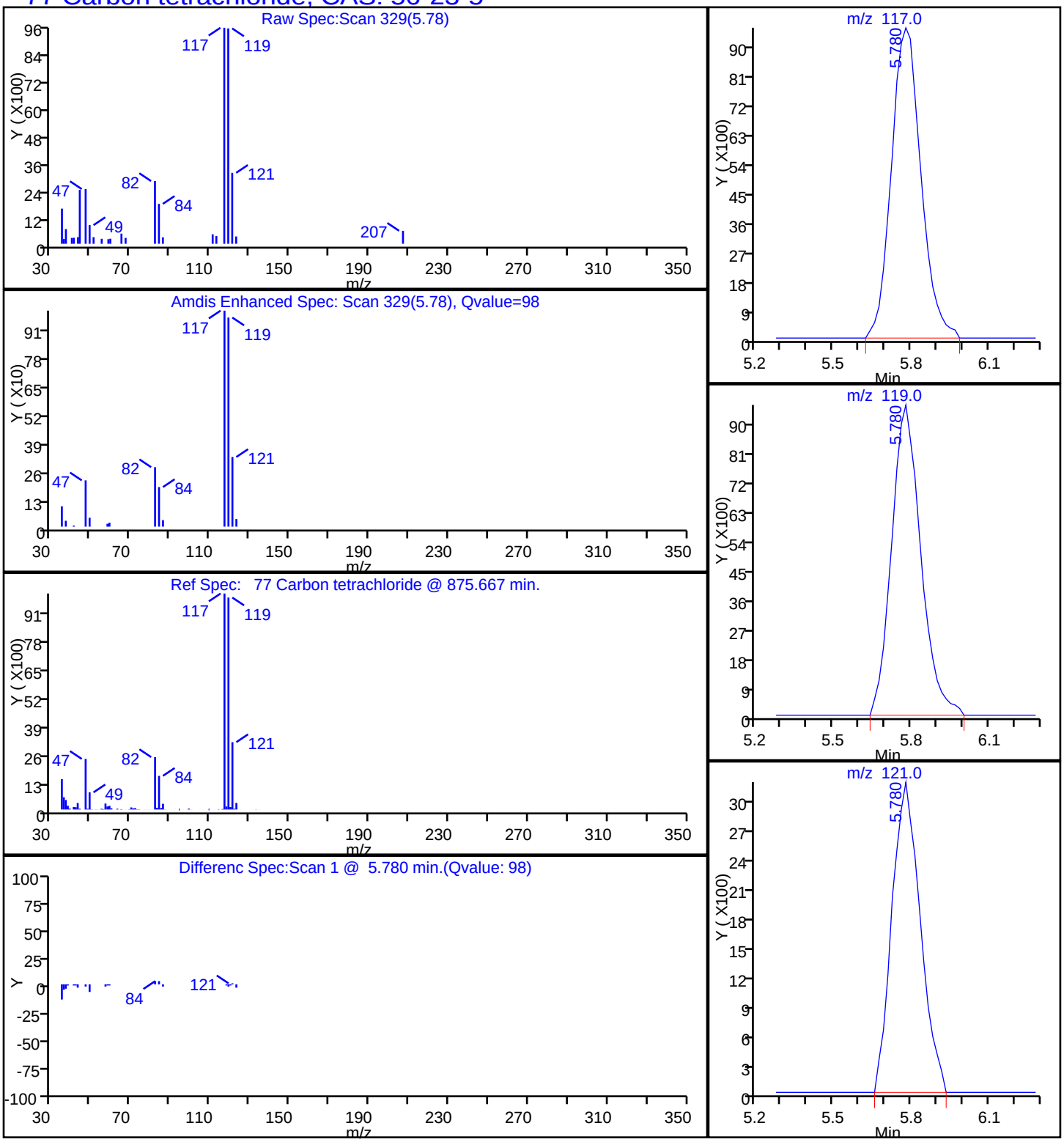


Report Date: 06-May-2015 15:22:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D				
Injection Date:	06-May-2015 05:29:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-6	Lab Sample ID:	280-68518-6		
Client ID:	54400-MW45D-0415				
Operator ID:	bergerb	ALS Bottle#:	26	Worklist Smp#:	28
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		

77 Carbon tetrachloride, CAS: 56-23-5

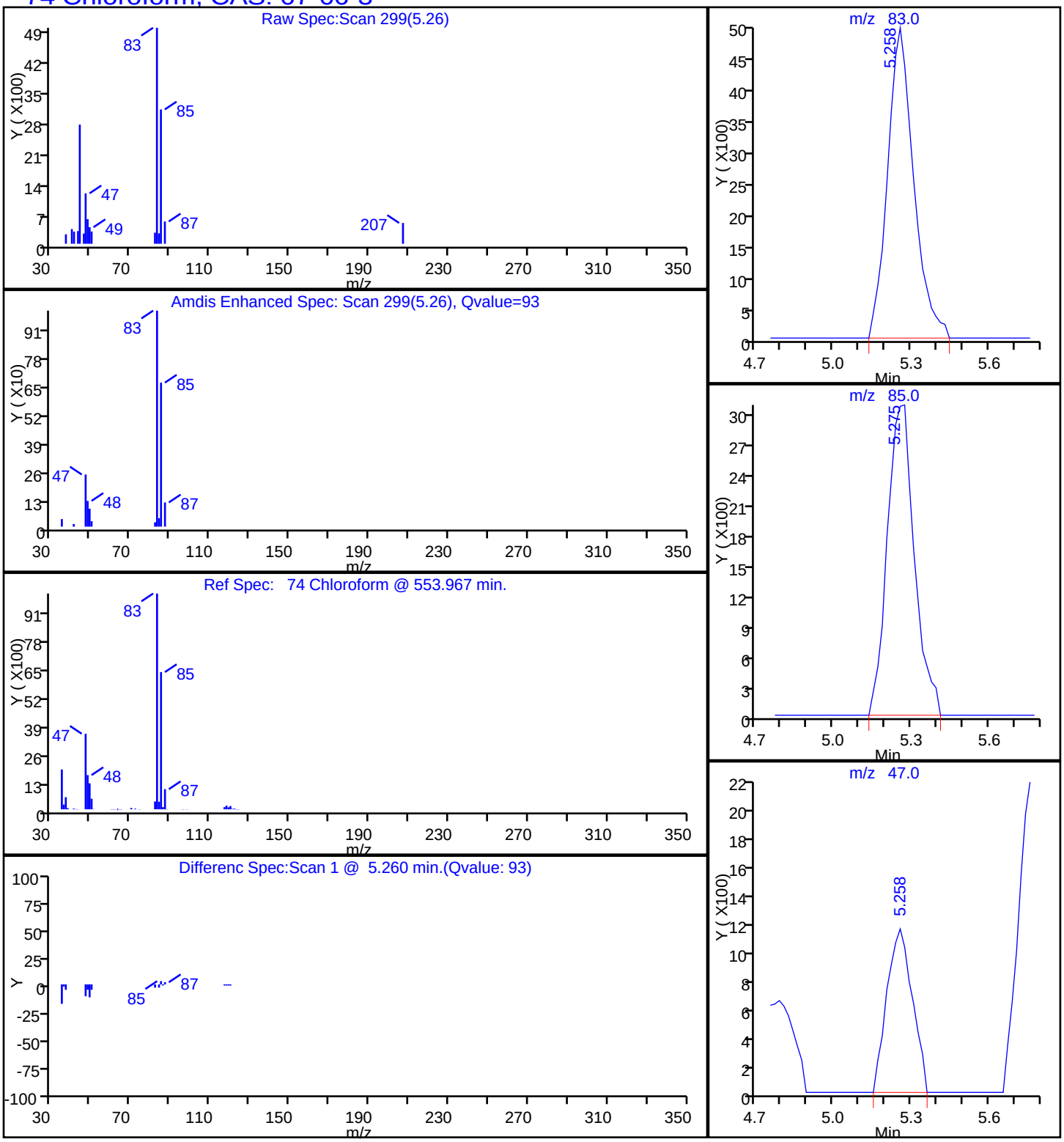


Report Date: 06-May-2015 15:22:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D				
Injection Date:	06-May-2015 05:29:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-6	Lab Sample ID:	280-68518-6		
Client ID:	54400-MW45D-0415				
Operator ID:	bergerb	ALS Bottle#:	26	Worklist Smp#:	28
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		

74 Chloroform, CAS: 67-66-3

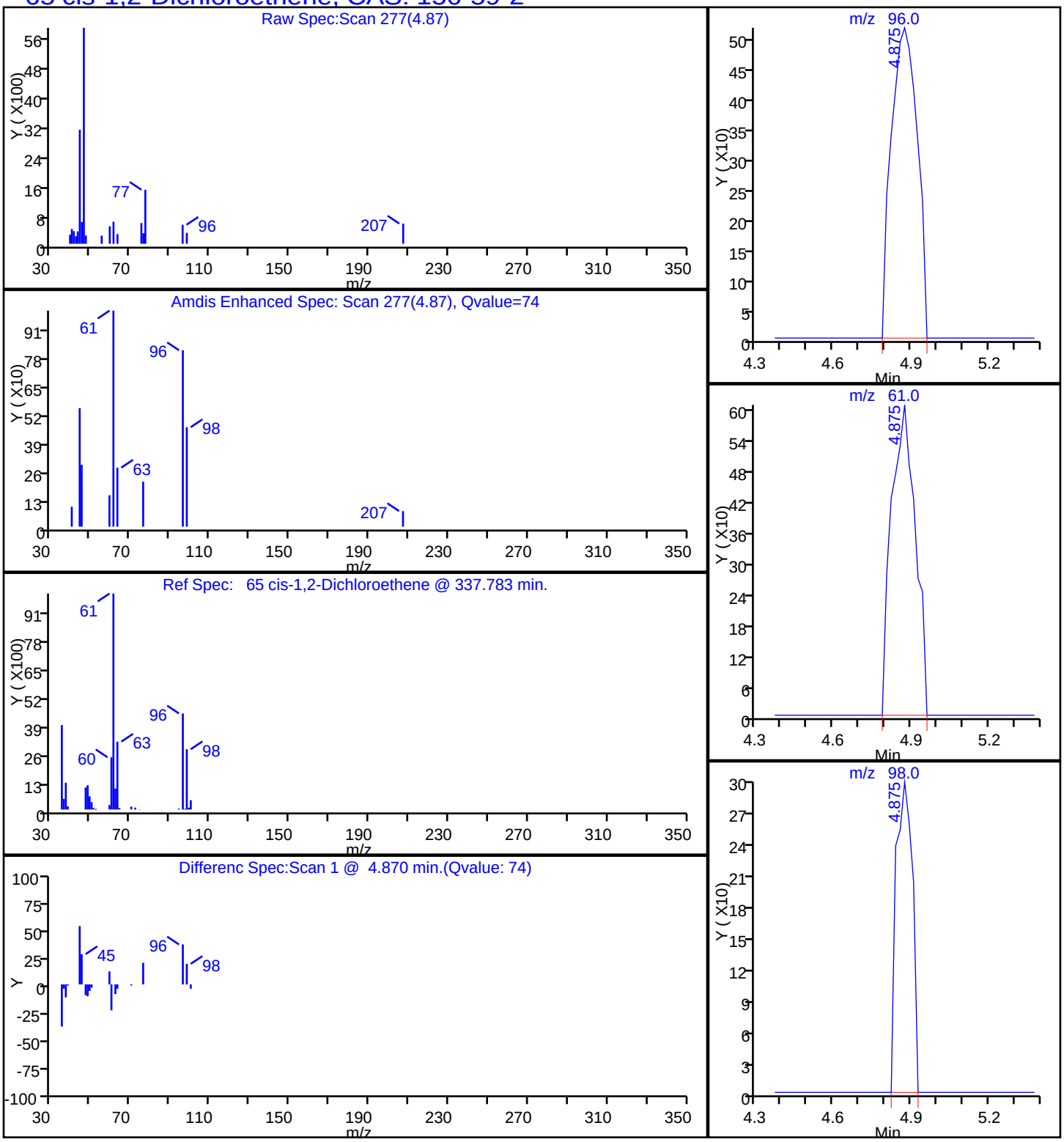


Report Date: 06-May-2015 15:22:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D				
Injection Date:	06-May-2015 05:29:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-6	Lab Sample ID:	280-68518-6		
Client ID:	54400-MW45D-0415				
Operator ID:	bergerb	ALS Bottle#:	26	Worklist Smp#:	28
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		

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

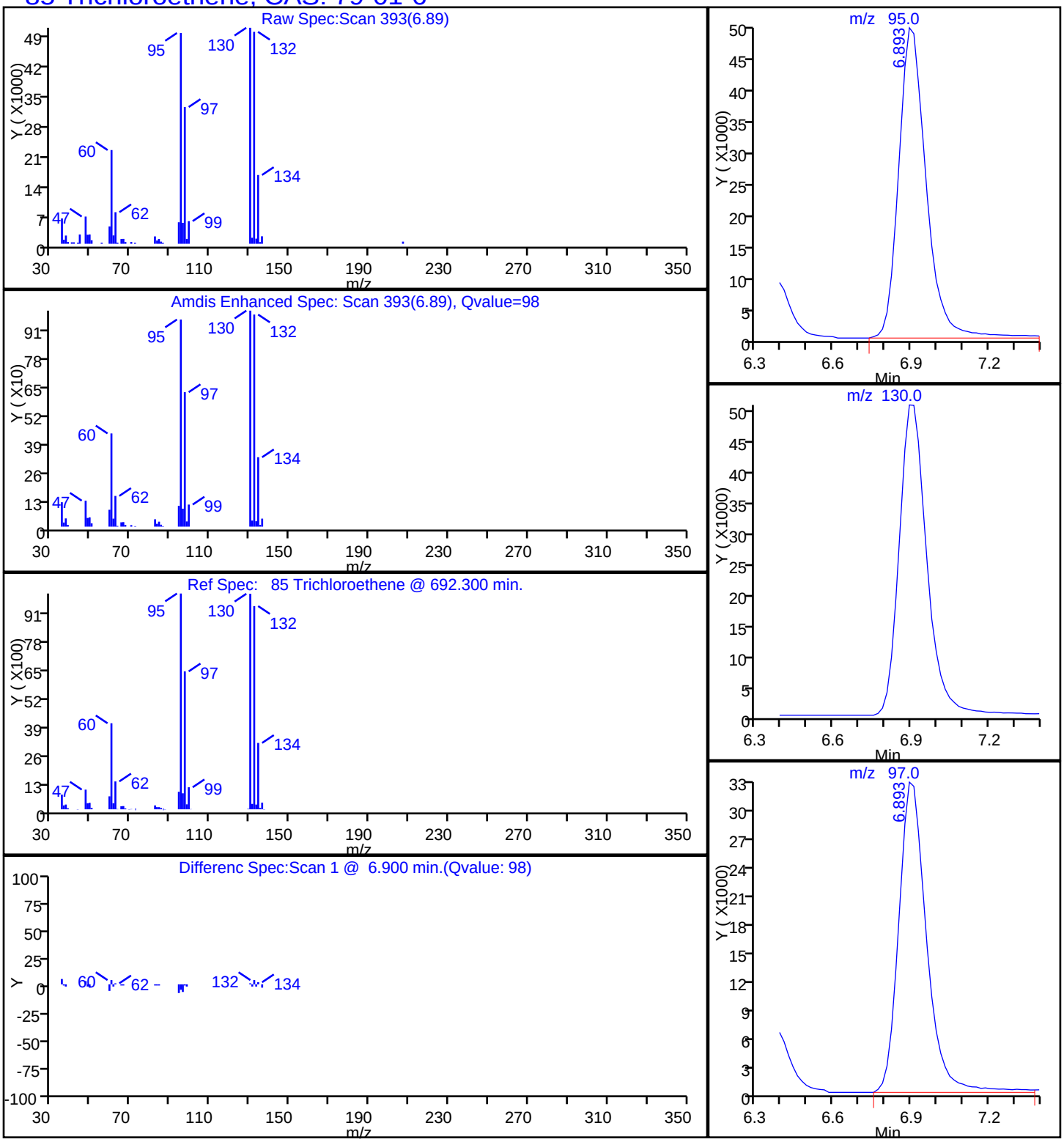


Report Date: 06-May-2015 15:22:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7183.D				
Injection Date:	06-May-2015 05:29:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-6	Lab Sample ID:	280-68518-6		
Client ID:	54400-MW45D-0415				
Operator ID:	bergerb	ALS Bottle#:	26	Worklist Smp#:	28
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		

85 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW45S-0415 | Lab Sample ID: 280-68518-7
Matrix: Water | Lab File ID: Z7184.D
Analysis Method: 8260B | Date Collected: 04/28/2015 18:35
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:52
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.: 276091 | 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	0.21	J	1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	28		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	2.5		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW45S-0415 | Lab Sample ID: 280-68518-7
Matrix: Water | Lab File ID: Z7184.D
Analysis Method: 8260B | Date Collected: 04/28/2015 18:35
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 05:52
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.: 276091 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.17	J	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	1.2		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	0.19	J	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	15		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW45S-0415
Lab Sample ID: 280-68518-7
Matrix: Water
Lab File ID: Z7184.D
Analysis Method: 8260B
Date Collected: 04/28/2015 18:35
Sample wt/vol: 20(mL)
Date Analyzed: 05/06/2015 05:52
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.: 276091
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		81-118
460-00-4	4-Bromofluorobenzene (Surr)	112		85-114
1868-53-7	Dibromofluoromethane (Surr)	106		80-119
2037-26-5	Toluene-d8 (Surr)	103		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D
Lims ID: 280-68518-C-7 Lab Sample ID: 280-68518-7
Client ID: 54400-MW45S-0415
Sample Type: Client
Inject. Date: 06-May-2015 05:52:30 ALS Bottle#: 27 Worklist Smp#: 29
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-C-7 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:22:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.483	3.483	0.000	89	130733	250.0	
* 2 Fluorobenzene	96	6.372	6.389	-0.017	98	744893	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.018	11.017	0.001	88	175332	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.124	15.124	0.000	96	309151	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.466	0.001	93	368529	11.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.901	0.001	95	153657	11.1	
$ 10 Toluene-d8 (Surr)	98	8.704	8.703	0.001	93	712748	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.054	13.053	0.001	86	395709	11.8	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96	3.031	3.048	-0.017	97	550191	28.2	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63	4.197	4.196	0.001	90	8285	0.2121	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96	4.875	4.875	0.000	77	3838	0.1912	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83	5.258	5.257	0.001	96	46076	1.20	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117	5.780	5.780	0.000	98	82969	2.45	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95	6.911	6.911	0.000	98	391848	15.0	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129	10.061	10.060	0.001	83	3090	0.1659	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

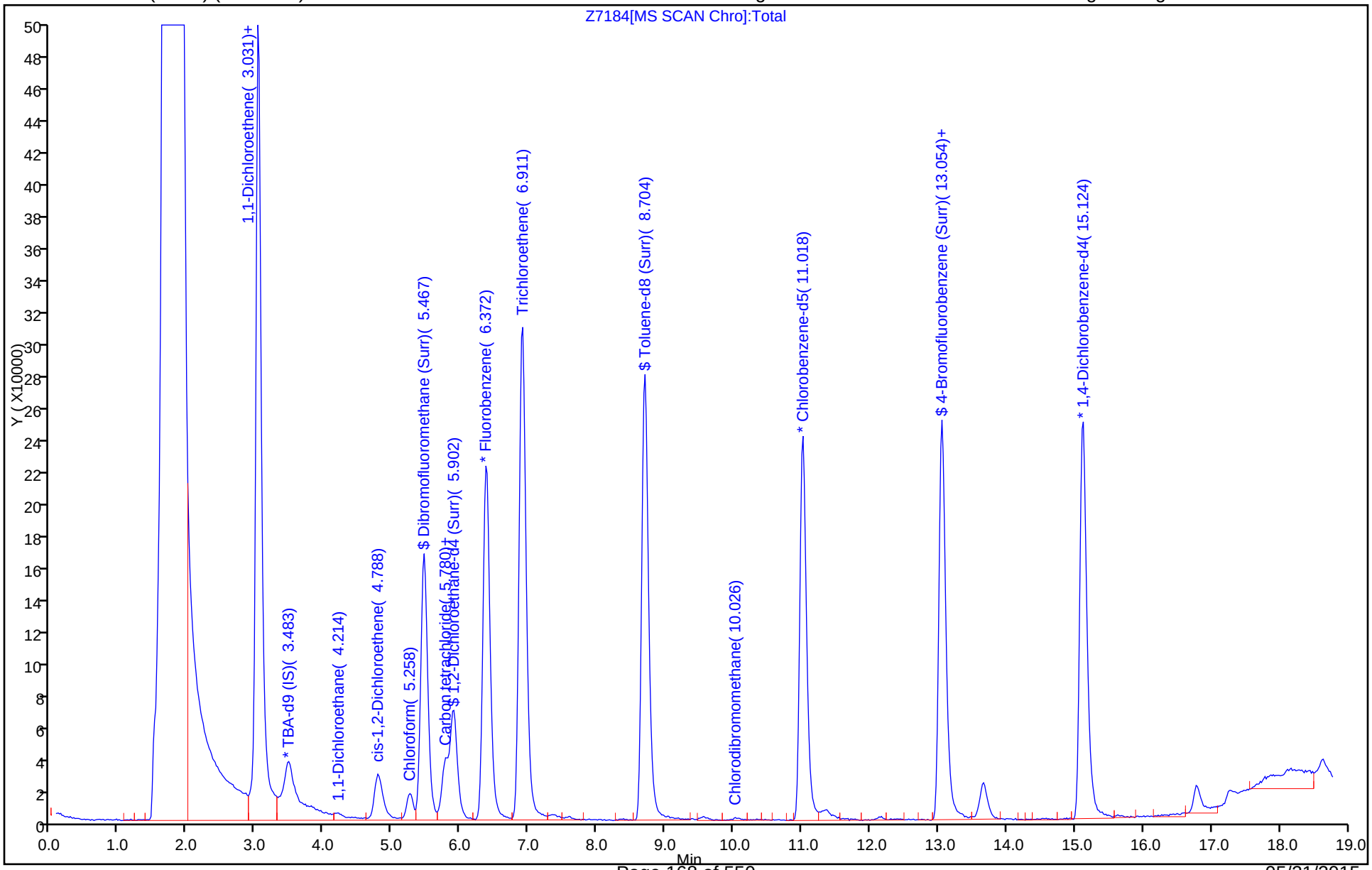
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7	Worklist Smp#:	29
Client ID:	54400-MW45S-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
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

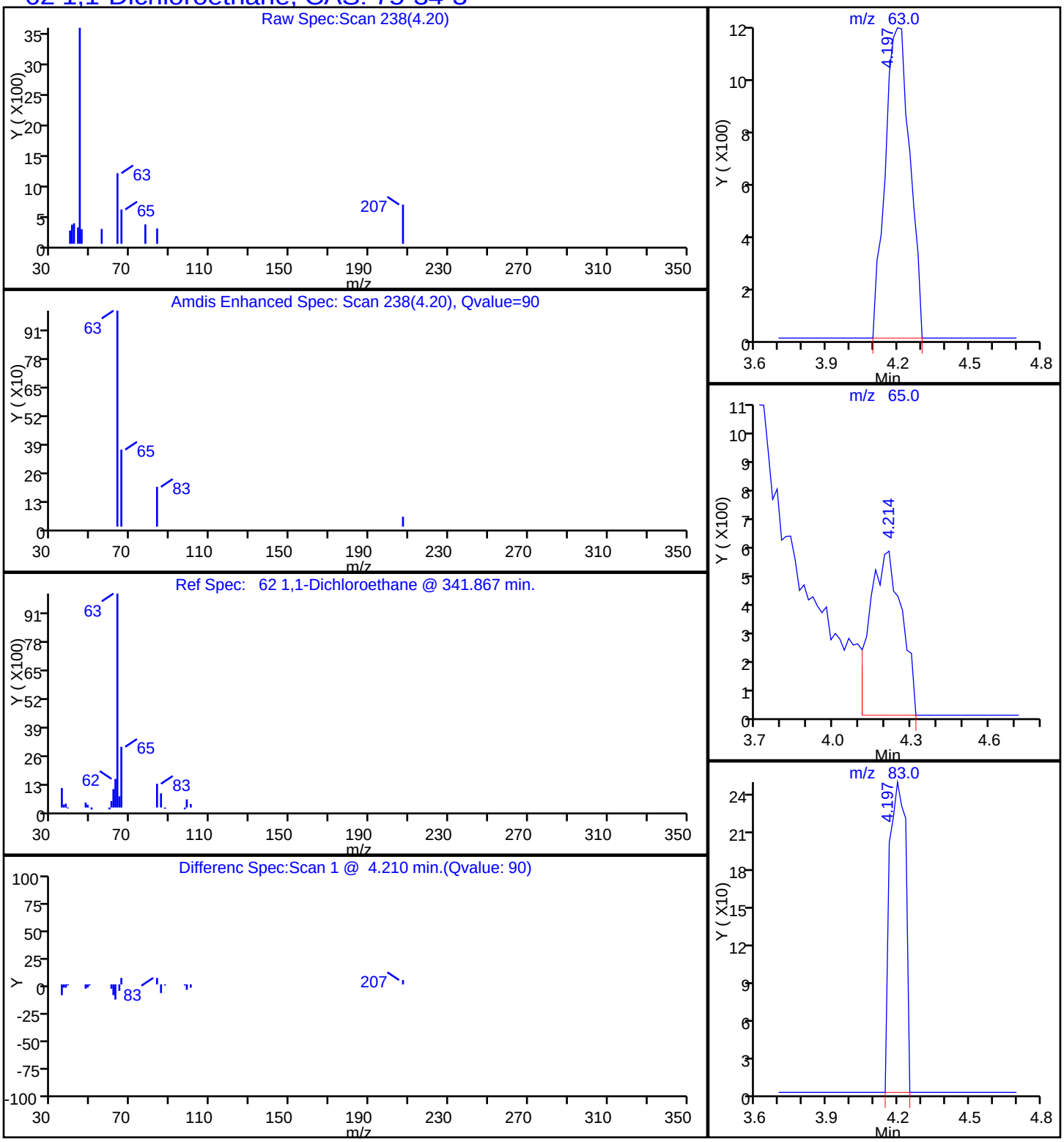


Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7		
Client ID:	54400-MW45S-0415				
Operator ID:	bergerb	ALS Bottle#:	27	Worklist Smp#:	29
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		

62 1,1-Dichloroethane, CAS: 75-34-3

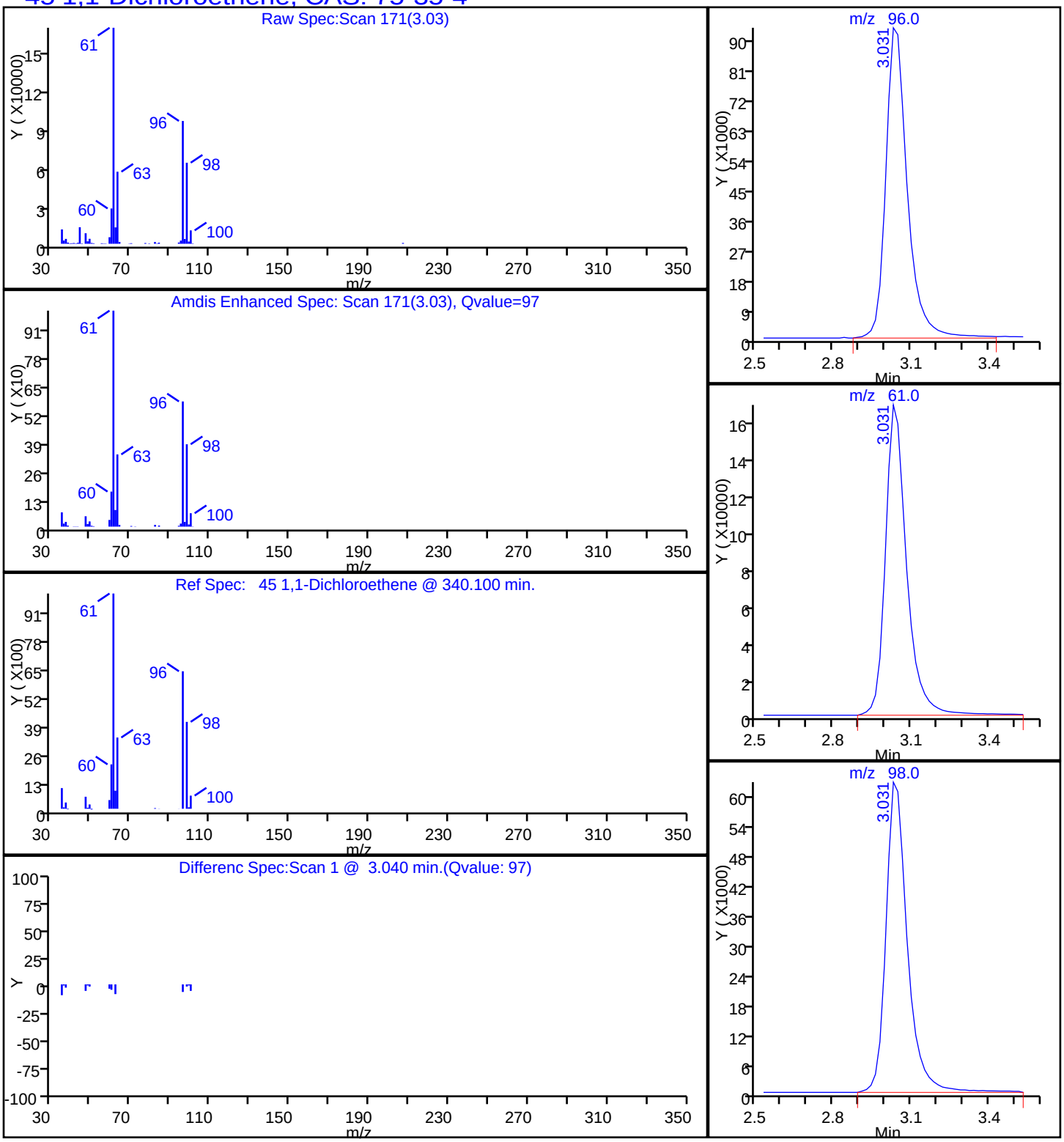


Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7		
Client ID:	54400-MW45S-0415				
Operator ID:	bergerb	ALS Bottle#:	27	Worklist Smp#:	29
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		

45 1,1-Dichloroethene, CAS: 75-35-4

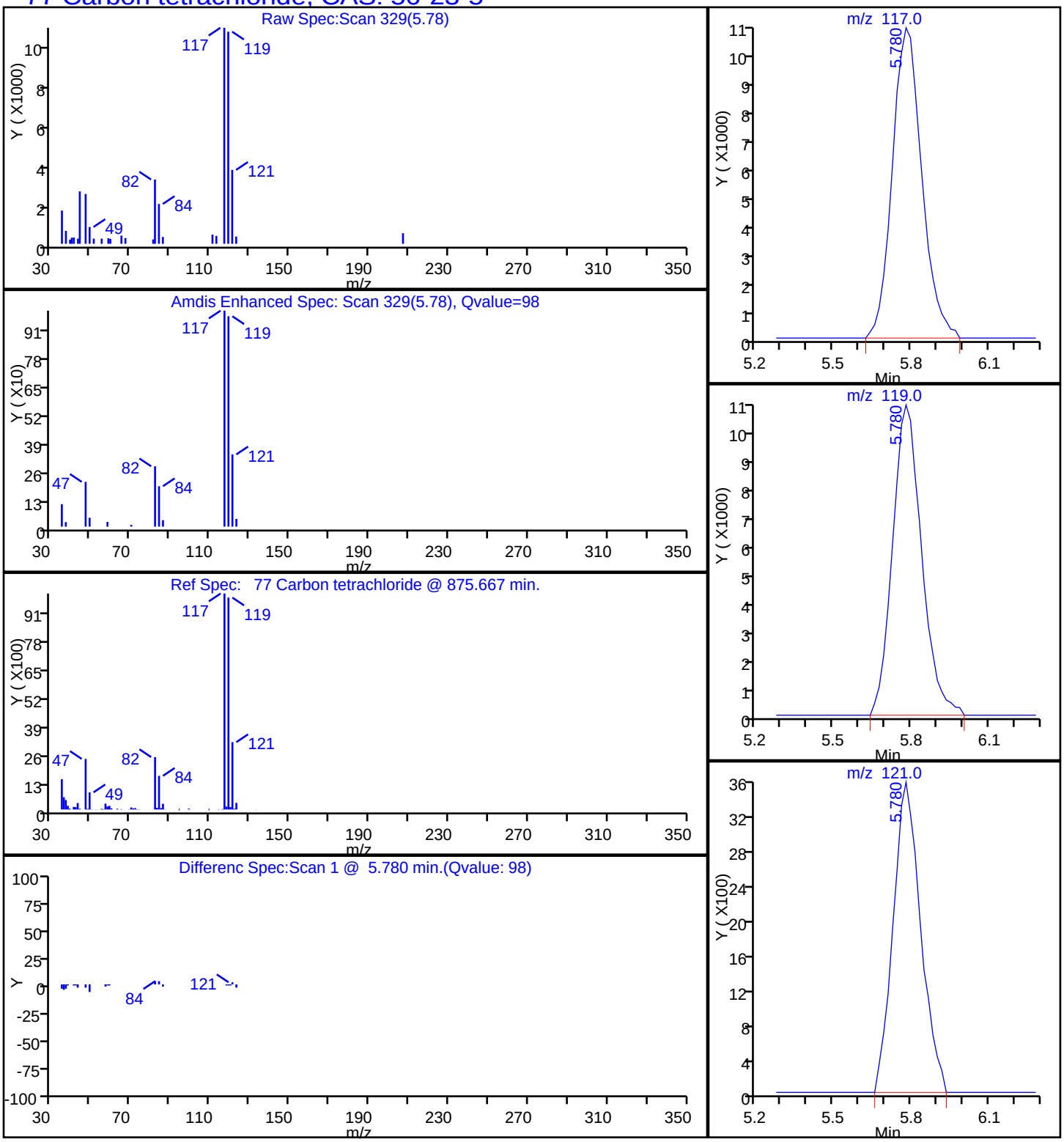


Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7		
Client ID:	54400-MW45S-0415				
Operator ID:	bergerb	ALS Bottle#:	27	Worklist Smp#:	29
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		

77 Carbon tetrachloride, CAS: 56-23-5

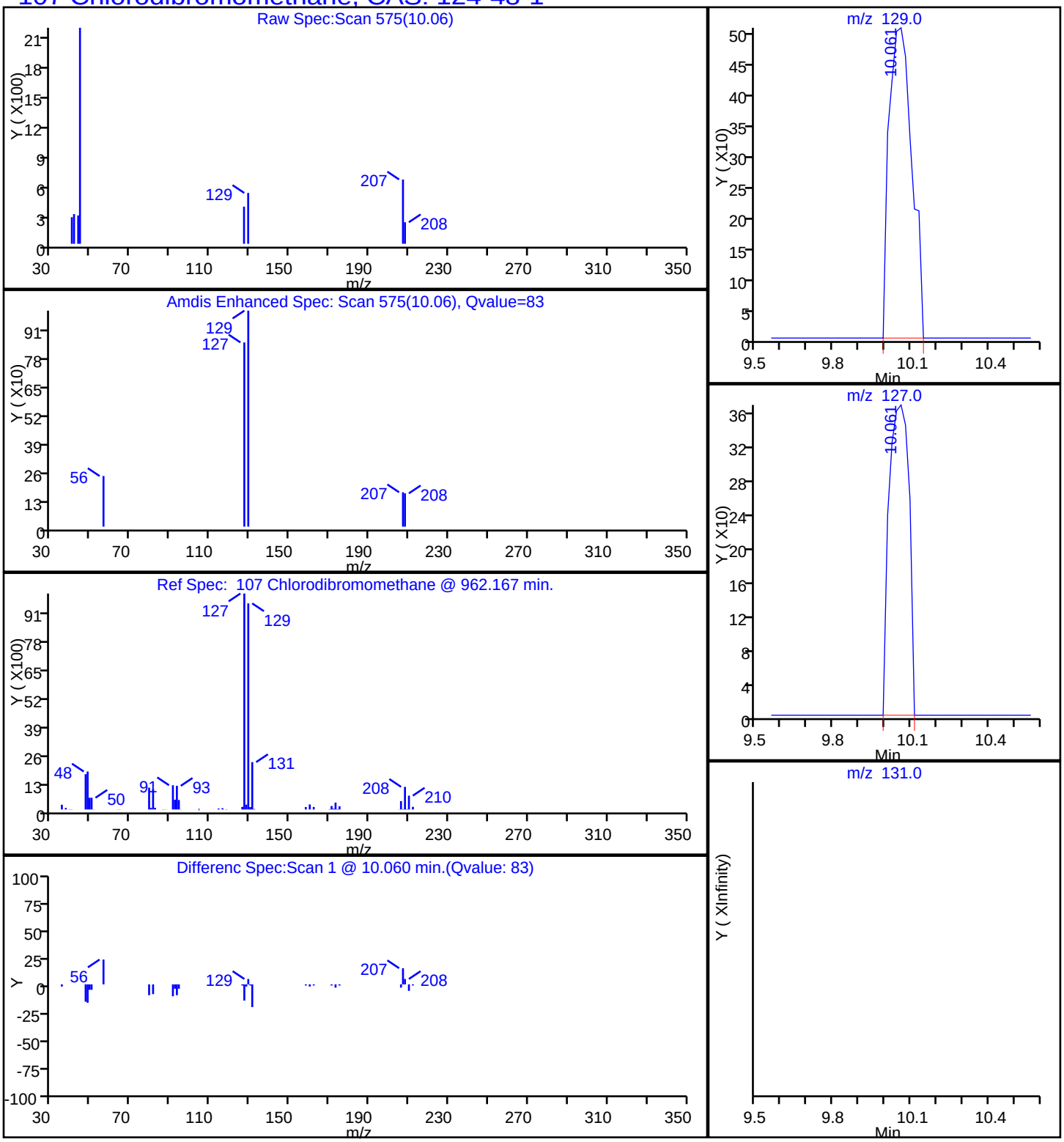


Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7		
Client ID:	54400-MW45S-0415				
Operator ID:	bergerb	ALS Bottle#:	27	Worklist Smp#:	29
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		

107 Chlorodibromomethane, CAS: 124-48-1

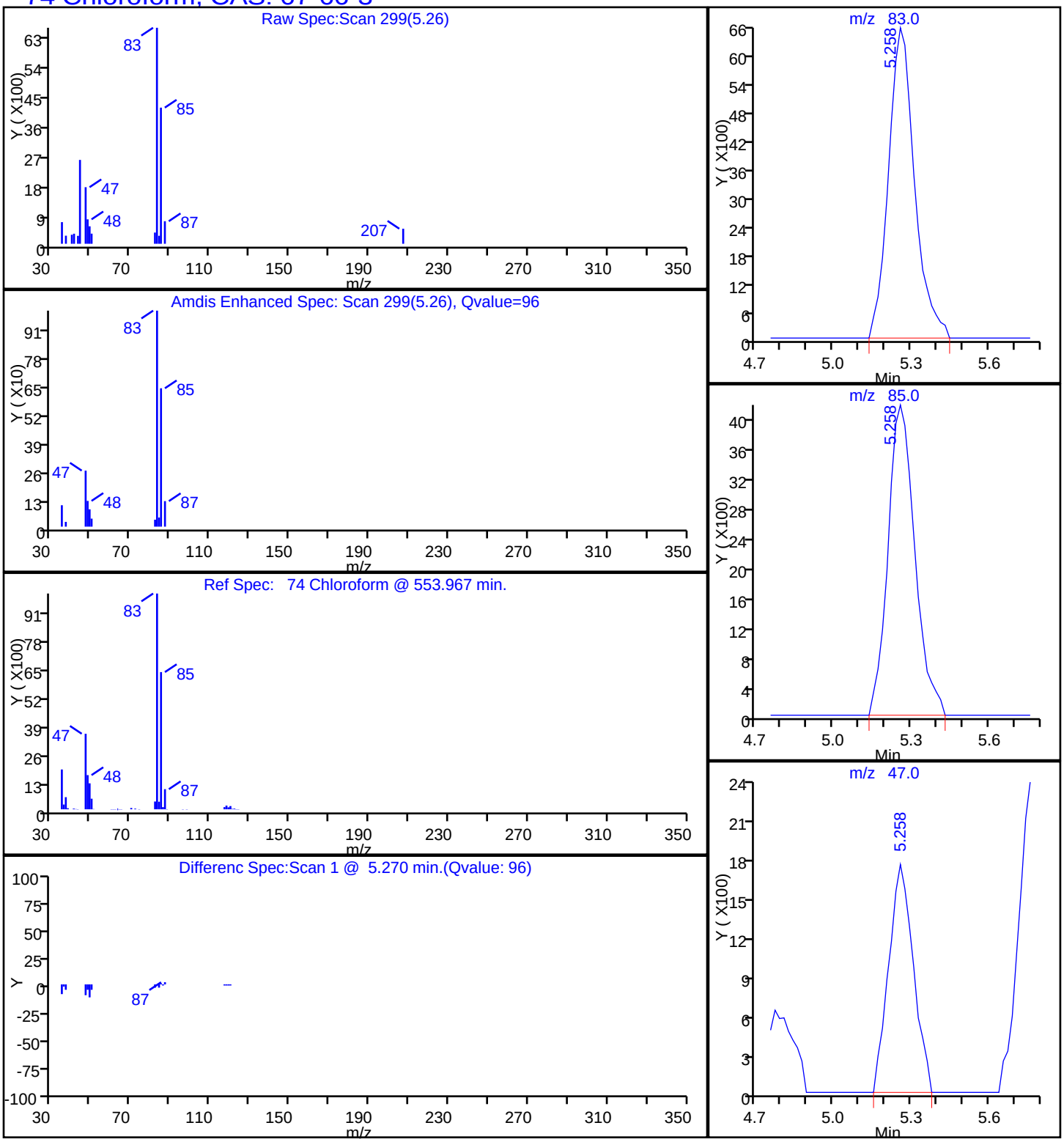


Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7		
Client ID:	54400-MW45S-0415				
Operator ID:	bergerb	ALS Bottle#:	27	Worklist Smp#:	29
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		

74 Chloroform, CAS: 67-66-3

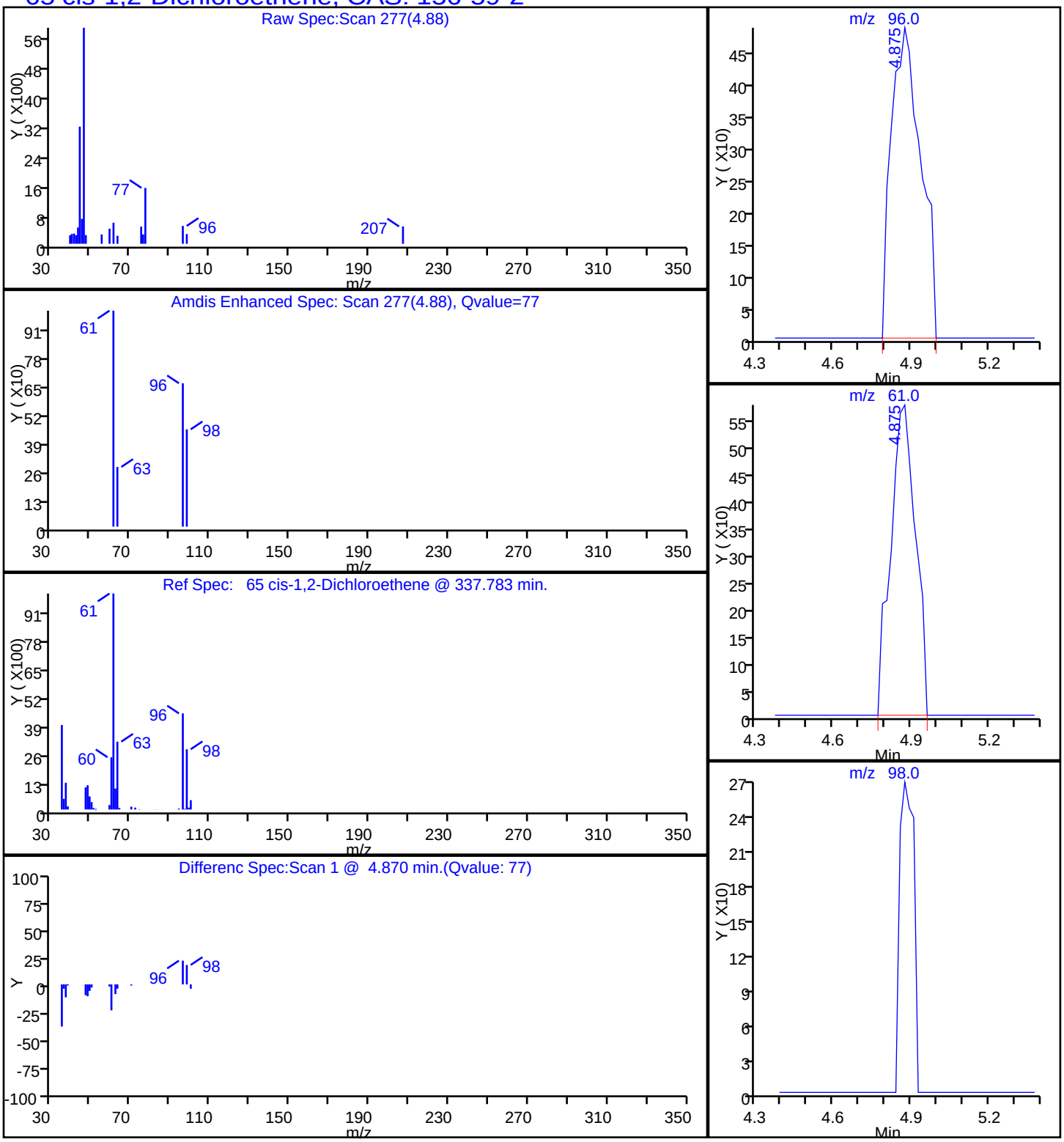


Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7		
Client ID:	54400-MW45S-0415				
Operator ID:	bergerb	ALS Bottle#:	27	Worklist Smp#:	29
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		

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

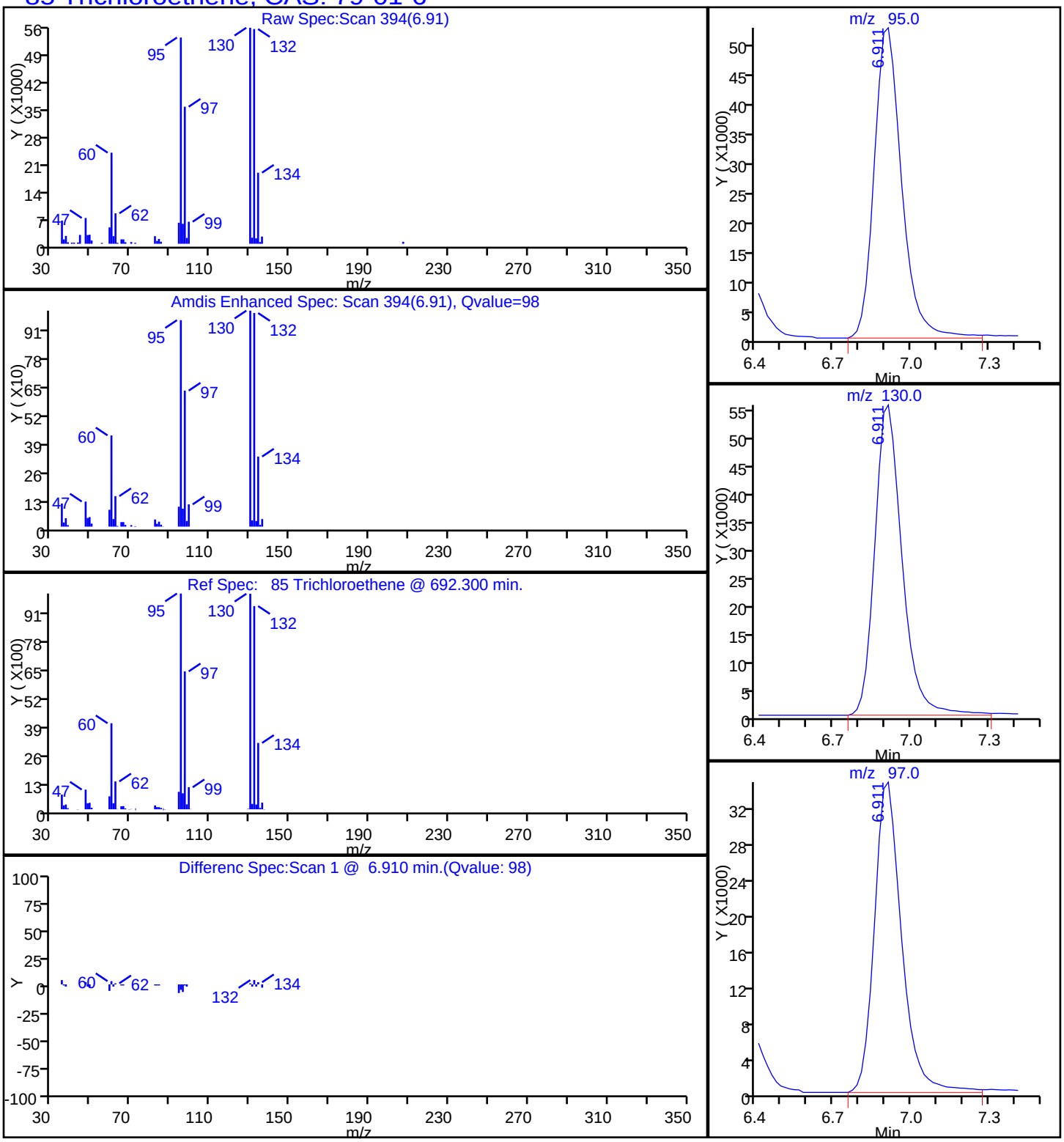


Report Date: 06-May-2015 15:22:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7184.D				
Injection Date:	06-May-2015 05:52:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-7	Lab Sample ID:	280-68518-7		
Client ID:	54400-MW45S-0415				
Operator ID:	bergerb	ALS Bottle#:	27	Worklist Smp#:	29
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		

85 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW42-0415 | Lab Sample ID: 280-68518-8
Matrix: Water | Lab File ID: Z7185.D
Analysis Method: 8260B | Date Collected: 04/28/2015 09:20
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 06:15
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.: 276091 | 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	0.75	J	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	0.37	J	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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW42-0415 | Lab Sample ID: 280-68518-8
Matrix: Water | Lab File ID: Z7185.D
Analysis Method: 8260B | Date Collected: 04/28/2015 09:20
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 06:15
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.: 276091 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	0.94	J	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.62	J	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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-MW42-0415 | Lab Sample ID: 280-68518-8

Matrix: Water | Lab File ID: Z7185.D

Analysis Method: 8260B | Date Collected: 04/28/2015 09:20

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 06:15

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.: 276091 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		81-118
460-00-4	4-Bromofluorobenzene (Surr)	105		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	94		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7185.D
Lims ID: 280-68518-C-8 Lab Sample ID: 280-68518-8
Client ID: 54400-MW42-0415
Sample Type: Client
Inject. Date: 06-May-2015 06:15:30 ALS Bottle#: 28 Worklist Smp#: 30
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-C-8 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:21:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.482	3.483	-0.001	93	137175	250.0	
* 2 Fluorobenzene	96	6.371	6.389	-0.018	98	753694	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.017	11.017	0.000	88	180715	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.123	15.124	-0.001	96	313823	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.466	5.466	0.000	93	350092	10.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.901	5.901	0.000	94	145352	10.4	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	667951	9.88	
$ 11 4-Bromofluorobenzene (Surr	95	13.053	13.053	0.000	86	375854	11.0	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96		3.048				ND	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73		3.778				ND	
62 1,1-Dichloroethane	63		4.196				ND	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96		4.875				ND	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83	5.257	5.257	0.000	94	24123	0.6209	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117	5.762	5.780	-0.018	93	12750	0.3725	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95		6.911				ND	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83	7.589	7.607	-0.018	97	22293	0.7497	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129	10.042	10.060	-0.018	88	17968	0.9358	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

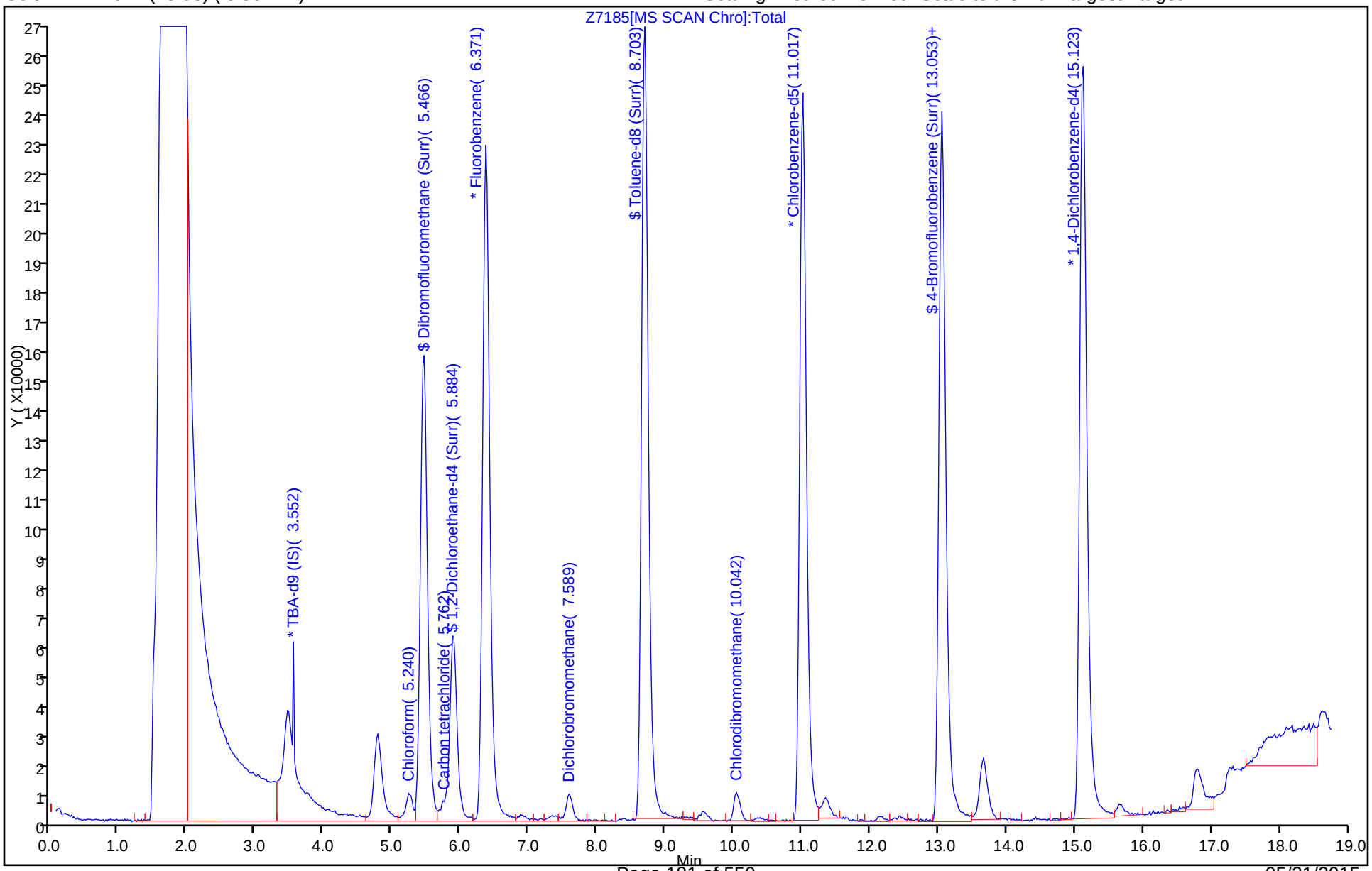
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:21:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7185.D				
Injection Date:	06-May-2015 06:15:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-C-8	Lab Sample ID:	280-68518-8	Worklist Smp#:	30
Client ID:	54400-MW42-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
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

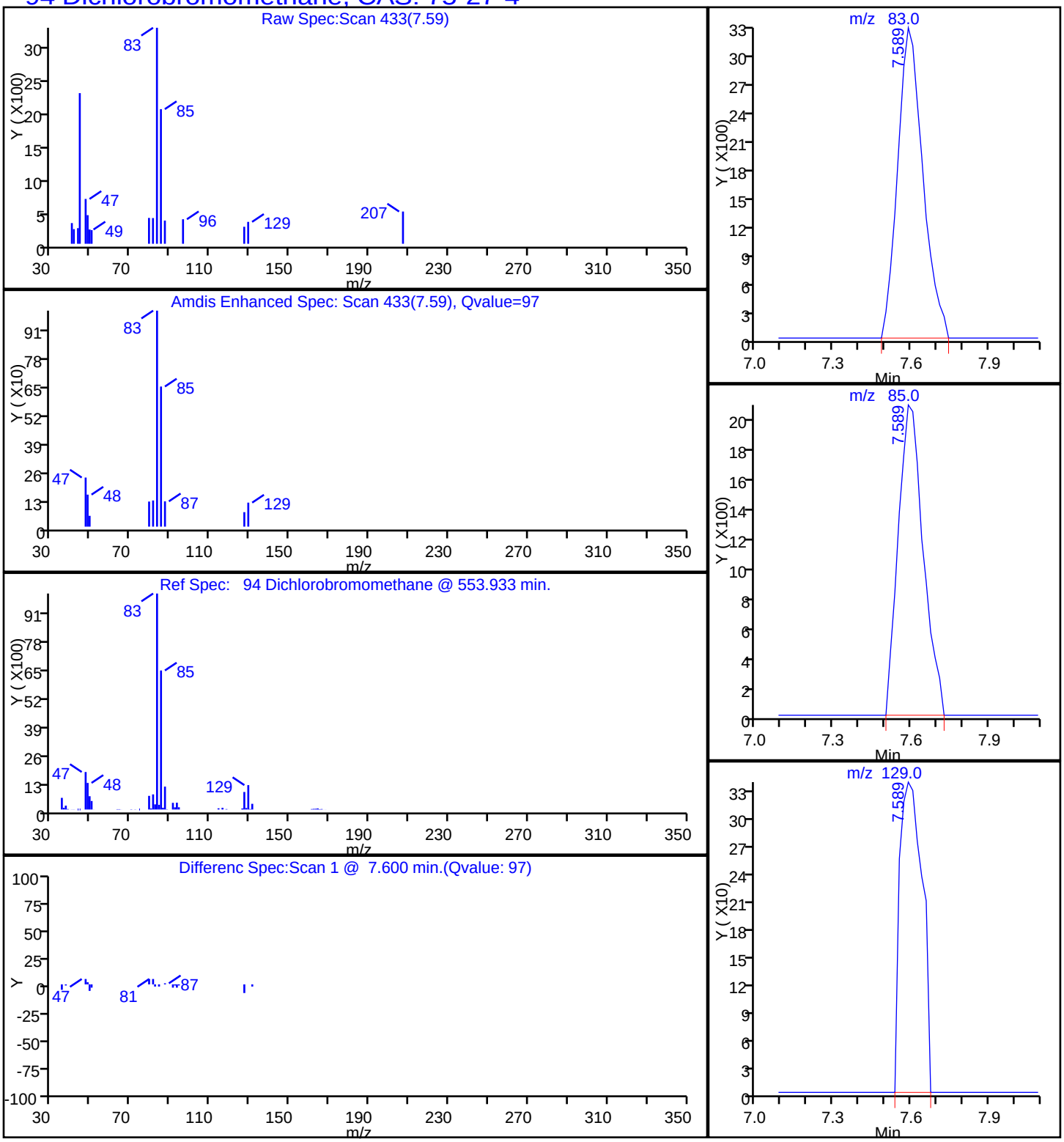


Report Date: 06-May-2015 15:21:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7185.D				
Injection Date:	06-May-2015 06:15:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-8	Lab Sample ID:	280-68518-8		
Client ID:	54400-MW42-0415				
Operator ID:	bergerb	ALS Bottle#:	28	Worklist Smp#:	30
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		

94 Dichlorobromomethane, CAS: 75-27-4

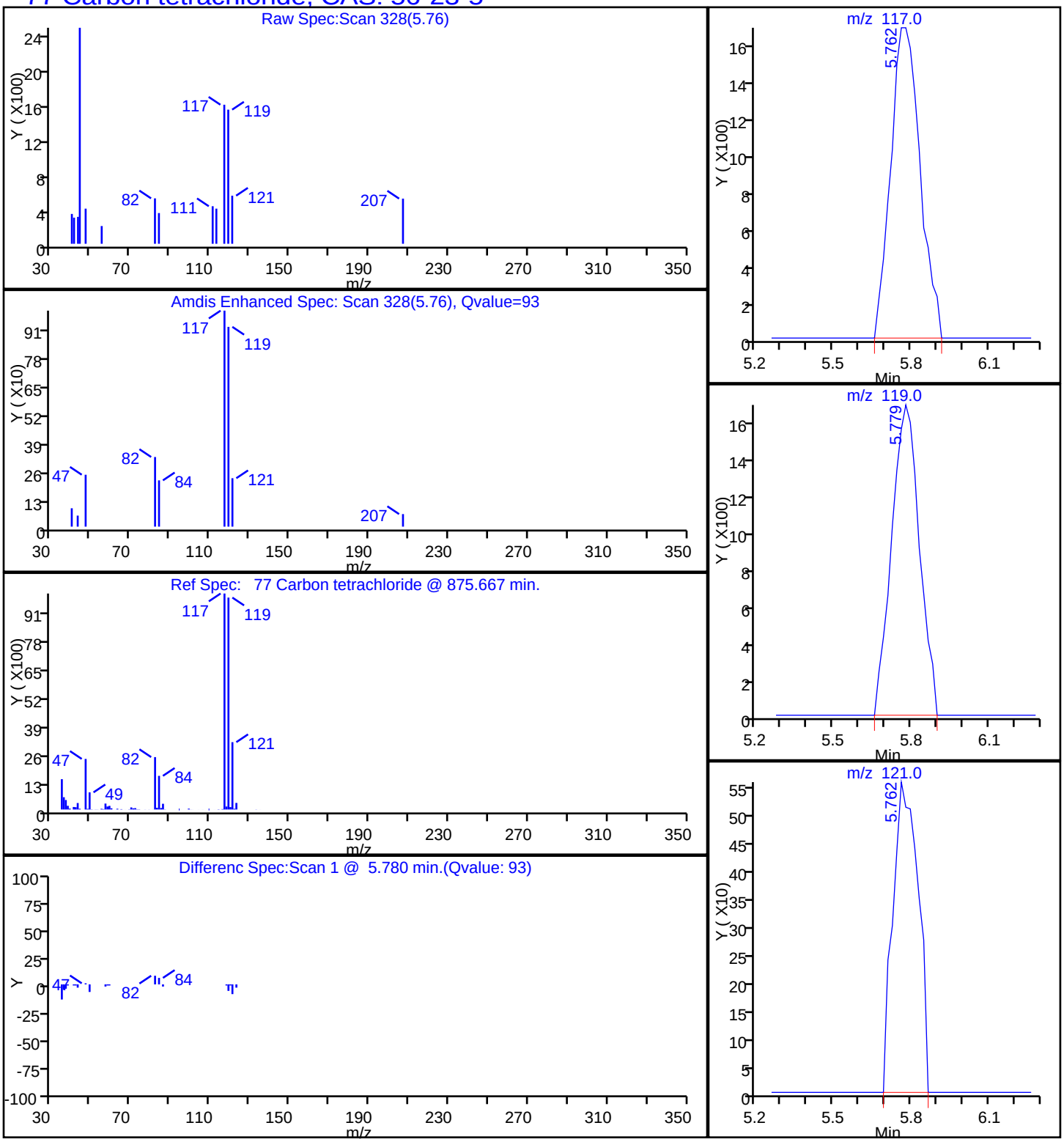


Report Date: 06-May-2015 15:21:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7185.D				
Injection Date:	06-May-2015 06:15:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-8	Lab Sample ID:	280-68518-8		
Client ID:	54400-MW42-0415				
Operator ID:	bergerb	ALS Bottle#:	28	Worklist Smp#:	30
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		

77 Carbon tetrachloride, CAS: 56-23-5

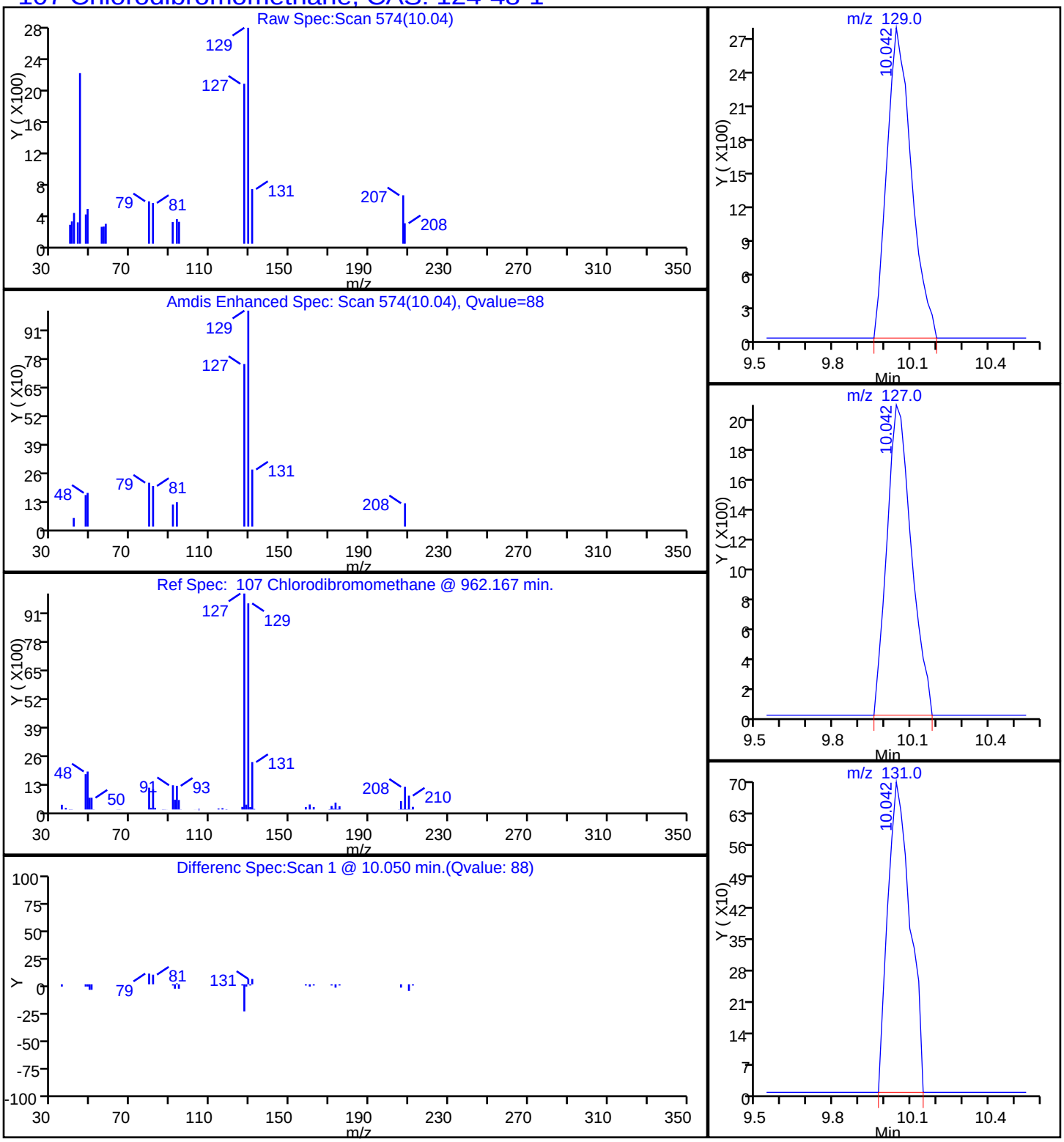


Report Date: 06-May-2015 15:21:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7185.D				
Injection Date:	06-May-2015 06:15:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-8	Lab Sample ID:	280-68518-8		
Client ID:	54400-MW42-0415				
Operator ID:	bergerb	ALS Bottle#:	28	Worklist Smp#:	30
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		

107 Chlorodibromomethane, CAS: 124-48-1

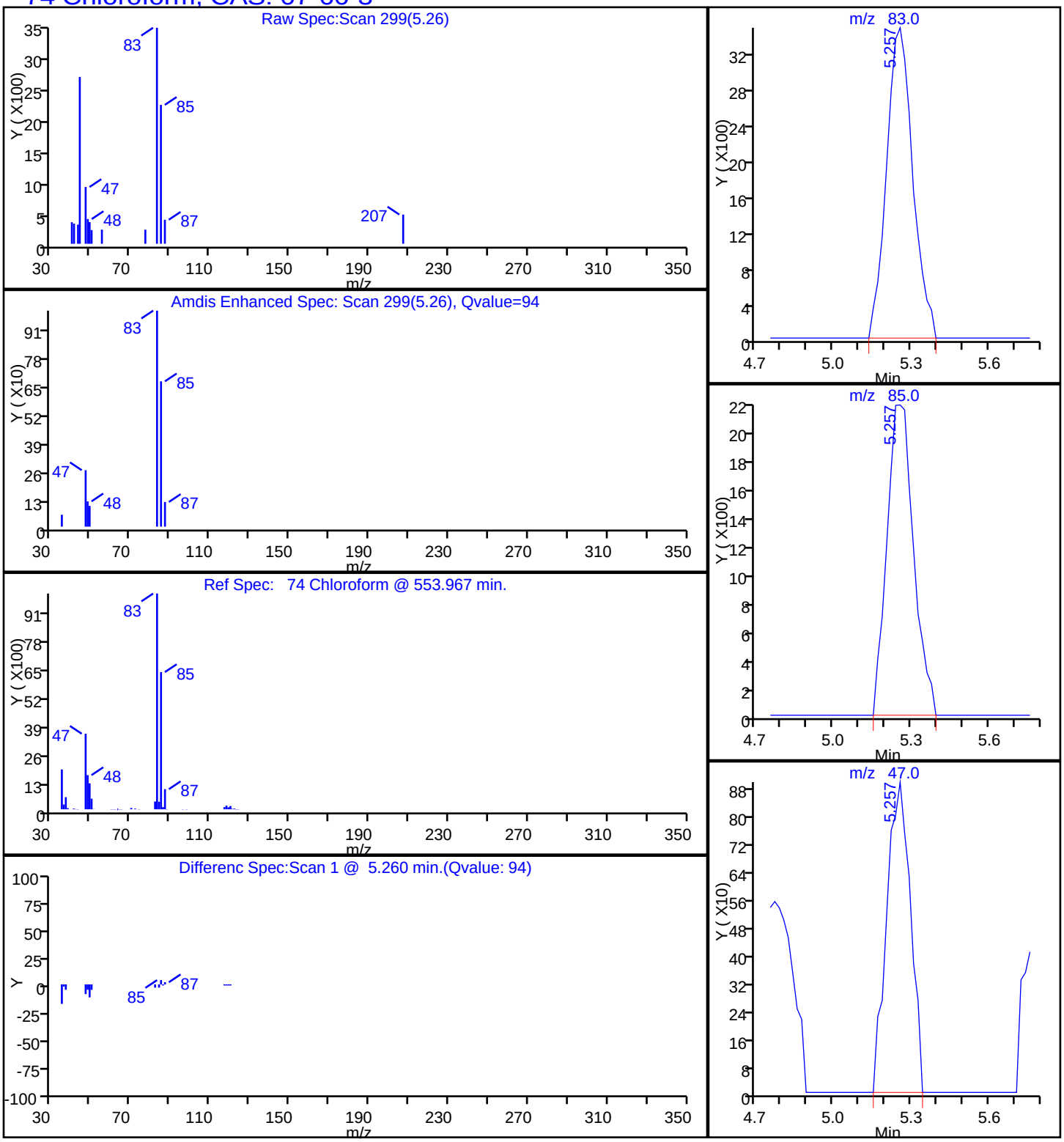


Report Date: 06-May-2015 15:21:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7185.D				
Injection Date:	06-May-2015 06:15:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-8	Lab Sample ID:	280-68518-8		
Client ID:	54400-MW42-0415				
Operator ID:	bergerb	ALS Bottle#:	28	Worklist Smp#:	30
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		

74 Chloroform, CAS: 67-66-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW67-0415 | Lab Sample ID: 280-68518-9
Matrix: Water | Lab File ID: Z7186.D
Analysis Method: 8260B | Date Collected: 04/27/2015 17:55
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 06:38
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.: 276091 | 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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW67-0415 | Lab Sample ID: 280-68518-9
Matrix: Water | Lab File ID: Z7186.D
Analysis Method: 8260B | Date Collected: 04/27/2015 17:55
Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 06:38
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.: 276091 | 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	1.0	J	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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-MW67-0415 | Lab Sample ID: 280-68518-9

Matrix: Water | Lab File ID: Z7186.D

Analysis Method: 8260B | Date Collected: 04/27/2015 17:55

Sample wt/vol: 20(mL) | Date Analyzed: 05/06/2015 06:38

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.: 276091 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		81-118
460-00-4	4-Bromofluorobenzene (Surr)	112		85-114
1868-53-7	Dibromofluoromethane (Surr)	105		80-119
2037-26-5	Toluene-d8 (Surr)	103		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7186.D
Lims ID: 280-68518-C-9 Lab Sample ID: 280-68518-9
Client ID: 54400-MW67-0415
Sample Type: Client
Inject. Date: 06-May-2015 06:38:30 ALS Bottle#: 29 Worklist Smp#: 31
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-C-9 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:21:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.489	3.483	0.006	88	138810	250.0	
* 2 Fluorobenzene	96	6.377	6.389	-0.012	99	754701	12.5	
* 3 1,4-Dioxane-d8	96	7.352	7.292	0.060	30	6249	0	
* 4 Chlorobenzene-d5	119	11.023	11.017	0.006	88	176359	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.112	15.124	-0.012	96	311774	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.472	5.466	0.006	93	369022	11.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.907	5.901	0.006	95	155607	11.1	
$ 10 Toluene-d8 (Surr)	98	8.709	8.703	0.006	93	711679	10.8	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.053	-0.011	86	396750	11.7	
27 Dichlorodifluoromethane	85		1.917				ND	
30 Chloromethane	50		2.004				ND	
32 Vinyl chloride	62		2.108				ND	
35 Bromomethane	94		2.352				ND	
36 Chloroethane	64		2.404				ND	
38 Trichlorofluoromethane	101		2.613				ND	
45 1,1-Dichloroethene	96		3.048				ND	
48 Acetone	43		3.065				ND	
50 Carbon disulfide	76		3.274				ND	
54 Methylene Chloride	84		3.465				ND	
55 2-Methyl-2-propanol	59		3.570				ND	
57 trans-1,2-Dichloroethene	96		3.761				ND	
56 Methyl tert-butyl ether	73	3.767	3.778	-0.011	98	30345	1.01	
62 1,1-Dichloroethane	63		4.196				ND	
67 2-Butanone (MEK)	43		4.875				ND	
65 cis-1,2-Dichloroethene	96		4.875				ND	
66 2,2-Dichloropropane	77		4.909				ND	
71 Chlorobromomethane	128		5.171				ND	
74 Chloroform	83		5.257				ND	
75 1,1,1-Trichloroethane	97		5.553				ND	
78 1,1-Dichloropropene	75		5.745				ND	
77 Carbon tetrachloride	117		5.780				ND	
82 1,2-Dichloroethane	62		6.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.023				ND	
85 Trichloroethene	95		6.911				ND	
90 1,2-Dichloropropane	63		7.206				ND	
92 Dibromomethane	93		7.363				ND	
94 Dichlorobromomethane	83		7.607				ND	
97 cis-1,3-Dichloropropene	75		8.268				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529				ND	
99 Toluene	91		8.807				ND	
100 trans-1,3-Dichloropropene	75		9.120				ND	
102 1,1,2-Trichloroethane	97		9.416				ND	
104 1,3-Dichloropropane	76		9.677				ND	
103 Tetrachloroethene	164		9.695				ND	
105 2-Hexanone	43		9.851				ND	
107 Chlorodibromomethane	129		10.060				ND	
109 Ethylene Dibromide	107		10.234				ND	
111 Chlorobenzene	112		11.069				ND	
113 1,1,1,2-Tetrachloroethane	131		11.209				ND	
112 Ethylbenzene	106		11.278				ND	
114 m-Xylene & p-Xylene	106		11.487				ND	
115 o-Xylene	106		12.148				ND	
116 Styrene	104		12.166				ND	
117 Bromoform	173		12.461				ND	
118 Isopropylbenzene	105		12.809				ND	
121 Bromobenzene	156		13.297				ND	
122 1,1,2,2-Tetrachloroethane	83		13.314				ND	
124 1,2,3-Trichloropropane	110		13.366				ND	
123 N-Propylbenzene	120		13.540				ND	
126 2-Chlorotoluene	126		13.662				ND	
128 4-Chlorotoluene	126		13.853				ND	
127 1,3,5-Trimethylbenzene	105		13.871				ND	
129 tert-Butylbenzene	119		14.445				ND	
130 1,2,4-Trimethylbenzene	105		14.532				ND	
131 sec-Butylbenzene	134		14.845				ND	
132 1,3-Dichlorobenzene	146		15.002				ND	
133 4-Isopropyltoluene	119		15.124				ND	
134 1,4-Dichlorobenzene	146		15.158				ND	
138 1,2-Dichlorobenzene	146		15.802				ND	
137 n-Butylbenzene	91		15.855				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933				ND	
141 1,2,4-Trichlorobenzene	180		17.873				ND	
142 Hexachlorobutadiene	225		18.064				ND	
143 Naphthalene	128		18.099				ND	
144 1,2,3-Trichlorobenzene	180		18.343				ND	

Reagents:

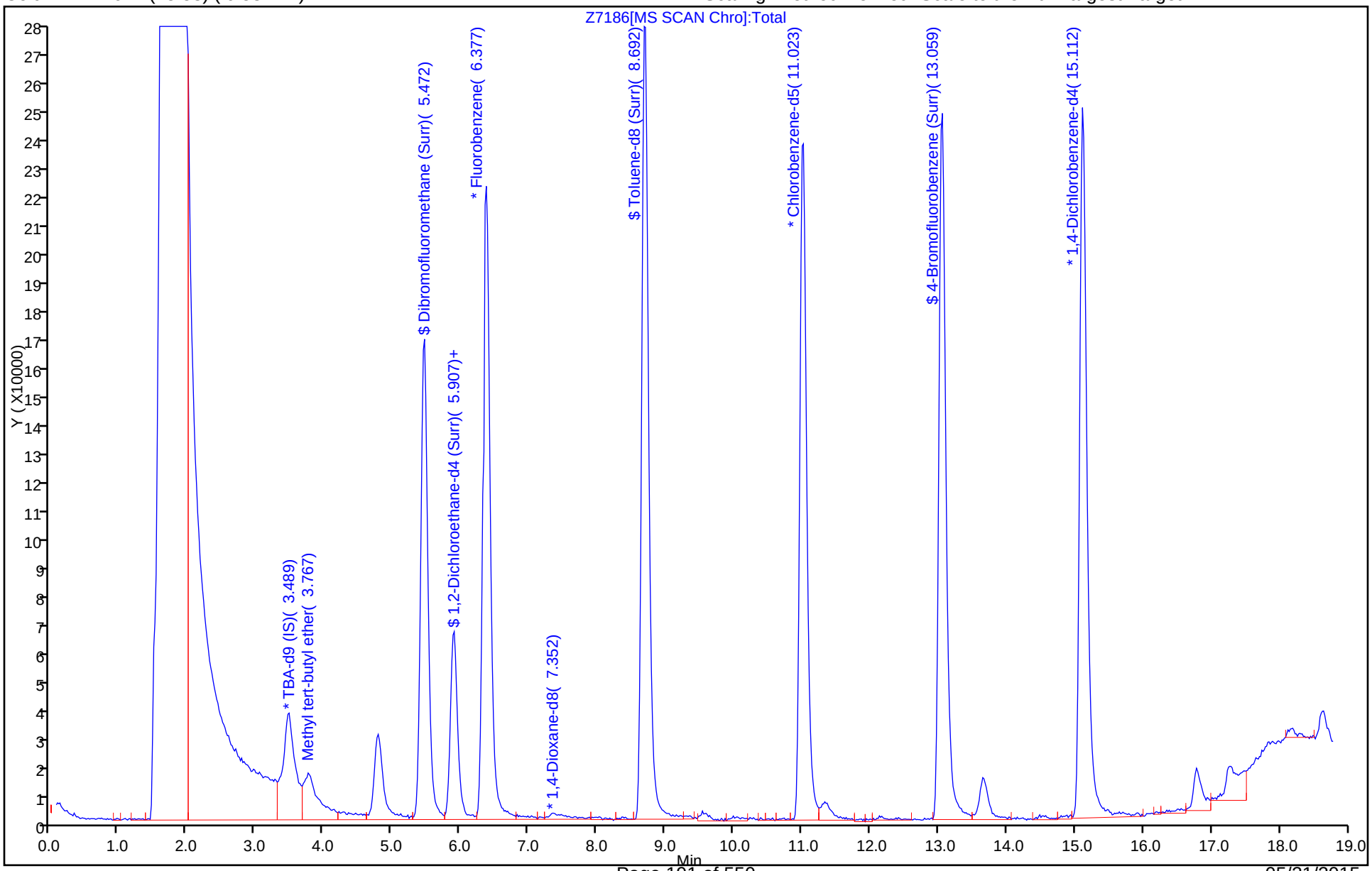
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:21:19 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7186.D				
Injection Date:	06-May-2015 06:38:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-C-9	Lab Sample ID:	280-68518-9	Worklist Smp#:	31
Client ID:	54400-MW67-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
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

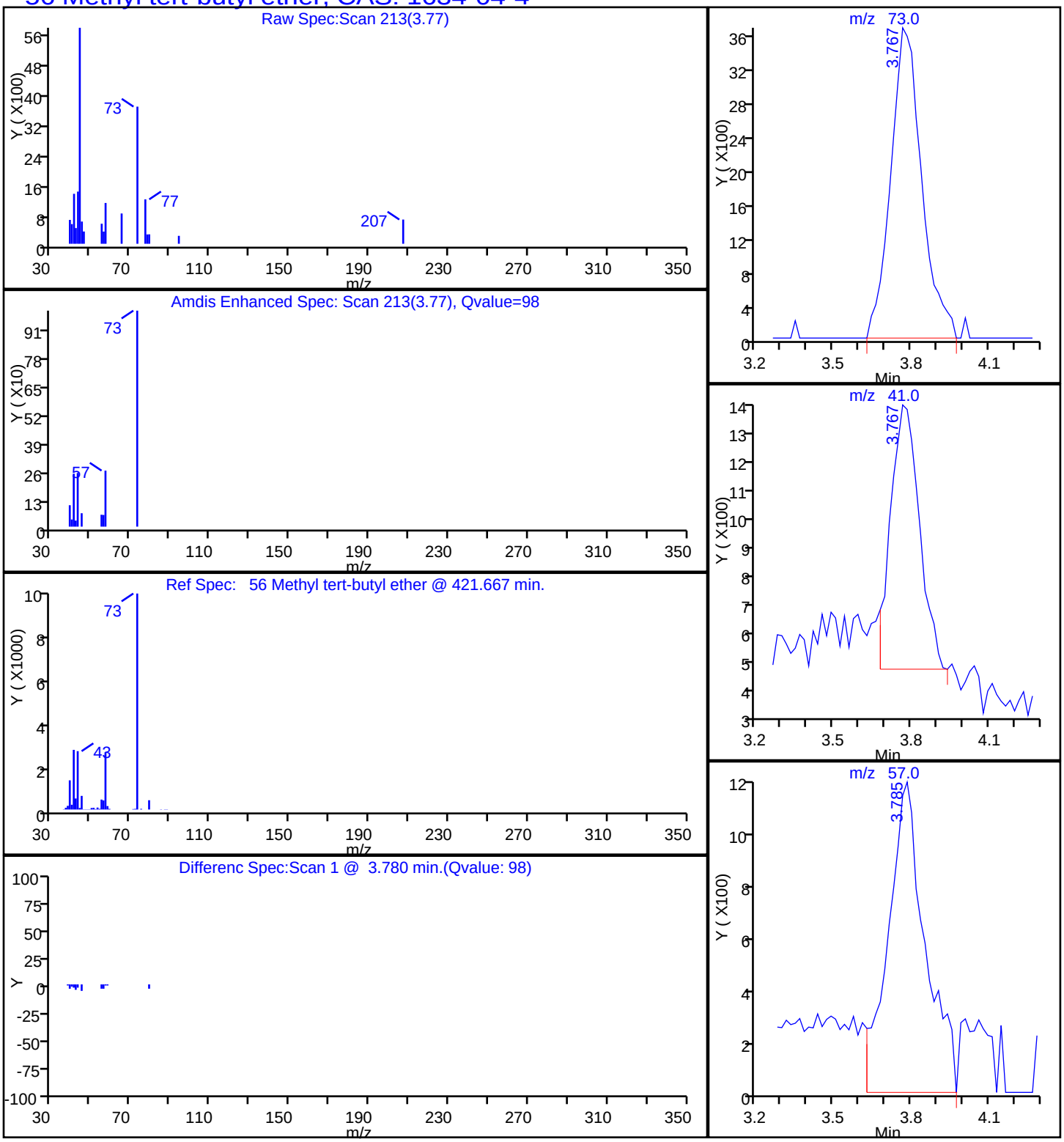


Report Date: 06-May-2015 15:21:19 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7186.D				
Injection Date:	06-May-2015 06:38:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-C-9	Lab Sample ID:	280-68518-9		
Client ID:	54400-MW67-0415				
Operator ID:	bergerb	ALS Bottle#:	29	Worklist Smp#:	31
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		

56 Methyl tert-butyl ether, CAS: 1634-04-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW178-0415 | Lab Sample ID: 280-68518-10
Matrix: Water | Lab File ID: Z7288.D
Analysis Method: 8260B | Date Collected: 04/28/2015 17:23
Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 22:45
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.: 276534 | 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	0.85	J	1.0	0.80	0.16
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	13		2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
124-48-1	Chlorodibromomethane	0.40	U	1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW178-0415 | Lab Sample ID: 280-68518-10
Matrix: Water | Lab File ID: Z7288.D
Analysis Method: 8260B | Date Collected: 04/28/2015 17:23
Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 22:45
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.: 276534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	2.2		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	0.44	J	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	56		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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-MW178-0415 | Lab Sample ID: 280-68518-10

Matrix: Water | Lab File ID: Z7288.D

Analysis Method: 8260B | Date Collected: 04/28/2015 17:23

Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 22:45

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.: 276534 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		81-118
460-00-4	4-Bromofluorobenzene (Surr)	106		85-114
1868-53-7	Dibromofluoromethane (Surr)	103		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7288.D
Lims ID: 280-68518-B-10 Lab Sample ID: 280-68518-10
Client ID: 54400-MW179-0415
Sample Type: Client
Inject. Date: 07-May-2015 22:45:30 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-B-10 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:28:44 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:28:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.483	3.489	-0.006	90	91520	250.0	
* 2 Fluorobenzene	96	6.389	6.378	0.011	99	667626	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.017	11.024	-0.007	87	152952	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.124	15.130	-0.006	95	276500	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.466	5.473	-0.007	94	321401	10.8	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.901	5.908	-0.007	94	121723	9.83	
$ 10 Toluene-d8 (Surr)	98	8.703	8.709	-0.006	93	615336	10.7	
$ 11 4-Bromofluorobenzene (Surr	95	13.053	13.060	-0.007	89	336313	11.2	
27 Dichlorodifluoromethane	85		1.923				ND	
30 Chloromethane	50		1.993				ND	
32 Vinyl chloride	62		2.115				ND	
35 Bromomethane	94		2.341				ND	
36 Chloroethane	64		2.393				ND	
38 Trichlorofluoromethane	101		2.602				ND	
45 1,1-Dichloroethene	96	3.030	3.037	-0.007	99	2555699	146.2	E
48 Acetone	43		3.054				ND	
50 Carbon disulfide	76		3.280				ND	
54 Methylene Chloride	84		3.472				ND	
55 2-Methyl-2-propanol	59		3.559				ND	
57 trans-1,2-Dichloroethene	96		3.768				ND	
56 Methyl tert-butyl ether	73		3.785				ND	
62 1,1-Dichloroethane	63	4.196	4.203	-0.007	94	29853	0.8526	
67 2-Butanone (MEK)	43		4.881				ND	
65 cis-1,2-Dichloroethene	96	4.875	4.881	-0.006	77	7836	0.4356	
66 2,2-Dichloropropane	77		4.916				ND	
71 Chlorobromomethane	128		5.177				ND	
74 Chloroform	83	5.258	5.264	-0.006	95	75196	2.18	
75 1,1,1-Trichloroethane	97		5.560				ND	
78 1,1-Dichloropropene	75		5.751				ND	
77 Carbon tetrachloride	117	5.780	5.786	-0.006	99	405961	13.4	
82 1,2-Dichloroethane	62		6.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.012				ND	
85 Trichloroethene	95	6.911	6.917	-0.006	97	1314253	56.2	
90 1,2-Dichloropropane	63		7.196				ND	
92 Dibromomethane	93		7.370				ND	
94 Dichlorobromomethane	83		7.613				ND	
97 cis-1,3-Dichloropropene	75		8.274				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.535				ND	
99 Toluene	91		8.814				ND	
100 trans-1,3-Dichloropropene	75		9.127				ND	
102 1,1,2-Trichloroethane	97		9.423				ND	
104 1,3-Dichloropropane	76		9.684				ND	
103 Tetrachloroethene	164		9.701				ND	
105 2-Hexanone	43		9.858				ND	
107 Chlorodibromomethane	129		10.049				ND	
109 Ethylene Dibromide	107		10.241				ND	
111 Chlorobenzene	112		11.076				ND	
113 1,1,1,2-Tetrachloroethane	131		11.215				ND	
112 Ethylbenzene	106		11.285				ND	
114 m-Xylene & p-Xylene	106		11.493				ND	
115 o-Xylene	106		12.155				ND	
116 Styrene	104		12.172				ND	
117 Bromoform	173		12.468				ND	
118 Isopropylbenzene	105		12.816				ND	
121 Bromobenzene	156		13.303				ND	
122 1,1,2,2-Tetrachloroethane	83		13.321				ND	
124 1,2,3-Trichloropropane	110		13.373				ND	
123 N-Propylbenzene	120		13.547				ND	
126 2-Chlorotoluene	126		13.669				ND	
128 4-Chlorotoluene	126		13.860				ND	
127 1,3,5-Trimethylbenzene	105		13.877				ND	
129 tert-Butylbenzene	119		14.452				ND	
130 1,2,4-Trimethylbenzene	105		14.539				ND	
131 sec-Butylbenzene	134		14.852				ND	
132 1,3-Dichlorobenzene	146		15.008				ND	
133 4-Isopropyltoluene	119		15.130				ND	
134 1,4-Dichlorobenzene	146		15.165				ND	
138 1,2-Dichlorobenzene	146		15.809				ND	
137 n-Butylbenzene	91		15.844				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.940				ND	
141 1,2,4-Trichlorobenzene	180		17.862				ND	
142 Hexachlorobutadiene	225		18.071				ND	
143 Naphthalene	128		18.106				ND	
144 1,2,3-Trichlorobenzene	180		18.349				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

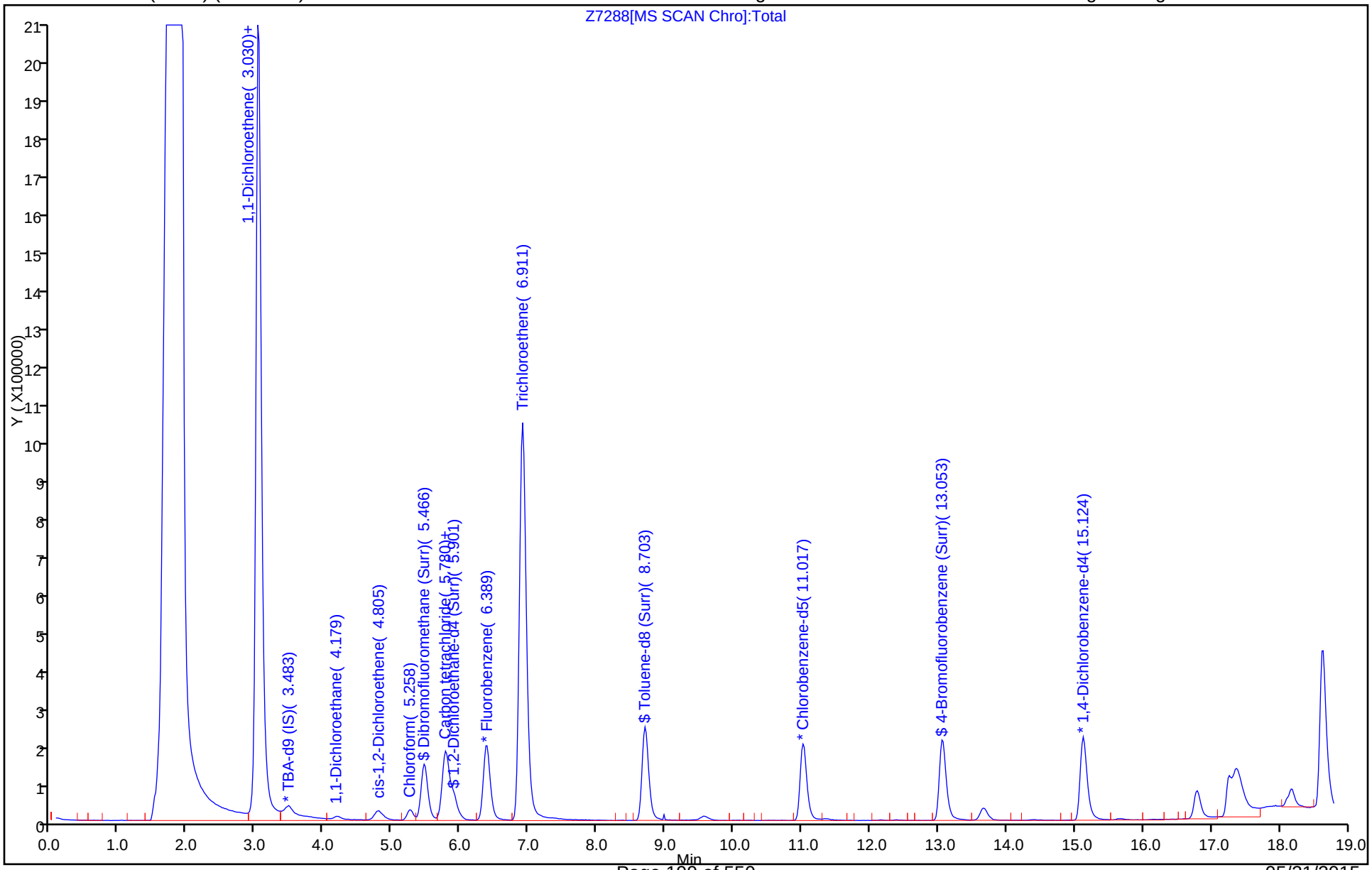
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:28:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7288.D				
Injection Date:	07-May-2015 22:45:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10	Worklist Smp#:	10
Client ID:	54400-MW179-0415				
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

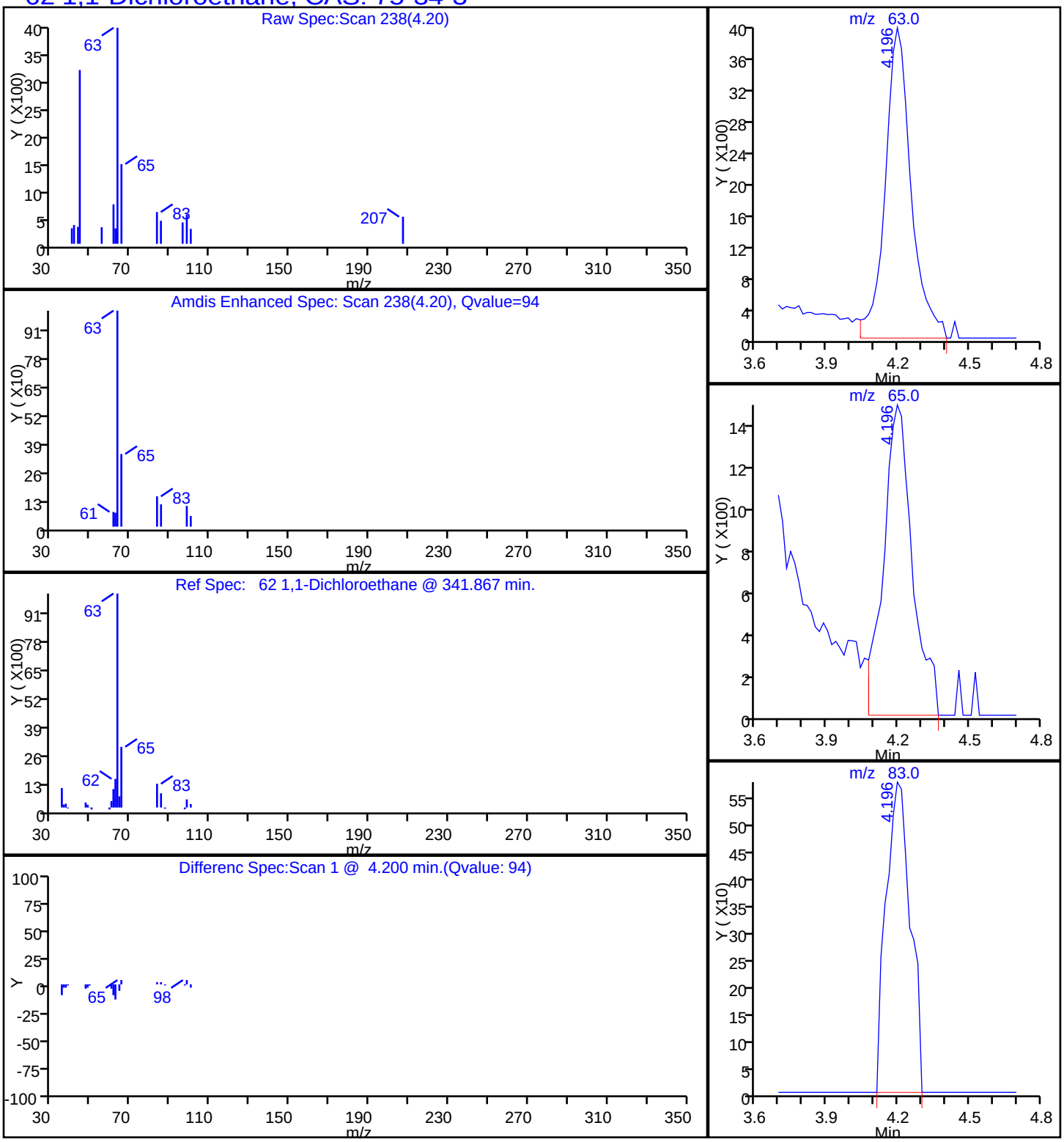


Report Date: 08-May-2015 16:28:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7288.D				
Injection Date:	07-May-2015 22:45:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10		
Client ID:	54400-MW179-0415				
Operator ID:	bergerb	ALS Bottle#:	6	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		

62 1,1-Dichloroethane, CAS: 75-34-3

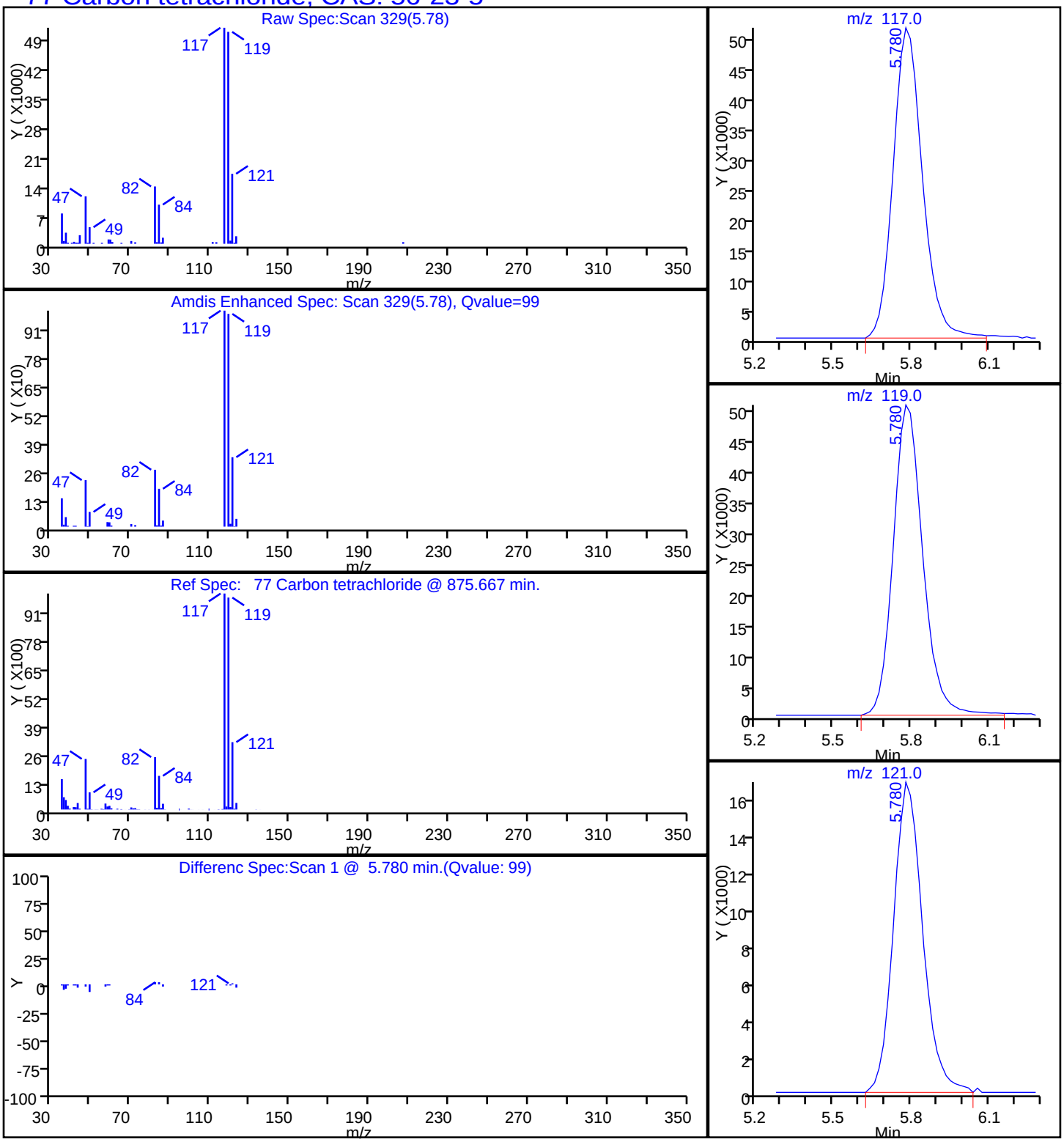


Report Date: 08-May-2015 16:28:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7288.D				
Injection Date:	07-May-2015 22:45:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10		
Client ID:	54400-MW179-0415				
Operator ID:	bergerb	ALS Bottle#:	6	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		

77 Carbon tetrachloride, CAS: 56-23-5

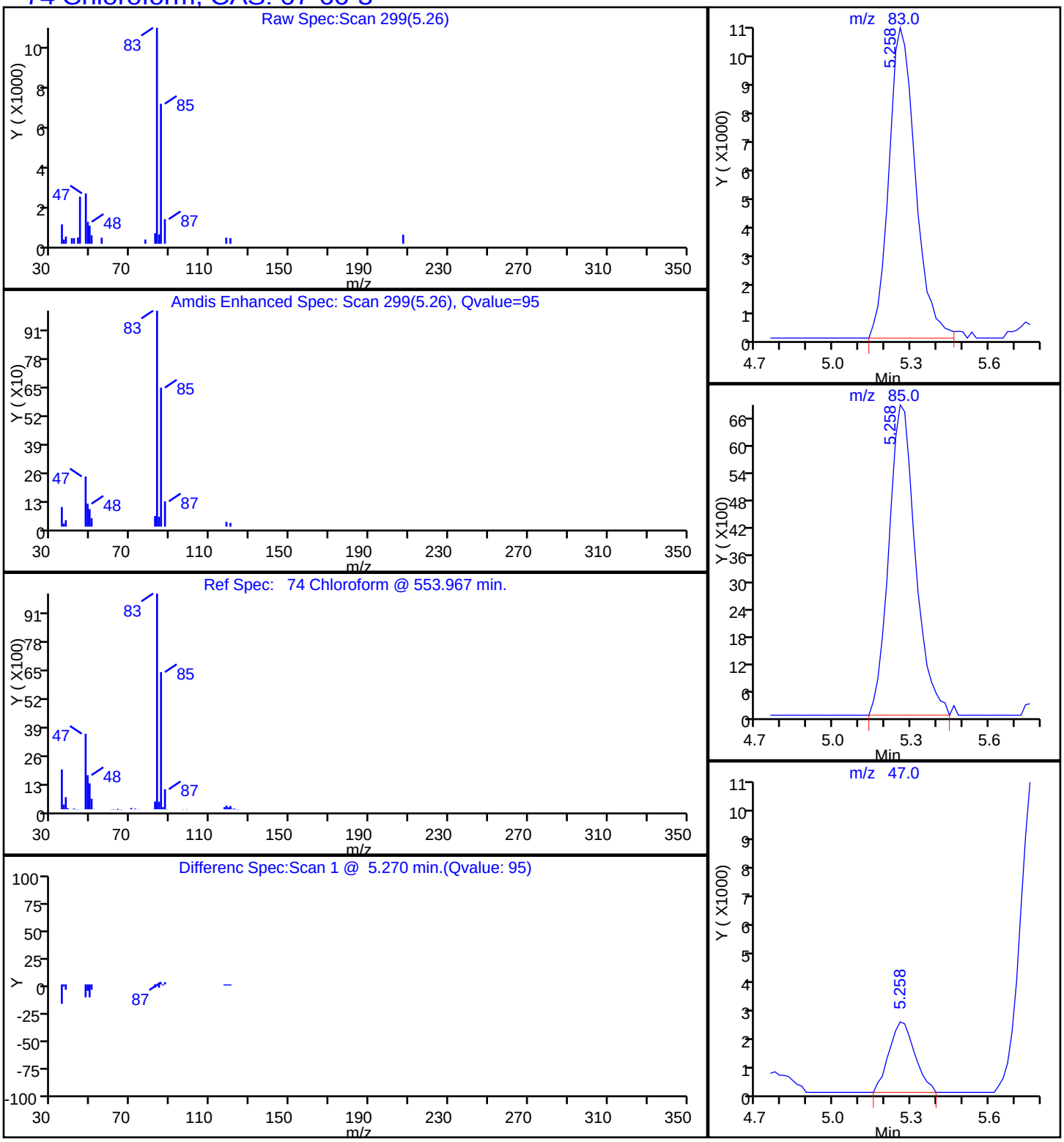


Report Date: 08-May-2015 16:28:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7288.D				
Injection Date:	07-May-2015 22:45:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10		
Client ID:	54400-MW179-0415				
Operator ID:	bergerb	ALS Bottle#:	6	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		

74 Chloroform, CAS: 67-66-3

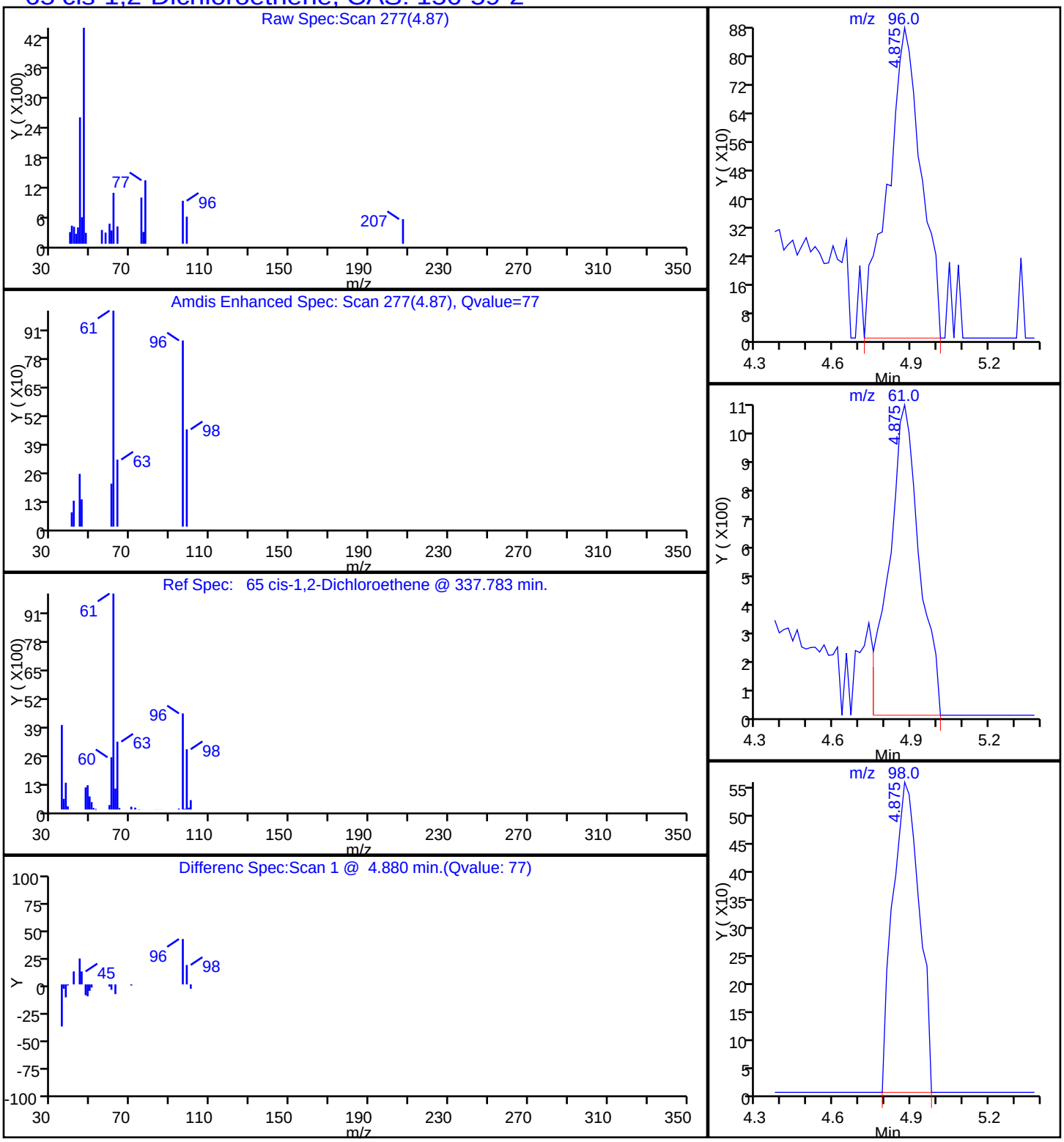


Report Date: 08-May-2015 16:28:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7288.D				
Injection Date:	07-May-2015 22:45:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10		
Client ID:	54400-MW179-0415				
Operator ID:	bergerb	ALS Bottle#:	6	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		

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

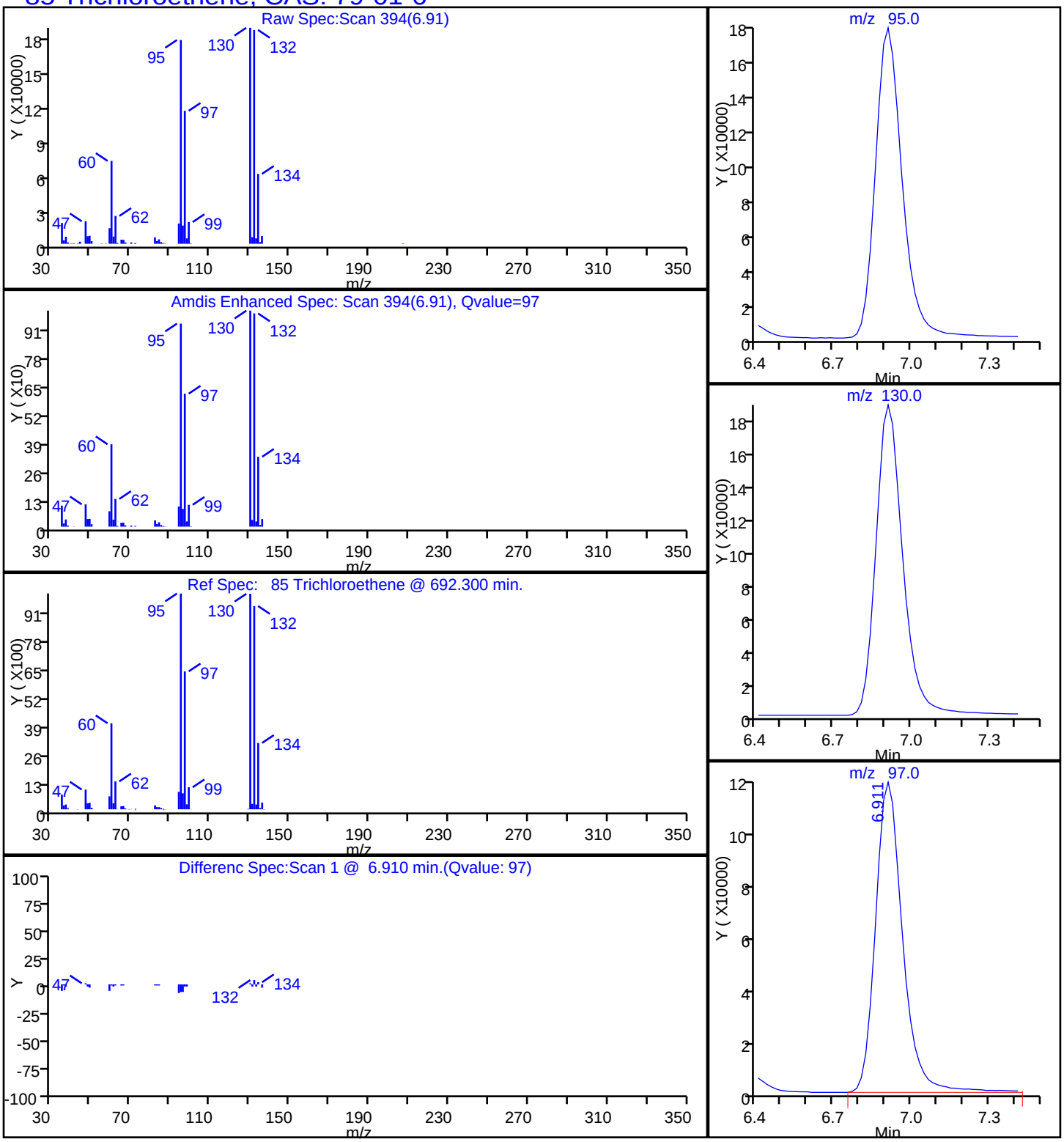


Report Date: 08-May-2015 16:28:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7288.D				
Injection Date:	07-May-2015 22:45:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10		
Client ID:	54400-MW179-0415				
Operator ID:	bergerb	ALS Bottle#:	6	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		

85 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW178-0415 DL
Lab Sample ID: 280-68518-10 DL
Matrix: Water
Lab File ID: Z7289.D
Analysis Method: 8260B
Date Collected: 04/28/2015 17:23
Sample wt/vol: 2(mL)
Date Analyzed: 05/07/2015 23:07
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.: 276534
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-35-4	1,1-Dichloroethene	140		10	8.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	102		85-114
1868-53-7	Dibromofluoromethane (Surr)	103		80-119
2037-26-5	Toluene-d8 (Surr)	101		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7289.D
Lims ID: 280-68518-B-10 Lab Sample ID: 280-68518-10
Client ID: 54400-MW179-0415
Sample Type: Client
Inject. Date: 07-May-2015 23:07:30 ALS Bottle#: 7 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-B-10 pH<2 2ml
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:28:44 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:28:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.501	3.489	0.012	95	101714	250.0	
* 2 Fluorobenzene	96	6.389	6.378	0.011	99	653258	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.018	11.024	-0.006	87	150915	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.125	15.130	-0.006	95	278662	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.473	-0.006	94	313714	10.8	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.908	-0.006	94	120916	9.98	
$ 10 Toluene-d8 (Surr)	98	8.704	8.709	-0.005	93	599250	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.054	13.060	-0.006	89	327340	10.8	
27 Dichlorodifluoromethane	85		1.923				ND	
30 Chloromethane	50		1.993				ND	
32 Vinyl chloride	62		2.115				ND	
35 Bromomethane	94		2.341				ND	
36 Chloroethane	64		2.393				ND	
38 Trichlorofluoromethane	101		2.602				ND	
45 1,1-Dichloroethene	96	3.048	3.037	0.011	99	240439	14.1	
48 Acetone	43		3.054				ND	
50 Carbon disulfide	76		3.280				ND	
54 Methylene Chloride	84		3.472				ND	
55 2-Methyl-2-propanol	59		3.559				ND	
57 trans-1,2-Dichloroethene	96		3.768				ND	
56 Methyl tert-butyl ether	73		3.785				ND	
62 1,1-Dichloroethane	63		4.203				ND	
67 2-Butanone (MEK)	43		4.881				ND	
65 cis-1,2-Dichloroethene	96		4.881				ND	
66 2,2-Dichloropropane	77		4.916				ND	
71 Chlorobromomethane	128		5.177				ND	
74 Chloroform	83	5.258	5.264	-0.006	90	7855	0.2332	
75 1,1,1-Trichloroethane	97		5.560				ND	
78 1,1-Dichloropropene	75		5.751				ND	
77 Carbon tetrachloride	117	5.798	5.786	0.012	96	37447	1.26	
82 1,2-Dichloroethane	62		6.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.012				ND	
85 Trichloroethene	95	6.911	6.917	-0.006	98	124719	5.46	
90 1,2-Dichloropropane	63		7.196				ND	
92 Dibromomethane	93		7.370				ND	
94 Dichlorobromomethane	83		7.613				ND	
97 cis-1,3-Dichloropropene	75		8.274				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.535				ND	
99 Toluene	91		8.814				ND	
100 trans-1,3-Dichloropropene	75		9.127				ND	
102 1,1,2-Trichloroethane	97		9.423				ND	
104 1,3-Dichloropropane	76		9.684				ND	
103 Tetrachloroethene	164		9.701				ND	
105 2-Hexanone	43		9.858				ND	
107 Chlorodibromomethane	129		10.049				ND	
109 Ethylene Dibromide	107		10.241				ND	
111 Chlorobenzene	112		11.076				ND	
113 1,1,1,2-Tetrachloroethane	131		11.215				ND	
112 Ethylbenzene	106		11.285				ND	
114 m-Xylene & p-Xylene	106		11.493				ND	
115 o-Xylene	106		12.155				ND	
116 Styrene	104		12.172				ND	
117 Bromoform	173		12.468				ND	
118 Isopropylbenzene	105		12.816				ND	
121 Bromobenzene	156		13.303				ND	
122 1,1,2,2-Tetrachloroethane	83		13.321				ND	
124 1,2,3-Trichloropropane	110		13.373				ND	
123 N-Propylbenzene	120		13.547				ND	
126 2-Chlorotoluene	126		13.669				ND	
128 4-Chlorotoluene	126		13.860				ND	
127 1,3,5-Trimethylbenzene	105		13.877				ND	
129 tert-Butylbenzene	119		14.452				ND	
130 1,2,4-Trimethylbenzene	105		14.539				ND	
131 sec-Butylbenzene	134		14.852				ND	
132 1,3-Dichlorobenzene	146		15.008				ND	
133 4-Isopropyltoluene	119		15.130				ND	
134 1,4-Dichlorobenzene	146		15.165				ND	
138 1,2-Dichlorobenzene	146		15.809				ND	
137 n-Butylbenzene	91		15.844				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.940				ND	
141 1,2,4-Trichlorobenzene	180		17.862				ND	
142 Hexachlorobutadiene	225		18.071				ND	
143 Naphthalene	128		18.106				ND	
144 1,2,3-Trichlorobenzene	180		18.349				ND	

Reagents:

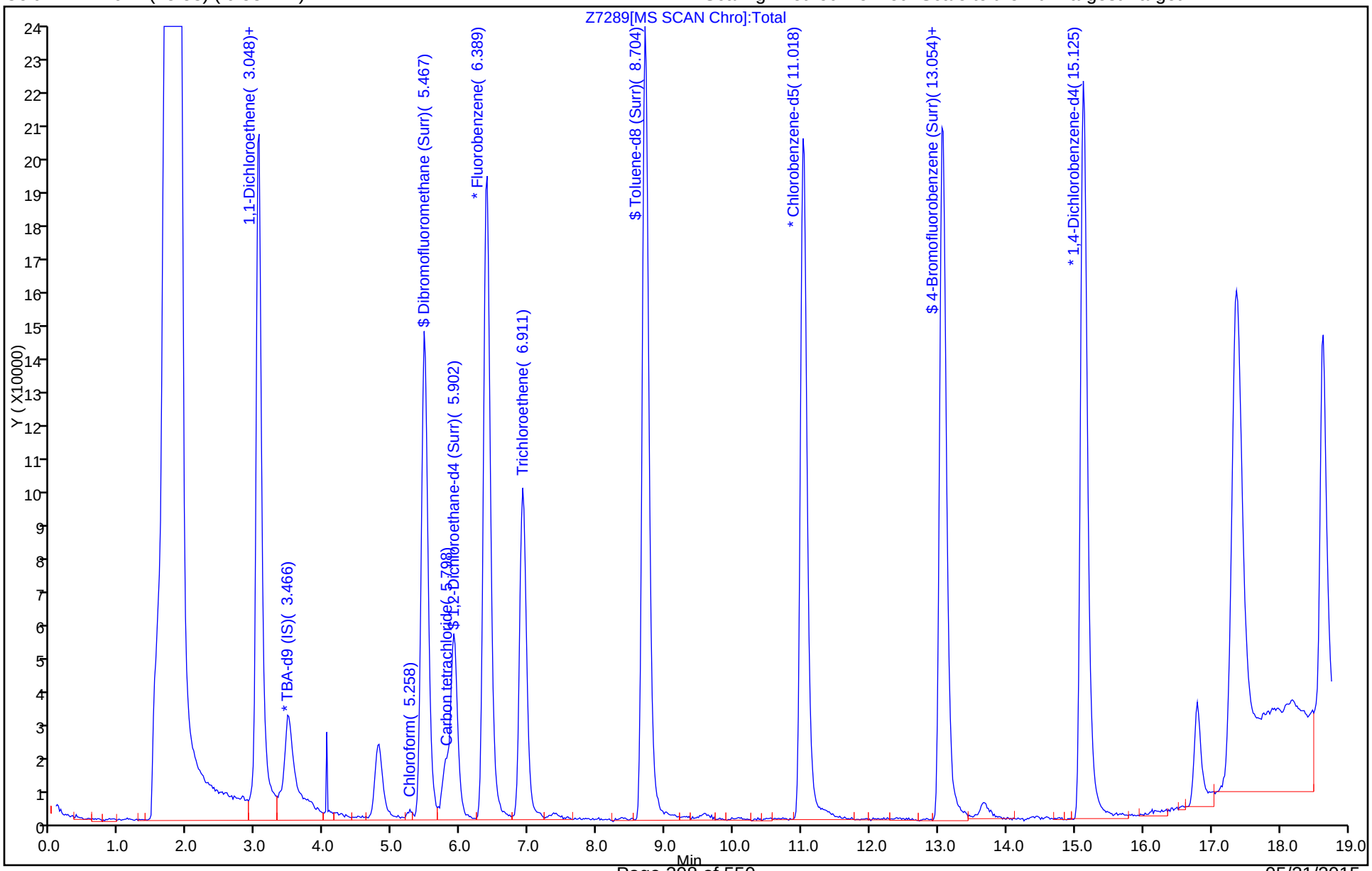
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:28:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7289.D				
Injection Date:	07-May-2015 23:07:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10	Worklist Smp#:	11
Client ID:	54400-MW179-0415				
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

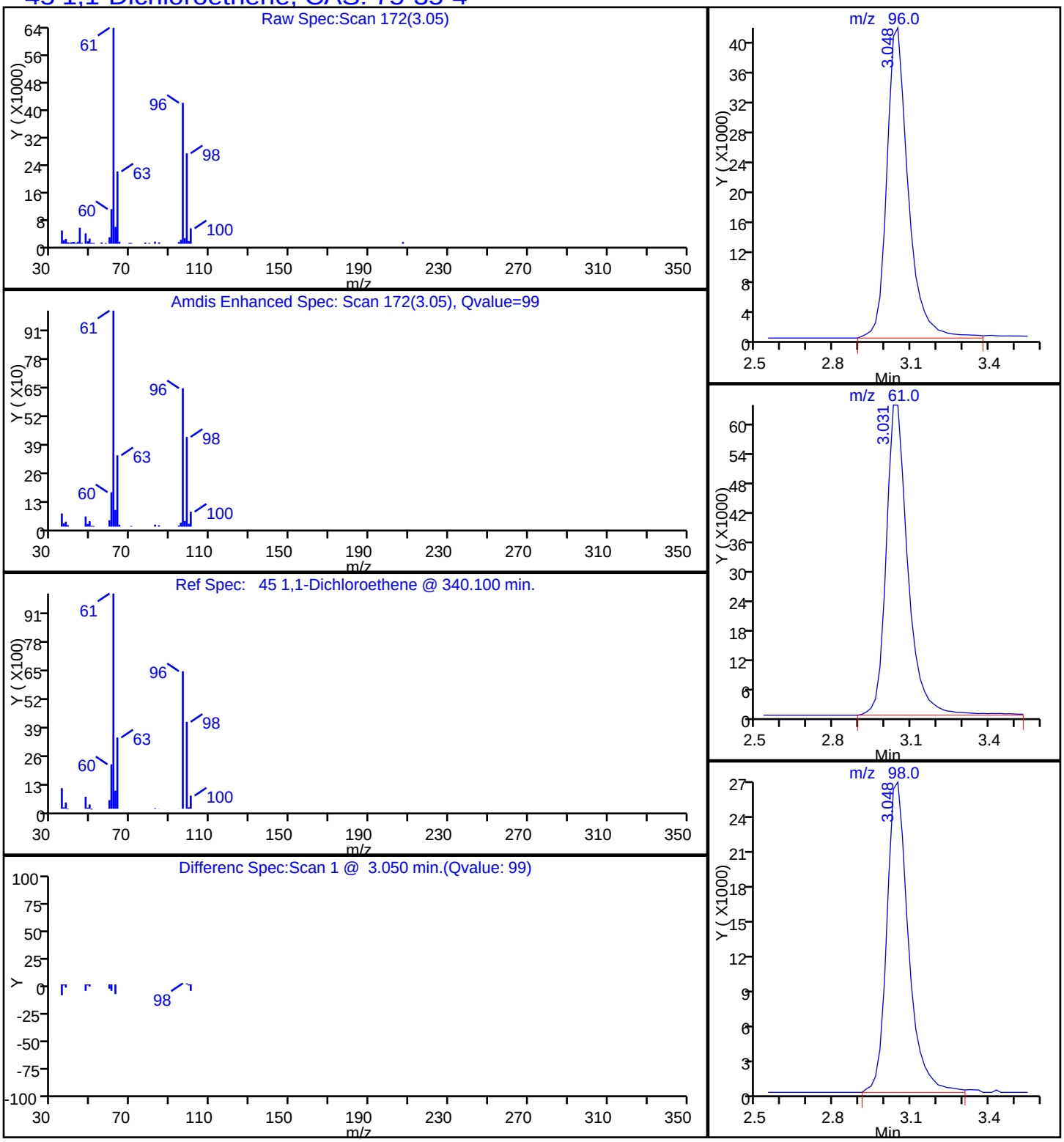


Report Date: 08-May-2015 16:28:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7289.D				
Injection Date:	07-May-2015 23:07:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-B-10	Lab Sample ID:	280-68518-10		
Client ID:	54400-MW179-0415				
Operator ID:	bergerb	ALS Bottle#:	7	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		

45 1,1-Dichloroethene, CAS: 75-35-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-BH0202S-0415 | Lab Sample ID: 280-68518-11
Matrix: Water | Lab File ID: Z7290.D
Analysis Method: 8260B | Date Collected: 04/27/2015 15:03
Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 23:30
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.: 276534 | 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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-BH0202S-0415 | Lab Sample ID: 280-68518-11

Matrix: Water | Lab File ID: Z7290.D

Analysis Method: 8260B | Date Collected: 04/27/2015 15:03

Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 23:30

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.: 276534 | 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.: 280-68518-1

SDG No.:

Client Sample ID: 54400-BH0202S-0415 | Lab Sample ID: 280-68518-11

Matrix: Water | Lab File ID: Z7290.D

Analysis Method: 8260B | Date Collected: 04/27/2015 15:03

Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 23:30

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.: 276534 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		81-118
460-00-4	4-Bromofluorobenzene (Surr)	105		85-114
1868-53-7	Dibromofluoromethane (Surr)	108		80-119
2037-26-5	Toluene-d8 (Surr)	103		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7290.D
Lims ID: 280-68518-A-11 Lab Sample ID: 280-68518-11
Client ID: 54400-BH0202S-0415
Sample Type: Client
Inject. Date: 07-May-2015 23:30:30 ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-A-11 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:27:28 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:28:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.484	3.489	-0.005	85	119046	250.0	
* 2 Fluorobenzene	96	6.390	6.378	0.012	98	670896	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.018	11.024	-0.006	87	157400	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.125	15.130	-0.005	95	293049	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.473	-0.006	94	339300	11.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.908	-0.006	94	131118	10.5	
$ 10 Toluene-d8 (Surr)	98	8.704	8.709	-0.005	93	634032	10.8	
$ 11 4-Bromofluorobenzene (Surr	95	13.054	13.060	-0.006	88	353232	11.1	
27 Dichlorodifluoromethane	85		1.923				ND	
30 Chloromethane	50		1.993				ND	
32 Vinyl chloride	62		2.115				ND	
35 Bromomethane	94		2.341				ND	
36 Chloroethane	64		2.393				ND	
38 Trichlorofluoromethane	101		2.602				ND	
45 1,1-Dichloroethene	96		3.037				ND	
48 Acetone	43		3.054				ND	
50 Carbon disulfide	76		3.280				ND	
54 Methylene Chloride	84		3.472				ND	
55 2-Methyl-2-propanol	59		3.559				ND	
57 trans-1,2-Dichloroethene	96		3.768				ND	
56 Methyl tert-butyl ether	73		3.785				ND	
62 1,1-Dichloroethane	63		4.203				ND	
67 2-Butanone (MEK)	43		4.881				ND	
65 cis-1,2-Dichloroethene	96		4.881				ND	
66 2,2-Dichloropropane	77		4.916				ND	
71 Chlorobromomethane	128		5.177				ND	
74 Chloroform	83		5.264				ND	
75 1,1,1-Trichloroethane	97		5.560				ND	
78 1,1-Dichloropropene	75		5.751				ND	
77 Carbon tetrachloride	117		5.786				ND	
82 1,2-Dichloroethane	62		6.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.012				ND	
85 Trichloroethene	95		6.917				ND	
90 1,2-Dichloropropane	63		7.196				ND	
92 Dibromomethane	93		7.370				ND	
94 Dichlorobromomethane	83		7.613				ND	
97 cis-1,3-Dichloropropene	75		8.274				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.535				ND	
99 Toluene	91		8.814				ND	
100 trans-1,3-Dichloropropene	75		9.127				ND	
102 1,1,2-Trichloroethane	97		9.423				ND	
104 1,3-Dichloropropane	76		9.684				ND	
103 Tetrachloroethene	164		9.701				ND	
105 2-Hexanone	43		9.858				ND	
107 Chlorodibromomethane	129		10.049				ND	
109 Ethylene Dibromide	107		10.241				ND	
111 Chlorobenzene	112		11.076				ND	
113 1,1,1,2-Tetrachloroethane	131		11.215				ND	
112 Ethylbenzene	106		11.285				ND	
114 m-Xylene & p-Xylene	106		11.493				ND	
115 o-Xylene	106		12.155				ND	
116 Styrene	104		12.172				ND	
117 Bromoform	173		12.468				ND	
118 Isopropylbenzene	105		12.816				ND	
121 Bromobenzene	156		13.303				ND	
122 1,1,2,2-Tetrachloroethane	83		13.321				ND	
124 1,2,3-Trichloropropane	110		13.373				ND	
123 N-Propylbenzene	120		13.547				ND	
126 2-Chlorotoluene	126		13.669				ND	
128 4-Chlorotoluene	126		13.860				ND	
127 1,3,5-Trimethylbenzene	105		13.877				ND	
129 tert-Butylbenzene	119		14.452				ND	
130 1,2,4-Trimethylbenzene	105		14.539				ND	
131 sec-Butylbenzene	134		14.852				ND	
132 1,3-Dichlorobenzene	146		15.008				ND	
133 4-Isopropyltoluene	119		15.130				ND	
134 1,4-Dichlorobenzene	146		15.165				ND	
138 1,2-Dichlorobenzene	146		15.809				ND	
137 n-Butylbenzene	91		15.844				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.940				ND	
141 1,2,4-Trichlorobenzene	180		17.862				ND	
142 Hexachlorobutadiene	225		18.071				ND	
143 Naphthalene	128		18.106				ND	
144 1,2,3-Trichlorobenzene	180		18.349				ND	

Reagents:

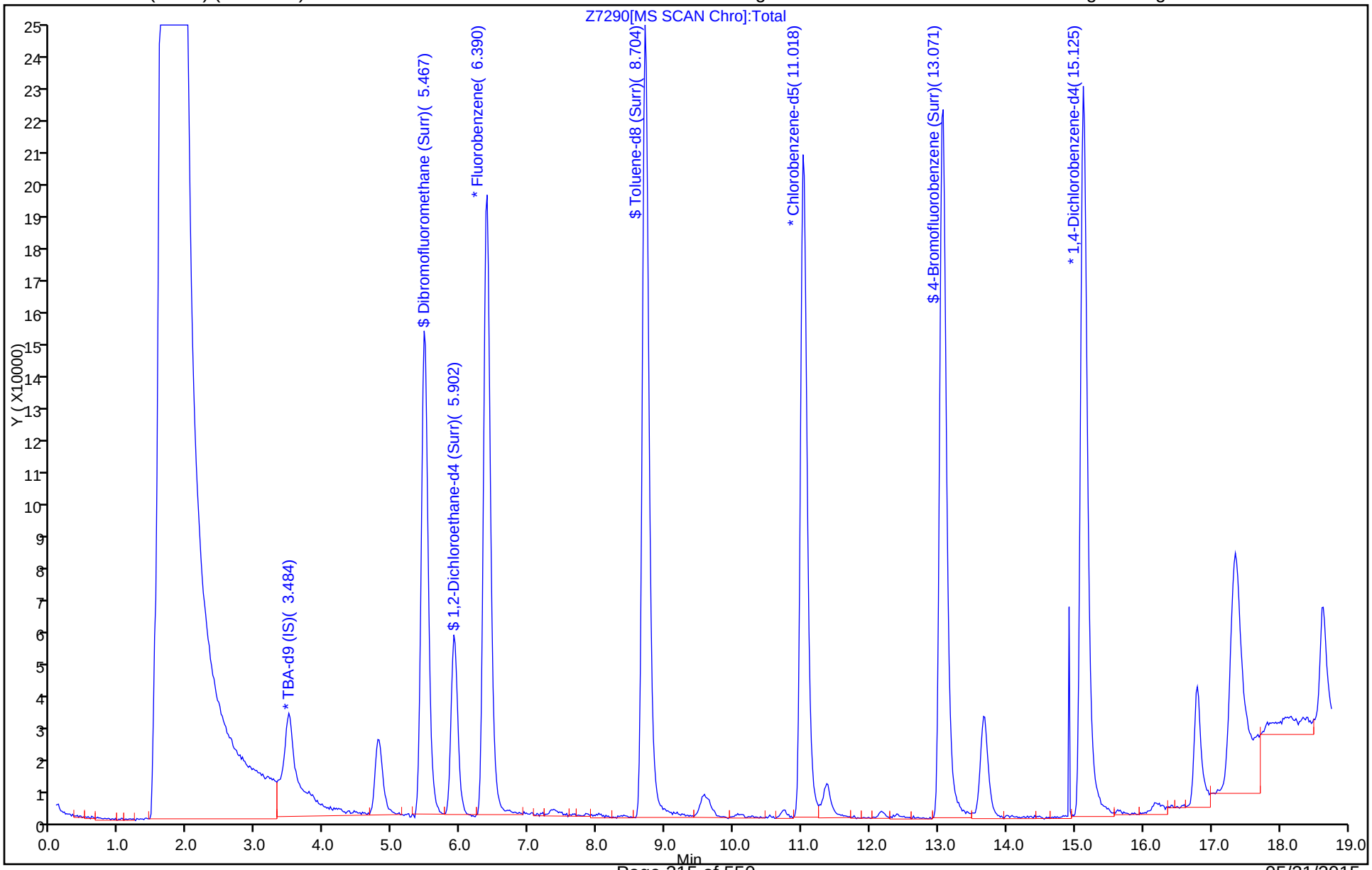
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:28:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7290.D				
Injection Date:	07-May-2015 23:30:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-A-11	Lab Sample ID:	280-68518-11	Worklist Smp#:	12
Client ID:	54400-BH0202S-0415				
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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW182-0415 | Lab Sample ID: 280-68518-12
Matrix: Water | Lab File ID: Z7302.D
Analysis Method: 8260B | Date Collected: 04/28/2015 13:50
Sample wt/vol: 20(mL) | Date Analyzed: 05/08/2015 04:02
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.: 276534 | 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	28		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	9.7		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW182-0415
Lab Sample ID: 280-68518-12
Matrix: Water
Lab File ID: Z7302.D
Analysis Method: 8260B
Date Collected: 04/28/2015 13:50
Sample wt/vol: 20(mL)
Date Analyzed: 05/08/2015 04:02
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.: 276534
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	1.8		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	15		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.: 280-68518-1
SDG No.:
Client Sample ID: 54400-MW182-0415
Lab Sample ID: 280-68518-12
Matrix: Water
Lab File ID: Z7302.D
Analysis Method: 8260B
Date Collected: 04/28/2015 13:50
Sample wt/vol: 20(mL)
Date Analyzed: 05/08/2015 04:02
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.: 276534
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		81-118
460-00-4	4-Bromofluorobenzene (Surr)	104		85-114
1868-53-7	Dibromofluoromethane (Surr)	108		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7302.D
Lims ID: 280-68518-A-12 Lab Sample ID: 280-68518-12
Client ID: 54400-MW182-0415
Sample Type: Client
Inject. Date: 08-May-2015 04:02:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68518-A-12 pH<2
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:22:05 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:22:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.488	3.489	-0.001	92	116943	250.0	
* 2 Fluorobenzene	96	6.377	6.378	-0.001	98	660583	12.5	
* 3 1,4-Dioxane-d8	96		7.292				ND	
* 4 Chlorobenzene-d5	119	11.023	11.024	-0.001	87	155383	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.130	15.130	0.000	95	297554	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.472	5.473	-0.001	94	332047	11.3	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.907	5.908	-0.001	94	129136	10.5	
$ 10 Toluene-d8 (Surr)	98	8.709	8.709	0.000	93	625052	10.7	
$ 11 4-Bromofluorobenzene (Surr	95	13.059	13.060	-0.001	89	355701	11.0	
27 Dichlorodifluoromethane	85		1.923				ND	
30 Chloromethane	50		1.993				ND	
32 Vinyl chloride	62		2.115				ND	
35 Bromomethane	94		2.341				ND	
36 Chloroethane	64		2.393				ND	
38 Trichlorofluoromethane	101		2.602				ND	
45 1,1-Dichloroethene	96	3.036	3.037	-0.001	99	491729	28.4	
48 Acetone	43		3.054				ND	
50 Carbon disulfide	76		3.280				ND	
54 Methylene Chloride	84		3.472				ND	
55 2-Methyl-2-propanol	59		3.559				ND	
57 trans-1,2-Dichloroethene	96		3.768				ND	
56 Methyl tert-butyl ether	73		3.785				ND	
62 1,1-Dichloroethane	63		4.203				ND	
67 2-Butanone (MEK)	43		4.881				ND	
65 cis-1,2-Dichloroethene	96		4.881				ND	
66 2,2-Dichloropropane	77		4.916				ND	
71 Chlorobromomethane	128		5.177				ND	
74 Chloroform	83	5.263	5.264	-0.001	94	62306	1.83	
75 1,1,1-Trichloroethane	97		5.560				ND	
78 1,1-Dichloropropene	75		5.751				ND	
77 Carbon tetrachloride	117	5.785	5.786	-0.001	99	290215	9.67	
82 1,2-Dichloroethane	62		6.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Benzene	78		6.012				ND	
85 Trichloroethene	95	6.916	6.917	-0.001	97	356607	15.4	
90 1,2-Dichloropropane	63		7.196				ND	
92 Dibromomethane	93		7.370				ND	
94 Dichlorobromomethane	83		7.613				ND	
97 cis-1,3-Dichloropropene	75		8.274				ND	
98 4-Methyl-2-pentanone (MIBK	43		8.535				ND	
99 Toluene	91		8.814				ND	
100 trans-1,3-Dichloropropene	75		9.127				ND	
102 1,1,2-Trichloroethane	97		9.423				ND	
104 1,3-Dichloropropane	76		9.684				ND	
103 Tetrachloroethene	164		9.701				ND	
105 2-Hexanone	43		9.858				ND	
107 Chlorodibromomethane	129		10.049				ND	
109 Ethylene Dibromide	107		10.241				ND	
111 Chlorobenzene	112		11.076				ND	
113 1,1,1,2-Tetrachloroethane	131		11.215				ND	
112 Ethylbenzene	106		11.285				ND	
114 m-Xylene & p-Xylene	106		11.493				ND	
115 o-Xylene	106		12.155				ND	
116 Styrene	104		12.172				ND	
117 Bromoform	173		12.468				ND	
118 Isopropylbenzene	105		12.816				ND	
121 Bromobenzene	156		13.303				ND	
122 1,1,2,2-Tetrachloroethane	83		13.321				ND	
124 1,2,3-Trichloropropane	110		13.373				ND	
123 N-Propylbenzene	120		13.547				ND	
126 2-Chlorotoluene	126		13.669				ND	
128 4-Chlorotoluene	126		13.860				ND	
127 1,3,5-Trimethylbenzene	105		13.877				ND	
129 tert-Butylbenzene	119		14.452				ND	
130 1,2,4-Trimethylbenzene	105		14.539				ND	
131 sec-Butylbenzene	134		14.852				ND	
132 1,3-Dichlorobenzene	146		15.008				ND	
133 4-Isopropyltoluene	119		15.130				ND	
134 1,4-Dichlorobenzene	146		15.165				ND	
138 1,2-Dichlorobenzene	146		15.809				ND	
137 n-Butylbenzene	91		15.844				ND	
139 1,2-Dibromo-3-Chloropropan	157		16.940				ND	
141 1,2,4-Trichlorobenzene	180		17.862				ND	
142 Hexachlorobutadiene	225		18.071				ND	
143 Naphthalene	128		18.106				ND	
144 1,2,3-Trichlorobenzene	180		18.349				ND	

Reagents:

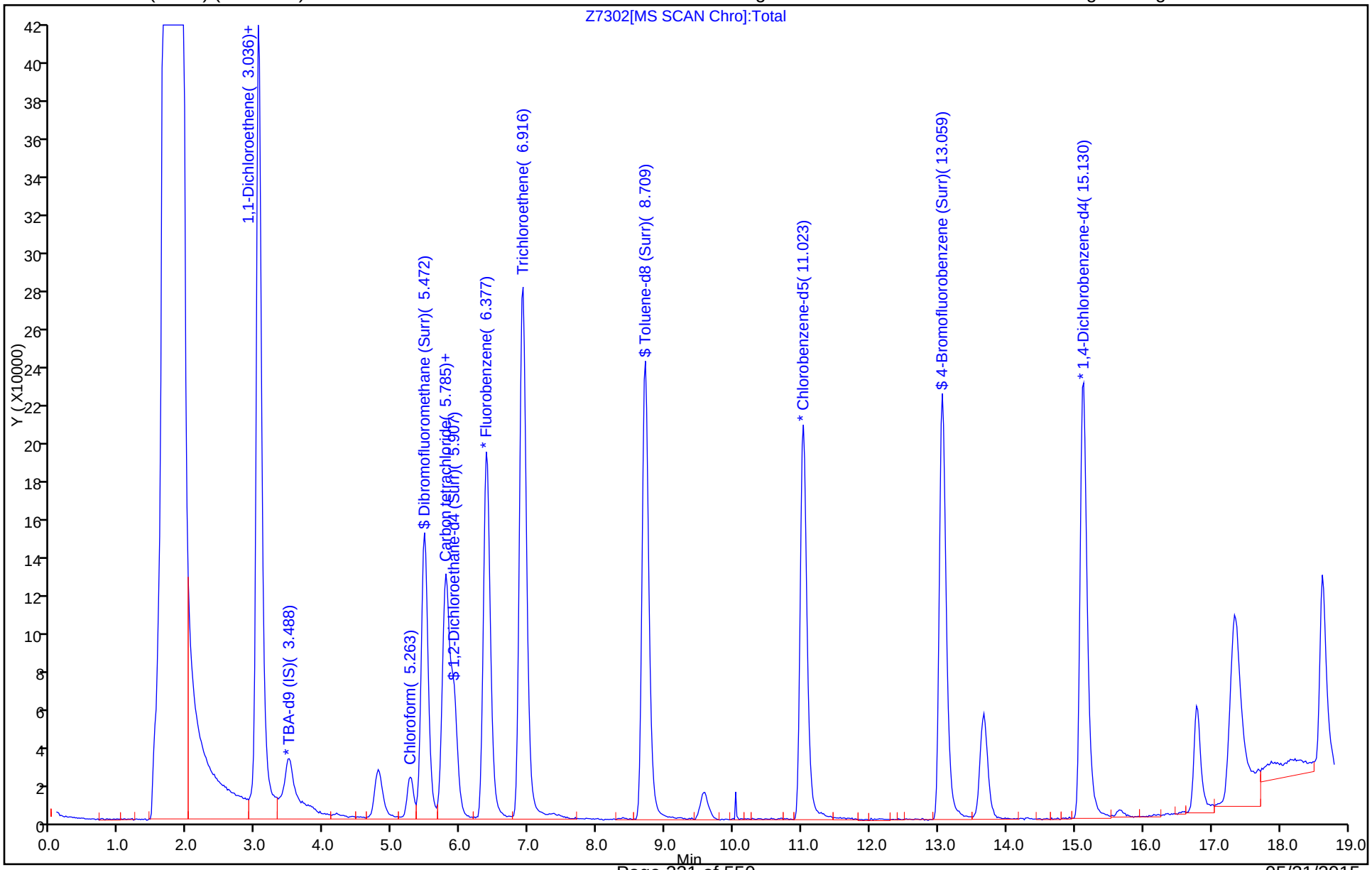
MV-567649-D_00001	Amount Added: 1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added: 0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:22:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7302.D				
Injection Date:	08-May-2015 04:02:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	280-68518-A-12	Lab Sample ID:	280-68518-12	Worklist Smp#:	24
Client ID:	54400-MW182-0415				
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

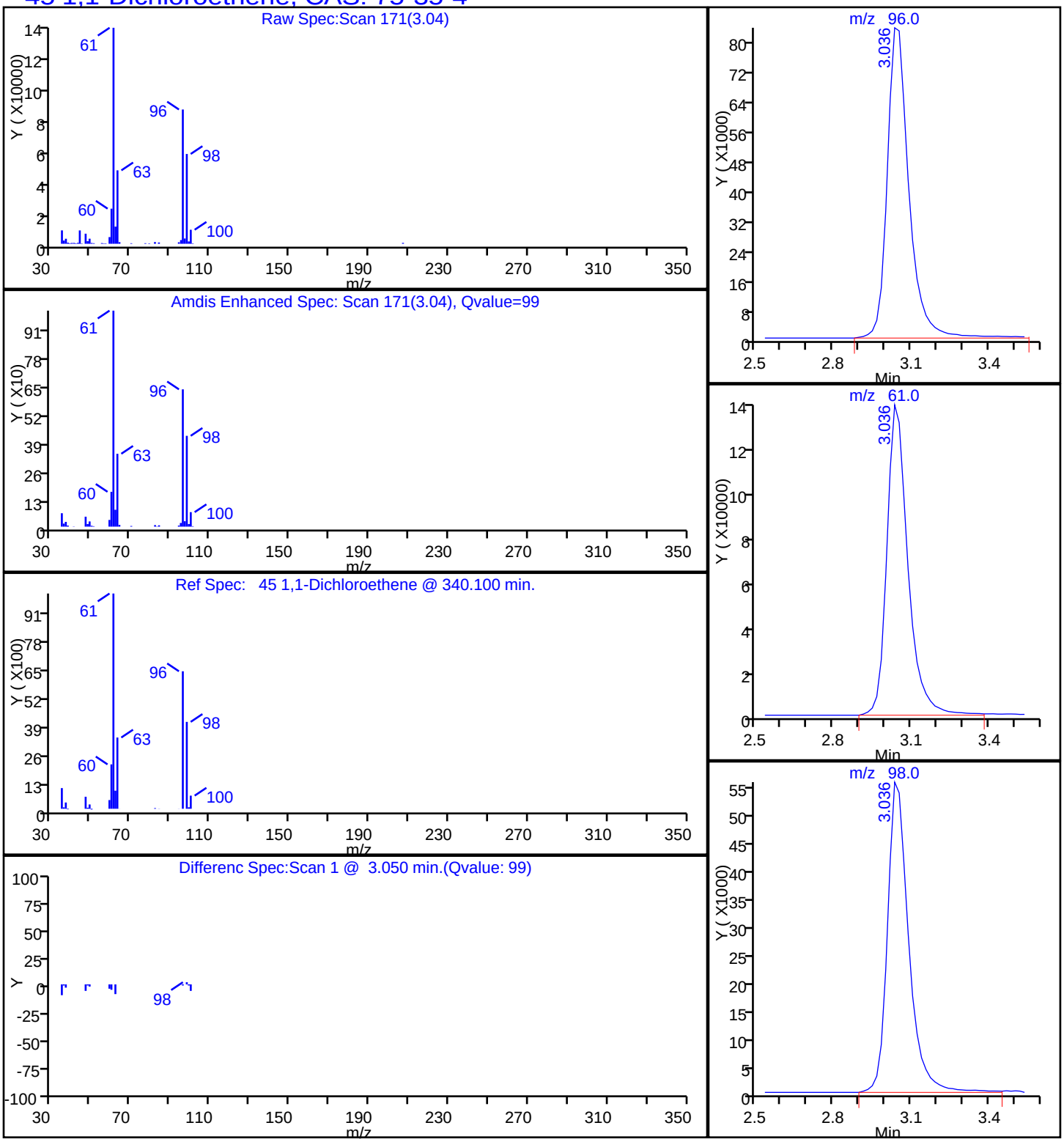


Report Date: 08-May-2015 16:22:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7302.D				
Injection Date:	08-May-2015 04:02:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-12	Lab Sample ID:	280-68518-12		
Client ID:	54400-MW182-0415				
Operator ID:	bergerb	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		

45 1,1-Dichloroethene, CAS: 75-35-4

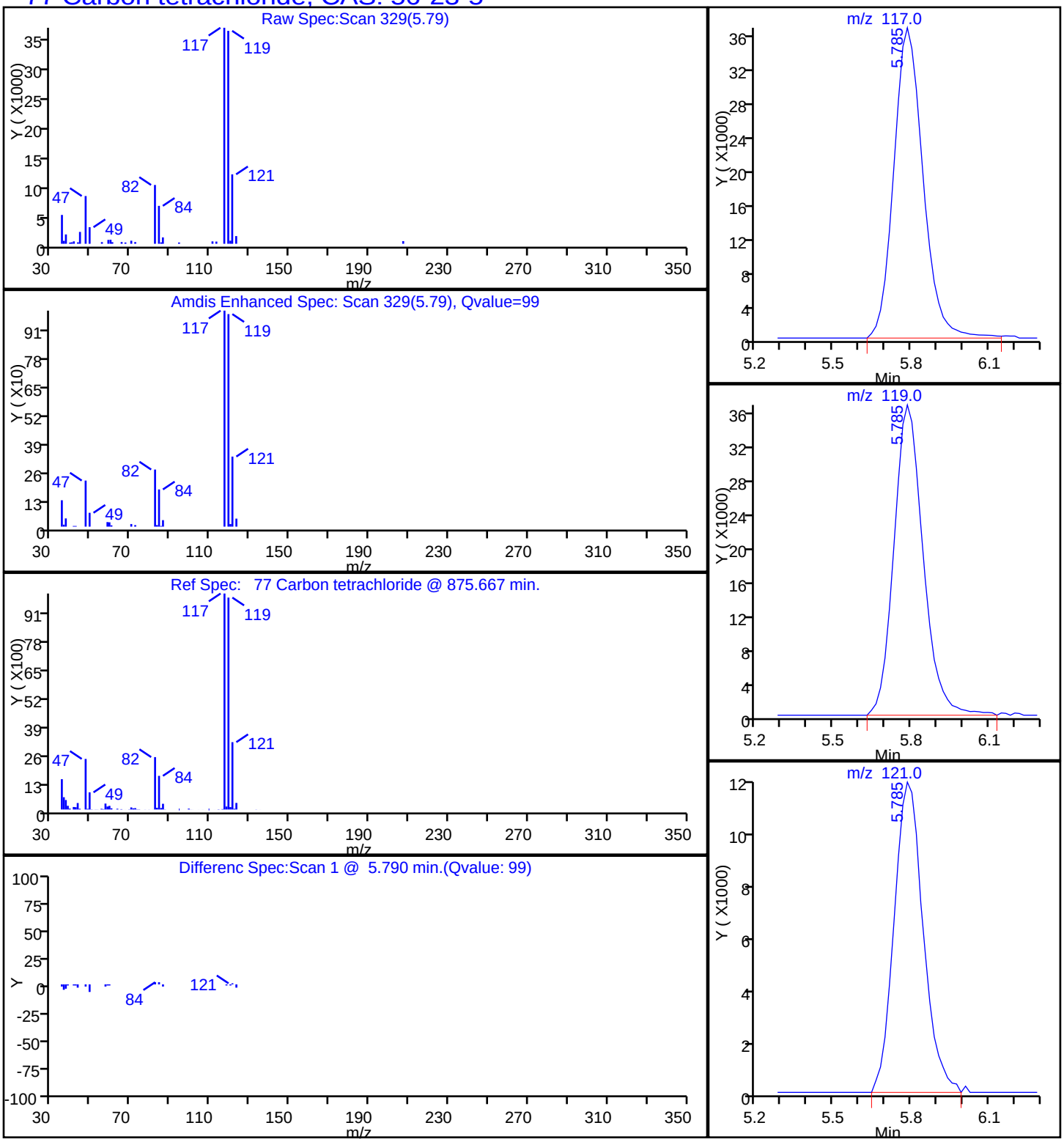


Report Date: 08-May-2015 16:22:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7302.D				
Injection Date:	08-May-2015 04:02:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-12	Lab Sample ID:	280-68518-12		
Client ID:	54400-MW182-0415				
Operator ID:	bergerb	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		

77 Carbon tetrachloride, CAS: 56-23-5

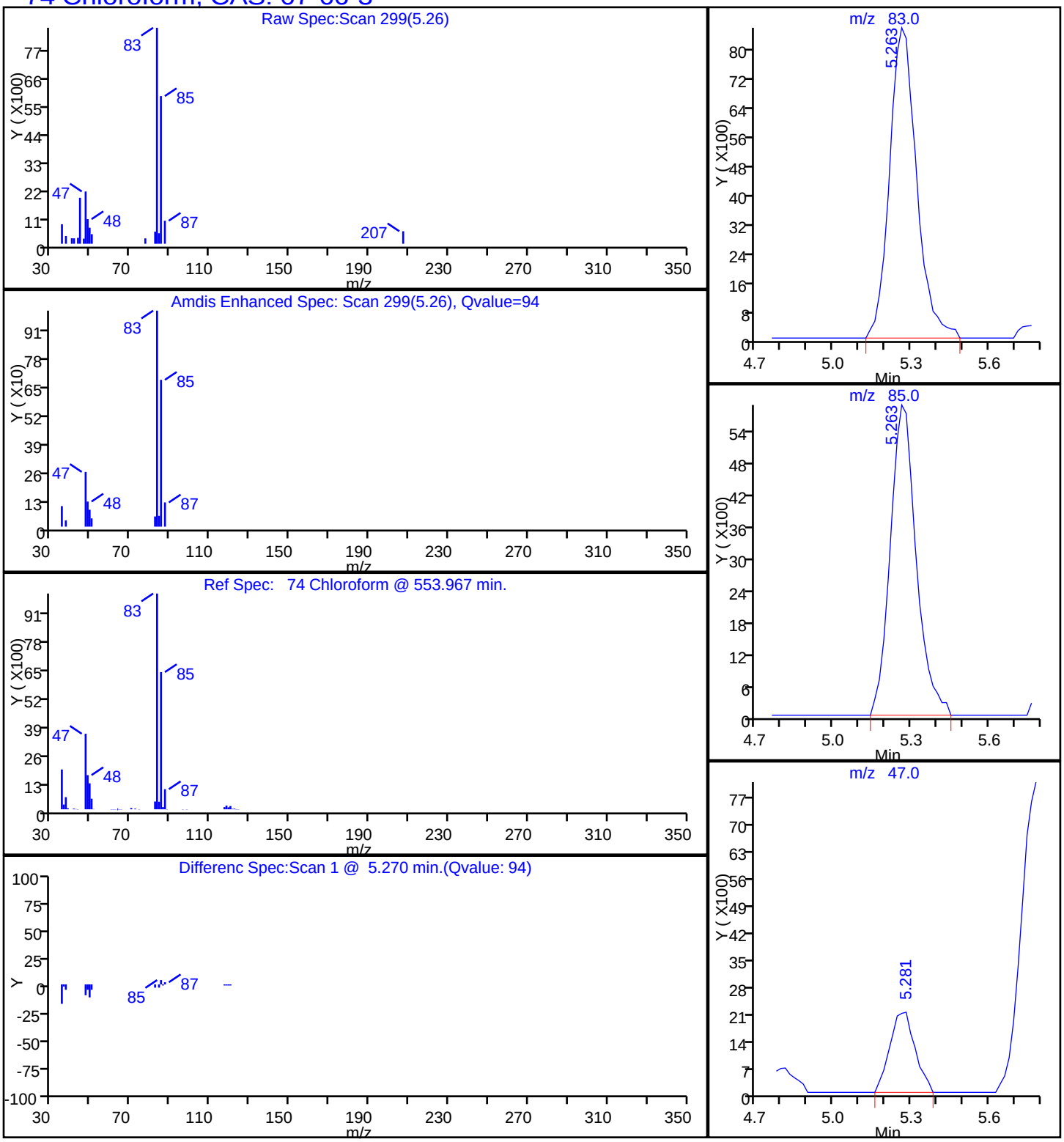


Report Date: 08-May-2015 16:22:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7302.D				
Injection Date:	08-May-2015 04:02:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-12	Lab Sample ID:	280-68518-12		
Client ID:	54400-MW182-0415				
Operator ID:	bergerb	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		

74 Chloroform, CAS: 67-66-3

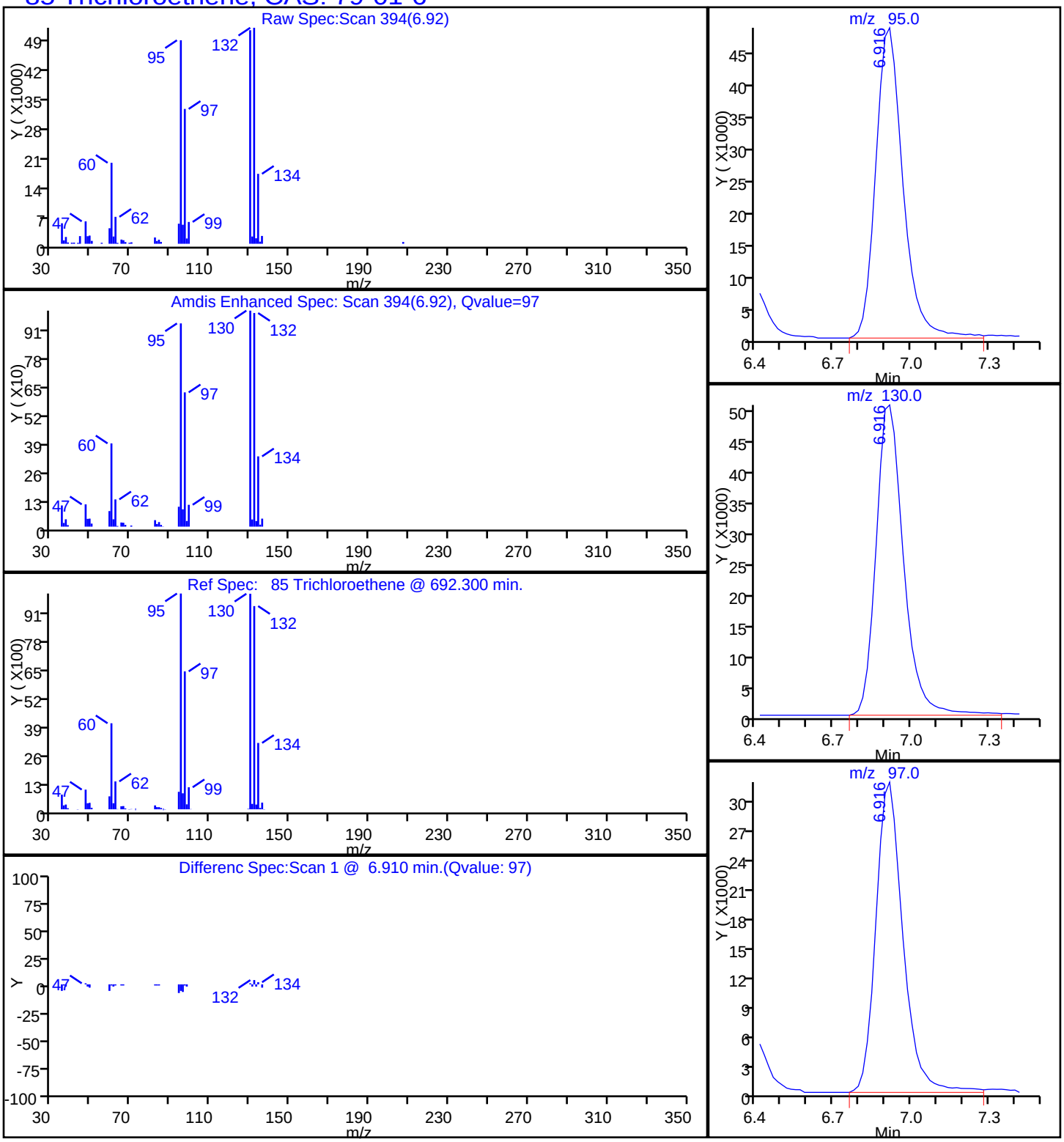


Report Date: 08-May-2015 16:22:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7302.D				
Injection Date:	08-May-2015 04:02:30	Instrument ID:	VMS_Z		
Lims ID:	280-68518-A-12	Lab Sample ID:	280-68518-12		
Client ID:	54400-MW182-0415				
Operator ID:	bergerb	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		

85 Trichloroethene, CAS: 79-01-6



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

Lab Name: TestAmerica Denver Job No.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274661/10	Z6764.D
Level 2	IC 280-274661/11	Z6765.D
Level 3	IC 280-274661/12	Z6766.D
Level 4	IC 280-274661/13	Z6767.D
Level 5	IC 280-274661/14	Z6768.D
Level 6	IC 280-274661/15	Z6769.D
Level 7	IC 280-274661/16	Z6770.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	+++++ 0.5416	0.4448 0.5347	0.4322	0.5963	0.5751	Ave		0.5208				13.0		15.0			
Chloromethane	+++++ 0.3055	0.3209 0.3282	0.3016	0.3674	0.3413	Ave		0.3275			0.1000	7.5		15.0			
Vinyl chloride	0.3190 0.3078	0.3042 0.3040	0.2921	0.3351	0.3262	Ave		0.3126				4.7		30.0			
Bromomethane	0.3348 0.3101	0.2996 0.3126	0.3126	0.3379	0.3335	Ave		0.3202				4.7		15.0			
Chloroethane	0.2430 0.2027	0.2197 0.2014	0.2136	0.2314	0.2242	Ave		0.2194				6.9		15.0			
Dichlorofluoromethane	0.8052 0.7641	0.8069 0.7601	0.7656	0.8393	0.8175	Ave		0.7941				3.9		15.0			
Trichlorofluoromethane	0.8082 0.6892	0.7434 0.6633	0.7172	0.7827	0.7395	Ave		0.7348				6.9		15.0			
Ethyl ether	0.2362 0.1350	0.1636 0.1348	0.1537	0.1521	0.1477	Lin2	0.0289	0.1390							0.9980		0.9900
Acrolein	+++++ 0.0083	0.0063 0.0084	0.0070	0.0087	0.0069	Ave		0.0076				13.0		15.0			
1,1-Dichloroethene	0.3389 0.3127	0.3431 0.3085	0.3063	0.3487	0.3333	Ave		0.3274				5.4		30.0			
Acetone	+++++ 0.0178	+++++ 0.0172	0.0211	0.0201	0.0179	Ave		0.0188				8.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5288 0.4845	0.5049 0.4744	0.5039	0.5443	0.5279	Ave		0.5098				5.0		15.0			
Iodomethane	0.8927 0.7984	0.8270 0.8081	0.8017	0.8635	0.8463	Ave		0.8339				4.2		15.0			
Carbon disulfide	1.3944 1.1151	1.2320 1.1023	1.1806	1.2478	1.1957	Ave		1.2097				8.1		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 CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

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								
Methyl acetate	+++++ 0.0716	0.0790 0.0707	0.0734	0.0764	0.0759	Ave		0.0745				4.2		15.0			
3-Chloro-1-propene	0.6598 0.5151	0.5821 0.5142	0.5642	0.5824	0.5500	Ave		0.5668				8.8		15.0			
Methylene Chloride	1.0287 0.2608	0.4385 0.2608	0.3303	0.3025	0.2832	Lin1	0.2148	0.2560							0.9990		0.9900
tert-Butyl alcohol	+++++ 1.0303	+++++ 0.8964	1.6676	1.1408	1.0204	Lin2	14.969	0.8966							0.9940		0.9900
Acrylonitrile	+++++ 0.0220	0.0289 0.0219	0.0260	0.0249	0.0226	Ave		0.0244				11.3		15.0			
trans-1,2-Dichloroethene	0.3624 0.3336	0.3620 0.3315	0.3490	0.3636	0.3457	Ave		0.3497				3.9		15.0			
Methyl tert-butyl ether	0.5709 0.4725	0.5006 0.4579	0.4857	0.5090	0.4876	Ave		0.4977				7.3		15.0			
Hexane	2.2542 2.1441	2.1471 2.0942	2.1548	2.3250	2.2660	Ave		2.1979				3.8		15.0			
1,1-Dichloroethane	0.7844 0.5963	0.6731 0.6016	0.6474	0.6537	0.6323	Ave		0.6555			0.1000	9.6		15.0			
Vinyl acetate	+++++ 0.3443	0.3749 0.3197	0.3507	0.3657	0.3638	Ave		0.3532				5.6		15.0			
2-Butanone (MEK)	+++++ 0.0405	0.0405 0.0390	0.0404	0.0442	0.0414	Ave		0.0410				4.3		15.0			
cis-1,2-Dichloroethene	0.3296 0.3308	0.3459 0.3348	0.3245	0.3499	0.3421	Ave		0.3368				2.8		15.0			
2,2-Dichloropropane	+++++ 0.5567	1.1164 0.5355	0.8587	0.7209	0.6417	Lin2	0.5687	0.5629							0.9960		0.9900
sec-Butyl Alcohol	+++++ 0.8486	0.8602 0.8724	0.7662	0.8608	0.8111	Ave		0.8366				4.8		15.0			
Bromochloromethane	0.1481 0.1591	0.1647 0.1613	0.1630	0.1694	0.1660	Ave		0.1617				4.2		15.0			
Tetrahydrofuran	+++++ 0.0249	0.0215 0.0253	0.0218	0.0271	0.0261	Ave		0.0244				9.3		15.0			
Chloroform	0.6890 0.6086	0.6636 0.6141	0.6285	0.6610	0.6459	Ave		0.6444				4.5		30.0			
1,1,1-Trichloroethane	0.6428 0.5854	0.7098 0.5798	0.6331	0.6762	0.6268	Ave		0.6363				7.3		15.0			
Cyclohexane	0.6223 0.5502	0.5950 0.5329	0.5467	0.5966	0.5803	Ave		0.5749				5.6		15.0			
1,1-Dichloropropene	0.6299 0.4996	0.5756 0.4859	0.5413	0.5500	0.5290	Ave		0.5445				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.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

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	+++++ 0.5509	0.5923 0.5431	0.5584	0.5811	0.5801	Ave		0.5677				3.4		15.0			
Isobutyl alcohol	+++++ 0.2860	+++++ 0.2960	0.3204	0.2906	0.2958	Ave		0.2978				4.5		15.0			
1,2-Dichloroethane	+++++ 0.2415	0.2514 0.2392	0.2456	0.2608	0.2538	Ave		0.2487				3.3		15.0			
Benzene	+++++ 0.9520	1.0692 0.9570	0.9833	1.0220	1.0030	Ave		0.9978				4.4		15.0			
Trichloroethene	+++++ 0.4089	0.5038 0.4068	0.4218	0.4513	0.4322	Ave		0.4375				8.3		15.0			
2-Pentanone	+++++ 0.0824	0.0797 0.0792	0.0815	0.0868	0.0841	Ave		0.0823				3.5		15.0			
1,2-Dichloropropane	0.4038 0.3314	0.3581 0.3272	0.3318	0.3478	0.3444	Ave		0.3492				7.6		30.0			
Methylcyclohexane	0.5555 0.4719	0.5043 0.4508	0.4981	0.5117	0.4958	Ave		0.4983				6.6		15.0			
Dibromomethane	0.2243 0.1889	0.2069 0.1850	0.1961	0.2014	0.1970	Ave		0.1999				6.5		15.0			
Bromodichloromethane	0.4914 0.5178	0.4645 0.5224	0.4433	0.5080	0.5049	Ave		0.4932				5.9		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1135	0.1191 0.1104	0.1098	0.1251	0.1186	Ave		0.1161				5.1		15.0			
cis-1,3-Dichloropropene	2.1498 1.9421	2.0334 1.9225	1.8881	2.0110	1.9409	Ave		1.9840				4.5		15.0			
4-Methyl-2-pentanone (MIBK)	0.1300 0.1265	0.1385 0.1212	0.1182	0.1314	0.1288	Ave		0.1278				5.3		15.0			
Toluene	1.2636 1.0393	1.1343 1.0289	1.0690	1.1168	1.0790	Ave		1.1044				7.2		30.0			
trans-1,3-Dichloropropene	0.3710 0.3025	0.3226 0.2907	0.3058	0.3295	0.3161	Ave		0.3197				8.2		15.0			
Ethyl methacrylate	0.9133 1.0506	1.0006 1.0027	0.9908	1.0571	1.0636	Ave		1.0112				5.2		15.0			
1,1,2-Trichloroethane	0.3266 0.1858	0.2324 0.1821	0.1772	0.2123	0.1935	Lin2	0.0423	0.1844							0.9920		0.9900
1,3-Dichloropropane	1.4303 1.3948	1.3672 1.3857	1.3490	1.4493	1.4248	Ave		1.4002				2.6		15.0			
Tetrachloroethene	1.5619 1.7409	1.7052 1.7069	1.6493	1.7924	1.7575	Ave		1.7020				4.5		15.0			
2-Hexanone	0.3829 0.3692	0.3604 0.3487	0.3380	0.3575	0.3593	Ave		0.3594				4.0		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.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

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	1.2704 1.5164	1.1856 1.5250	1.1790	1.2793	1.3415	Ave		1.3282				10.8		15.0			
1,2-Dibromoethane	0.9912 1.1098	1.0440 1.0903	1.0298	1.1024	1.1090	Ave		1.0681				4.4		15.0			
1-Chlorohexane	2.9276 2.2457	2.5383 2.1355	2.2860	2.3535	2.3149	Ave		2.4002				10.9		15.0			
Chlorobenzene	3.0942 3.2064	3.1976 3.1704	3.0407	3.2497	3.2184	Ave		3.1682			0.3000	2.3		15.0			
1,1,1,2-Tetrachloroethane	1.4353 1.5782	1.5164 1.5583	1.4597	1.5673	1.5737	Ave		1.5270				3.8		15.0			
Ethylbenzene	1.5380 1.5631	1.5860 1.5190	1.5461	1.6354	1.5875	Ave		1.5679				2.5		30.0			
m-Xylene & p-Xylene	2.1483 2.1345	2.1448 2.0919	2.0623	2.2306	2.0929	Ave		2.1293				2.6		15.0			
o-Xylene	1.6596 1.8249	1.8401 1.7965	1.7929	1.9322	1.8699	Ave		1.8166				4.6		15.0			
Styrene	2.8086 3.1094	2.9297 3.0447	2.9346	3.1762	3.1086	Ave		3.0160				4.3		15.0			
Bromoform	+++++ 0.7405	0.4098 0.7978	0.4414	0.5317	0.6133	Lin1	-0.606	0.7760			0.1000				0.9940		0.9900
Isopropylbenzene	3.5664 2.9995	3.3350 2.9979	3.1810	3.2835	3.1764	Ave		3.2199				6.2		15.0			
Cyclohexanone	+++++ 0.0146	0.0129 0.0135	0.0129	0.0139	0.0135	Ave		0.0136				4.7		15.0			
Bromobenzene	0.8177 0.8319	0.8273 0.8626	0.8151	0.8654	0.8541	Ave		0.8391				2.5		15.0			
1,1,2,2-Tetrachloroethane	0.7400 0.5605	0.5703 0.5595	0.5333	0.5818	0.5772	Ave		0.5889			0.3000	11.6		15.0			
1,2,3-Trichloropropane	+++++ 0.1289	0.1308 0.1288	0.1307	0.1364	0.1341	Ave		0.1316				2.3		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1286	0.1604 0.1204	0.1154	0.1451	0.1420	Ave		0.1353				12.5		15.0			
N-Propylbenzene	0.8948 0.7757	0.8528 0.7742	0.8226	0.8552	0.8117	Ave		0.8267				5.3		15.0			
2-Chlorotoluene	+++++ 0.6465	0.7436 0.6511	0.6760	0.6982	0.6886	Ave		0.6840				5.2		15.0			
4-Chlorotoluene	+++++ 0.7504	0.8245 0.7744	0.8033	0.8416	0.7986	Ave		0.7988				4.1		15.0			
1,3,5-Trimethylbenzene	2.7415 2.3132	2.6168 2.3100	2.4947	2.4743	2.3982	Ave		2.4784				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.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

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	3.3265 2.5573	3.0146 2.5231	2.7410	2.8410	2.7325	Ave		2.8194				9.9		15.0			
1,2,4-Trimethylbenzene	2.8458 2.2274	2.5469 2.2285	2.3858	2.4352	2.3476	Ave		2.4310				8.8		15.0			
sec-Butylbenzene	0.8422 0.7226	0.8358 0.7008	0.7714	0.8126	0.7600	Ave		0.7779				7.1		15.0			
1,3-Dichlorobenzene	1.5645 1.3713	1.4750 1.4535	1.4380	1.5081	1.4506	Ave		1.4659				4.1		15.0			
p-Isopropyltoluene	3.7272 2.9539	3.3545 2.8850	3.0338	3.2277	3.1148	Ave		3.1853				9.0		15.0			
1,4-Dichlorobenzene	1.9057 1.7037	1.8122 1.6426	1.6660	1.7966	1.7620	Ave		1.7555				5.2		15.0			
1,2-Dichlorobenzene	1.2915 1.2463	1.2977 1.2504	1.2433	1.2922	1.2819	Ave		1.2719				1.9		15.0			
n-Butylbenzene	3.5221 2.7763	3.2448 2.6523	3.0589	3.0620	2.9601	Ave		3.0395				9.5		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0881	+++++ 0.0929	0.0722	0.0806	0.0845	Ave		0.0837				9.4		15.0			
1,2,4-Trichlorobenzene	0.9081 0.8085	0.8687 0.7918	0.8463	0.9078	0.8739	Ave		0.8579				5.3		15.0			
Hexachlorobutadiene	0.9636 0.7980	0.9038 0.7538	0.8714	0.9000	0.8696	Ave		0.8657				8.1		15.0			
Naphthalene	+++++ 0.7875	0.9383 0.7644	0.8639	0.8581	0.8583	Ave		0.8451				7.3		15.0			
1,2,3-Trichlorobenzene	0.7319 0.6066	0.6985 0.5977	0.6834	0.6813	0.6660	Ave		0.6665				7.3		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 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274661/10	Z6764.D
Level 2	IC 280-274661/11	Z6765.D
Level 3	IC 280-274661/12	Z6766.D
Level 4	IC 280-274661/13	Z6767.D
Level 5	IC 280-274661/14	Z6768.D
Level 6	IC 280-274661/15	Z6769.D
Level 7	IC 280-274661/16	Z6770.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	+++++ 980917	26099 1906014	51113	175880	343915	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chloromethane	FB	Ave	+++++ 553379	18828 1170028	35666	108376	204096	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	5800 557481	17850 1083537	34547	98834	195036	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromomethane	FB	Ave	6087 561715	17577 1114295	36971	99676	199423	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloroethane	FB	Ave	4418 367165	12891 718040	25262	68236	134076	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	14638 1383912	47347 2709431	90535	247538	488877	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	14694 1248216	43616 2364574	84818	230868	442226	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl ether	FB	Lin2	4294 244592	9598 480519	18174	44854	88334	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acrolein	FB	Ave	+++++ 150727	3716 299054	8227	25774	41360	+++++ 300	10.00 600	20.0	50.0	100.0
1,1-Dichloroethene	FB	Ave	6161 566354	20130 1099849	36217	102853	199331	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acetone	FB	Ave	+++++ 129048	+++++ 245502	9987	23710	42839	+++++ 120	+++++ 240	8.00	20.0	40.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	9614 877515	29622 1691030	59591	160541	315694	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Iodomethane	FB	Ave	16229 1446050	48522 2880641	94803	254683	506059	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon disulfide	FB	Ave	25351 2019621	72288 3929554	139621	368031	715022	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methyl acetate	FB	Ave	+++++ 648404	23169 1260888	43396	112647	226809	+++++ 150	5.00 300	10.0	25.0	50.0

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

Lab Name: TestAmerica Denver Job No.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	11995 932982	34157 1833100	66719	171773	328887	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methylene Chloride	FB	Lin1	18703 472409	25730 929571	39066	89216	169362	0.300 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butyl alcohol	TBA	Lin2	+++++ 172116	+++++ 282840	17535	31852	57771	+++++ 300	+++++ 600	20.0	50.0	100
Acrylonitrile	FB	Ave	+++++ 398821	16928 779574	30750	73534	135433	+++++ 300	10.0 600	20.0	50.0	100
trans-1,2-Dichloroethene	FB	Ave	6589 604153	21239 1181821	41276	107250	206700	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methyl tert-butyl ether	FB	Ave	10380 855750	29372 1632196	57439	150121	291571	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexane	CBZ	Ave	10361 870829	29272 1674693	59594	159495	315285	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	14261 1079953	39491 2144564	76556	192812	378107	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl acetate	FB	Ave	+++++ 1247128	43989 2279047	82947	215739	435142	+++++ 60.0	2.00 120	4.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	+++++ 293168	9499 556437	19114	52173	98953	+++++ 120	4.00 240	8.00	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	5993 599157	20293 1193366	38370	103196	204595	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2,2-Dichloropropane	FB	Lin2	+++++ 1008248	65505 1908795	101546	212611	383738	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butyl Alcohol	TBA	Ave	+++++ 425310	13009 825730	24171	72102	137767	+++++ 900	30.0 1800	60.0	150	300
Bromochloromethane	FB	Ave	2693 288154	9663 574921	19273	49954	99285	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 90208	2523 180139	5157	15957	31190	+++++ 60.0	2.00 120	4.00	10.0	20.0
Chloroform	FB	Ave	12526 1102245	38938 2189196	74323	194953	386272	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	11686 1060281	41645 2066691	74867	199439	374796	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	11314 996464	34913 1899762	64651	175967	347042	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	11451 904780	33773 1732245	64019	162231	316320	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Ave	+++++ 997800	34754 1936167	66038	171387	346904	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Isobutyl alcohol	TBA	Ave	+++++ 119441	+++++ 233493	8422	20285	41865	+++++ 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.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

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	+++++ 437331	14750 852506	29041	76932	151780	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Benzene	FB	Ave	+++++ 1724125	62736 3411578	116285	301430	599803	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	+++++ 740490	29560 1450017	49883	133115	258437	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
2-Pentanone	FB	Ave	+++++ 596672	18700 1128783	38570	102461	201055	+++++ 120	4.00 240	8.00	20.0	40.0
1,2-Dichloropropane	FB	Ave	7341 600247	21011 1166242	39239	102569	205969	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methylcyclohexane	FB	Ave	10100 854628	29590 1607003	58910	150911	296485	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dibromomethane	FB	Ave	4078 342110	12141 659343	23191	59398	117803	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromodichloromethane	FB	Ave	8934 937795	27256 1862140	52426	149834	301930	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 205489	6991 393591	12982	36887	70911	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBZ	Ave	9881 788816	27722 1537392	52219	137956	270052	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	9457 916440	32506 1727894	55903	155023	308054	1.20 120	4.00 240	8.00	20.0	40.0
Toluene	FB	Ave	22973 1882392	66552 3667587	126423	329384	645238	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	FB	Ave	6745 547906	18931 1036172	36163	97197	189003	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl methacrylate	CBZ	Ave	4198 426714	13641 801831	27403	72518	147983	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloroethane	FB	Lin2	5937 336509	13637 649109	20951	62625	115713	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichloropropane	CBZ	Ave	6574 566516	18640 1108151	37309	99420	198243	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrachloroethene	CBZ	Ave	7179 707097	23248 1365011	45615	122962	244529	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Hexanone	CBZ	Ave	7039 599846	19655 1115524	37389	98111	199960	1.20 120	4.00 240	8.00	20.0	40.0
Chlorodibromomethane	CBZ	Ave	5839 615912	16164 1219503	32606	87757	186657	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromoethane	CBZ	Ave	4556 450775	14233 871932	28481	75628	154304	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1-Chlorohexane	CBZ	Ave	13456 912093	34605 1707784	63223	161452	322088	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.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	14222 1302298	43594 2535360	84096	222927	447791	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	6597 640998	20674 1246187	40369	107518	218963	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylbenzene	CBZ	Ave	7069 634876	21623 1214720	42759	112189	220876	0.300 30.0	1.00 60.0	2.00	5.00	10.0
m-Xylene & p-Xylene	CBZ	Ave	9874 866942	29241 1672926	57037	153017	291194	0.300 30.0	1.00 60.0	2.00	5.00	10.0
o-Xylene	CBZ	Ave	7628 741180	25086 1436667	49586	132546	260164	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Styrene	CBZ	Ave	12909 1262930	39942 2434851	81160	217885	432518	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromoform	CBZ	Lin1	+++++ 300779	5587 638029	12207	36475	85337	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Isopropylbenzene	DCB	Ave	27084 2373803	82462 4468243	161584	423137	834902	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexanone	CBZ	Ave	+++++ 237151	7041 432620	14271	38016	75211	+++++ 1200	40.0 2400	80.0	200	400
Bromobenzene	DCB	Ave	6210 658397	20455 1285597	41405	111521	224492	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCB	Ave	5620 443601	14102 833886	27088	74973	151707	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCB	Ave	+++++ 102024	3234 191973	6639	17579	35260	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 101780	3967 179412	5862	18698	37329	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
N-Propylbenzene	DCB	Ave	6795 613919	21086 1153892	41787	110212	213343	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chlorotoluene	DCB	Ave	+++++ 511647	18386 970451	34337	89981	181004	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
4-Chlorotoluene	DCB	Ave	+++++ 593867	20388 1154263	40804	108455	209904	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCB	Ave	20820 1830728	64703 3442965	126724	318859	630362	0.300 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butylbenzene	DCB	Ave	25262 2023864	74539 3760541	139235	366113	718232	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCB	Ave	21612 1762794	62976 3321411	121191	313826	617052	0.300 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butylbenzene	DCB	Ave	6396 571898	20667 1044484	39187	104723	199755	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCB	Ave	11881 1085274	36472 2166324	73044	194349	381295	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.: 280-68518-1 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 07:59 Calibration End Date: 04/27/2015 10:16 Calibration ID: 22132

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	28305 2337730	82944 4299850	154107	415946	818718	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCB	Ave	14472 1348336	44809 2448202	84626	231528	463128	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCB	Ave	9808 986317	32087 1863620	63154	166524	336943	0.300 30.0	1.00 60.0	2.00	5.00	10.0
n-Butylbenzene	DCB	Ave	26748 2197160	80232 3953067	155380	394595	778054	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	+++++ 69759	+++++ 138404	3670	10386	22215	+++++ 30.0	+++++ 60.0	2.00	5.00	10.0
1,2,4-Trichlorobenzene	DCB	Ave	6896 639843	21481 1180189	42990	116983	229690	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexachlorobutadiene	DCB	Ave	7318 631562	22348 1123434	44266	115976	228574	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Naphthalene	DCB	Ave	+++++ 623233	23201 1139307	43882	110576	225591	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCB	Ave	5558 480089	17272 890819	34714	87792	175064	0.300 30.0	1.00 60.0	2.00	5.00	10.0

Curve Type Legend:

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

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6764.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Apr-2015 07:59:30 ALS Bottle#: 4 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*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2015 20:56:03 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 11:34:11

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	3.473	3.485	-0.012	95	146178	250.0	250.0	
* 2 Fluorobenzene	96	6.362	6.375	-0.013	97	757518	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.010	11.005	0.005	89	191512	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.100	15.113	-0.013	96	316427	12.5	12.5	
27 Dichlorodifluoromethane	85		1.921				ND	ND	
30 Chloromethane	50	1.958	1.973	-0.015	93	7324	0.3000	0.3690	
31 Butadiene	54	2.045	2.078	-0.033	87	5435	NC	NC	
32 Vinyl chloride	62	2.080	2.112	-0.032	93	5800	0.3000	0.3061	
35 Bromomethane	94	2.306	2.339	-0.033	87	6087	0.3000	0.3137	
36 Chloroethane	64	2.358	2.391	-0.033	91	4418	0.3000	0.3322	
37 Dichlorofluoromethane	67	2.515	2.548	-0.033	97	14638	0.3000	0.3042	
38 Trichlorofluoromethane	101	2.567	2.600	-0.033	96	14694	0.3000	0.3300	
40 Ethyl ether	59	2.776	2.809	-0.033	83	4294	0.3000	0.3016	
44 Acrolein	56		2.913				ND	ND	
45 1,1-Dichloroethene	96	3.020	3.035	-0.015	97	6161	0.3000	0.3106	
48 Acetone	43		3.052				ND	ND	
46 1,1,2-Trichloro-1,2,2-trif	151	3.072	3.087	-0.015	95	9614	0.3000	0.3112	
49 Iodomethane	142	3.177	3.192	-0.015	99	16229	0.3000	0.3211	
50 Carbon disulfide	76	3.264	3.279	-0.015	99	25351	0.3000	0.3458	
52 3-Chloro-1-propene	41	3.333	3.348	-0.015	83	11995	0.3000	0.3492	
51 Methyl acetate	43		3.348				ND	ND	
54 Methylene Chloride	84	3.455	3.470	-0.015	94	18703	0.3000	0.3667	
55 2-Methyl-2-propanol	59		3.575				ND	ND	
58 Acrylonitrile	53		3.679				ND	ND	
57 trans-1,2-Dichloroethene	96	3.734	3.766	-0.032	96	6589	0.3000	0.3109	
56 Methyl tert-butyl ether	73	3.751	3.783	-0.032	85	10380	0.3000	0.3441	
59 Hexane	57	4.064	4.062	0.002	88	10361	0.3000	0.3077	
62 1,1-Dichloroethane	63	4.186	4.201	-0.015	95	14261	0.3000	0.3590	
61 Vinyl acetate	43		4.219				ND	ND	
67 2-Butanone (MEK)	43		4.863				ND	ND	
65 cis-1,2-Dichloroethene	96	4.865	4.863	0.002	81	5993	0.3000	0.2936	

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		4.897				ND	ND	
70 sec-Butyl Alcohol	45		5.106				ND	ND	
71 Chlorobromomethane	128	5.161	5.159	0.002	94	2693	0.3000	0.2749	
74 Chloroform	83	5.265	5.263	0.002	93	12526	0.3000	0.3208	
72 Tetrahydrofuran	42		5.263				ND	ND	
75 1,1,1-Trichloroethane	97	5.527	5.542	-0.015	94	11686	0.3000	0.3031	
77 Carbon tetrachloride	117		5.542				ND	ND	
76 Cyclohexane	56	5.648	5.646	0.002	88	11314	0.3000	0.3248	
78 1,1-Dichloropropene	75	5.718	5.733	-0.015	87	11451	0.3000	0.3470	
80 Isobutyl alcohol	41		5.855				ND	ND	
82 1,2-Dichloroethane	62		5.994				ND	ND	
81 Benzene	78		6.011				ND	ND	
84 n-Heptane	43		6.394				ND	ND	
85 Trichloroethene	95	6.902	6.899	0.003	97	11142	0.3000	0.4203	
89 2-Pentanone	43		7.126				ND	ND	
90 1,2-Dichloropropane	63	7.180	7.195	-0.015	69	7341	0.3000	0.3469	
87 Methylcyclohexane	55	7.198	7.213	-0.015	86	10100	0.3000	0.3345	
92 Dibromomethane	93	7.372	7.369	0.003	80	4078	0.3000	0.3366	
94 Dichlorobromomethane	83	7.581	7.596	-0.015	95	8934	0.3000	0.2989	
96 2-Chloroethyl vinyl ether	63		8.048				ND	ND	
97 cis-1,3-Dichloropropene	75	8.259	8.257	0.002	94	9881	0.3000	0.3251	
98 4-Methyl-2-pentanone (MIBK	43	8.503	8.518	-0.015	95	9457	1.20	1.22	
99 Toluene	91	8.799	8.797	0.002	98	22973	0.3000	0.3432	
100 trans-1,3-Dichloropropene	75	9.112	9.110	0.002	87	6745	0.3000	0.3481	
101 Ethyl methacrylate	69	9.321	9.319	0.002	84	4198	0.3000	0.2710	
102 1,1,2-Trichloroethane	97	9.408	9.406	0.002	85	5937	0.3000	0.3020	
104 1,3-Dichloropropane	76	9.669	9.667	0.002	66	6574	0.3000	0.3065	
103 Tetrachloroethene	164	9.669	9.684	-0.015	94	7179	0.3000	0.2753	
105 2-Hexanone	43	9.861	9.841	0.020	89	7039	1.20	1.28	
107 Chlorodibromomethane	129	10.052	10.033	0.020	84	5839	0.3000	0.2869	
109 Ethylene Dibromide	107	10.226	10.224	0.002	60	4556	0.3000	0.2784	
111 Chlorobenzene	112	11.045	11.060	-0.015	84	14222	0.3000	0.2930	
110 1-Chlorohexane	91	11.045	11.060	-0.015	91	13456	0.3000	0.3659	
113 1,1,1,2-Tetrachloroethane	131	11.201	11.199	0.002	72	6597	0.3000	0.2820	
112 Ethylbenzene	106	11.271	11.268	0.003	98	7069	0.3000	0.2943	
114 m-Xylene & p-Xylene	106	11.480	11.460	0.020	97	9874	0.3000	0.3027	
115 o-Xylene	106	12.141	12.139	0.002	96	7628	0.3000	0.2741	
116 Styrene	104	12.159	12.156	0.003	92	12909	0.3000	0.2794	
117 Bromoform	173		12.452				ND	ND	
118 Isopropylbenzene	105	12.803	12.800	0.003	96	27084	0.3000	0.3323	
119 Cyclohexanone	55		12.922				ND	ND	
121 Bromobenzene	156	13.290	13.288	0.002	91	6210	0.3000	0.2923	
122 1,1,2,2-Tetrachloroethane	83	13.307	13.305	0.002	66	5620	0.3000	0.3770	
124 1,2,3-Trichloropropane	110		13.357				ND	ND	
125 trans-1,4-Dichloro-2-buten	53		13.392				ND	ND	
123 N-Propylbenzene	120	13.534	13.531	0.003	99	6795	0.3000	0.3247	
126 2-Chlorotoluene	126		13.653				ND	ND	
128 4-Chlorotoluene	126		13.845				ND	ND	
127 1,3,5-Trimethylbenzene	105	13.865	13.862	0.002	94	20820	0.3000	0.3319	
129 tert-Butylbenzene	119	14.439	14.436	0.003	93	25262	0.3000	0.3540	
130 1,2,4-Trimethylbenzene	105	14.526	14.524	0.002	94	21612	0.3000	0.3512	
131 sec-Butylbenzene	134	14.822	14.837	-0.015	94	6396	0.3000	0.3248	

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	14.996	14.976	0.020	93	11881	0.3000	0.3202	
133 4-Isopropyltoluene	119	15.118	15.115	0.003	85	28305	0.3000	0.3510	
134 1,4-Dichlorobenzene	146	15.153	15.150	0.003	93	14472	0.3000	0.3257	
138 1,2-Dichlorobenzene	146	15.797	15.794	0.003	95	9808	0.3000	0.3046	
137 n-Butylbenzene	91	15.831	15.829	0.002	97	26748	0.3000	0.3476	
139 1,2-Dibromo-3-Chloropropan	157		16.908				ND	ND	
141 1,2,4-Trichlorobenzene	180	17.868	17.848	0.020	92	6896	0.3000	0.3176	
142 Hexachlorobutadiene	225	18.060	18.057	0.003	92	7318	0.3000	0.3339	
143 Naphthalene	128		18.092				ND	ND	
144 1,2,3-Trichlorobenzene	180	18.338	18.336	0.002	90	5558	0.3000	0.3294	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		0.6000	0.6045	
S 146 Xylenes, Total	106				0		0.6000	0.5767	
S 147 1,2-Dichloroethene, Total	96				0		0.6000	0.6045	
S 148 1,3-Dichloropropene, Total	1				0		0.6000	0.6732	
S 149 Trihalomethanes, Total	1				0		1.20	0.9066	
S 150 Xylenes, Total (URS)	1				0		0.6000	0.5767	
S 151 Total BTEX	1				0			1.21	

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-Gas/Ket A_00032	Amount Added:	0.15	Units: uL
MV-Main A_00022	Amount Added:	0.15	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.15	Units: uL

Report Date: 27-Apr-2015 20:56:03 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6764.D

Injection Date: 27-Apr-2015 07:59:30 Instrument ID: VMS_Z Operator ID: moanm

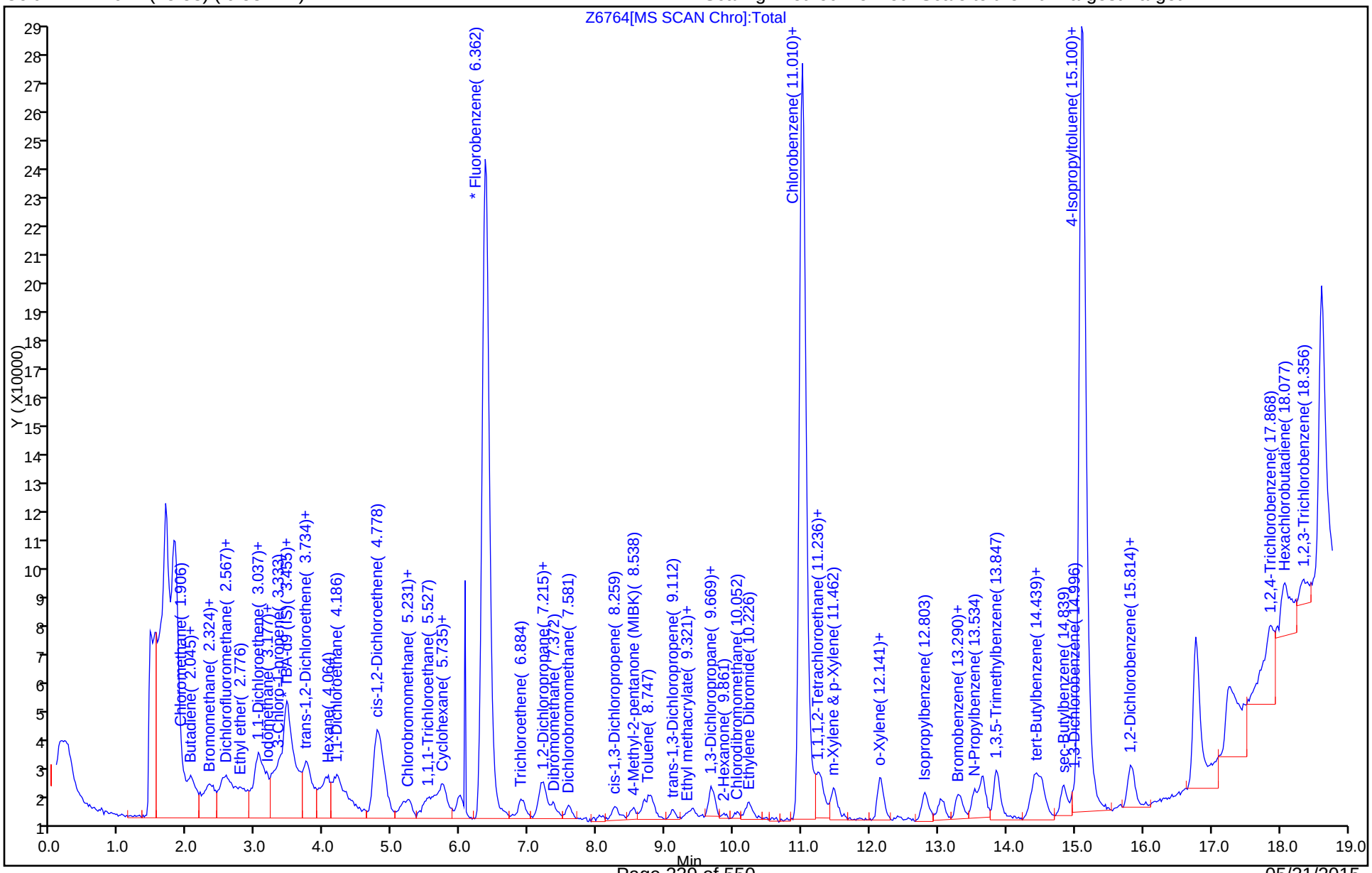
Lims ID: ic Worklist Smp#: 10

Client ID:

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



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6765.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Apr-2015 08:22:30 ALS Bottle#: 5 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*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-May-2015 06:53:57 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: XAWRK007

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	3.487	-0.001	92	126029	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.377	-0.002	98	733429	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.006	11.007	-0.001	92	170416	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.096	15.115	-0.019	97	309080	12.5	12.5	
27 Dichlorodifluoromethane	85	1.902	1.921	-0.019	98	26099	1.00	0.8541	M
30 Chloromethane	50	1.954	1.973	-0.019	99	18828	1.00	0.9798	
31 Butadiene	54	2.058	2.078	-0.020	88	14699	NC	NC	
32 Vinyl chloride	62	2.093	2.112	-0.019	97	17850	1.00	0.9731	
35 Bromomethane	94	2.320	2.339	-0.019	90	17577	1.00	0.9357	
36 Chloroethane	64	2.372	2.391	-0.019	98	12891	1.00	1.00	
37 Dichlorofluoromethane	67	2.528	2.548	-0.020	98	47347	1.00	1.02	
38 Trichlorofluoromethane	101	2.598	2.600	-0.002	99	43616	1.00	1.01	
40 Ethyl ether	59	2.790	2.809	-0.019	90	9598	1.00	0.9686	
44 Acrolein	56	2.911	2.913	-0.002	96	3716	10.0	8.32	
45 1,1-Dichloroethene	96	3.033	3.035	-0.002	98	20130	1.00	1.05	
48 Acetone	43		3.052				ND	ND	
46 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.087	-0.002	98	29622	1.00	0.99	
49 Iodomethane	142	3.173	3.192	-0.020	99	48522	1.00	0.99	
50 Carbon disulfide	76	3.260	3.279	-0.019	100	72288	1.00	1.02	
52 3-Chloro-1-propene	41	3.347	3.348	-0.001	84	34157	1.00	1.03	
51 Methyl acetate	43	3.347	3.348	-0.001	68	23169	5.00	5.30	
54 Methylene Chloride	84	3.451	3.470	-0.019	95	25730	1.00	0.8742	
55 2-Methyl-2-propanol	59		3.575				ND	ND	
58 Acrylonitrile	53	3.677	3.679	-0.002	97	16928	10.0	11.8	
57 trans-1,2-Dichloroethene	96	3.764	3.766	-0.002	97	21239	1.00	1.04	
56 Methyl tert-butyl ether	73	3.764	3.783	-0.019	84	29372	1.00	1.01	
59 Hexane	57	4.043	4.062	-0.019	90	29272	1.00	0.9769	
62 1,1-Dichloroethane	63	4.200	4.201	-0.001	96	39491	1.00	1.03	
61 Vinyl acetate	43	4.217	4.219	-0.002	96	43989	2.00	2.12	
67 2-Butanone (MEK)	43	4.861	4.863	-0.002	41	9499	4.00	3.95	
65 cis-1,2-Dichloroethene	96	4.861	4.863	-0.002	85	20293	1.00	1.03	
66 2,2-Dichloropropane	77	4.878	4.897	-0.019	90	65505	1.00	0.9729	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
70 sec-Butyl Alcohol	45	5.087	5.106	-0.019	93	13009	30.0	30.8	
71 Chlorobromomethane	128	5.157	5.159	-0.002	97	9663	1.00	1.02	
74 Chloroform	83	5.261	5.263	-0.002	94	38938	1.00	1.03	
72 Tetrahydrofuran	42	5.244	5.263	-0.019	36	2523	2.00	1.76	
75 1,1,1-Trichloroethane	97	5.540	5.542	-0.002	98	41645	1.00	1.12	
76 Cyclohexane	56	5.644	5.646	-0.002	93	34913	1.00	1.04	
78 1,1-Dichloropropene	75	5.731	5.733	-0.002	95	33773	1.00	1.06	
77 Carbon tetrachloride	117	5.784	5.785	-0.001	71	34754	1.00	2.39	a
80 Isobutyl alcohol	41		5.855				ND	ND	
82 1,2-Dichloroethane	62	5.992	5.994	-0.002	55	14750	1.00	1.01	
81 Benzene	78	6.010	6.011	-0.001	97	62736	1.00	1.07	
84 n-Heptane	43	6.410	6.394	0.016	93	43316	1.00	1.11	
85 Trichloroethene	95	6.898	6.899	-0.001	97	29560	1.00	1.15	
89 2-Pentanone	43	7.141	7.126	0.015	98	18700	4.00	3.87	
90 1,2-Dichloropropane	63	7.194	7.195	-0.001	86	21011	1.00	1.03	
87 Methylcyclohexane	55	7.211	7.213	-0.002	90	29590	1.00	1.01	
92 Dibromomethane	93	7.368	7.369	-0.001	96	12141	1.00	1.03	
94 Dichlorobromomethane	83	7.594	7.596	-0.002	97	27256	1.00	0.9419	
96 2-Chloroethyl vinyl ether	63	8.046	8.048	-0.002	93	6991	1.00	1.03	
97 cis-1,3-Dichloropropene	75	8.255	8.257	-0.002	95	27722	1.00	1.02	
98 4-Methyl-2-pentanone (MIBK	43	8.516	8.518	-0.002	97	32506	4.00	4.33	
99 Toluene	91	8.795	8.797	-0.002	99	66552	1.00	1.03	
100 trans-1,3-Dichloropropene	75	9.126	9.110	0.016	93	18931	1.00	1.01	
101 Ethyl methacrylate	69	9.317	9.319	-0.002	91	13641	1.00	0.9894	
102 1,1,2-Trichloroethane	97	9.404	9.406	-0.002	89	13637	1.00	1.03	
104 1,3-Dichloropropane	76	9.665	9.667	-0.002	95	18640	1.00	0.9765	
103 Tetrachloroethene	164	9.683	9.684	-0.001	97	23248	1.00	1.00	
105 2-Hexanone	43	9.839	9.841	-0.002	96	19655	4.00	4.01	
107 Chlorodibromomethane	129	10.031	10.033	-0.001	90	16164	1.00	0.8927	
109 Ethylene Dibromide	107	10.205	10.224	-0.019	96	14233	1.00	0.9774	
111 Chlorobenzene	112	11.058	11.060	-0.002	90	43594	1.00	1.01	
110 1-Chlorohexane	91	11.058	11.060	-0.002	92	34605	1.00	1.06	
113 1,1,1,2-Tetrachloroethane	131	11.197	11.199	-0.002	76	20674	1.00	0.99	
112 Ethylbenzene	106	11.267	11.268	-0.001	99	21623	1.00	1.01	
114 m-Xylene & p-Xylene	106	11.458	11.460	-0.002	99	29241	1.00	1.01	
115 o-Xylene	106	12.137	12.139	-0.002	96	25086	1.00	1.01	
116 Styrene	104	12.155	12.156	-0.002	93	39942	1.00	0.9714	
117 Bromoform	173	12.450	12.452	-0.002	89	5587	1.00	1.31	
118 Isopropylbenzene	105	12.799	12.800	-0.001	96	82462	1.00	1.04	
119 Cyclohexanone	55	12.920	12.922	-0.002	84	7041	40.0	38.1	
121 Bromobenzene	156	13.286	13.288	-0.002	94	20455	1.00	0.9858	
122 1,1,2,2-Tetrachloroethane	83	13.303	13.305	-0.002	64	14102	1.00	0.9684	
124 1,2,3-Trichloropropane	110	13.356	13.357	-0.001	82	3234	1.00	0.99	
125 trans-1,4-Dichloro-2-buten	53	13.390	13.392	-0.002	57	3967	1.00	1.19	
123 N-Propylbenzene	120	13.530	13.531	-0.001	99	21086	1.00	1.03	
126 2-Chlorotoluene	126	13.652	13.653	-0.001	19	18386	1.00	1.09	a
128 4-Chlorotoluene	126	13.843	13.845	-0.002	98	20388	1.00	1.03	
127 1,3,5-Trimethylbenzene	105	13.860	13.862	-0.002	94	64703	1.00	1.06	
129 tert-Butylbenzene	119	14.435	14.436	-0.001	94	74539	1.00	1.07	
130 1,2,4-Trimethylbenzene	105	14.522	14.524	-0.002	95	62976	1.00	1.05	
131 sec-Butylbenzene	134	14.835	14.837	-0.002	94	20667	1.00	1.07	
132 1,3-Dichlorobenzene	146	14.974	14.976	-0.002	95	36472	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
133 4-Isopropyltoluene	119	15.114	15.115	-0.001	93	82944	1.00	1.05	
134 1,4-Dichlorobenzene	146	15.149	15.150	-0.002	94	44809	1.00	1.03	
138 1,2-Dichlorobenzene	146	15.793	15.794	-0.001	96	32087	1.00	1.02	
137 n-Butylbenzene	91	15.827	15.829	-0.002	97	80232	1.00	1.07	
139 1,2-Dibromo-3-Chloropropan	157	16.924	16.908	0.016	87	1600	1.00	0.7733	
141 1,2,4-Trichlorobenzene	180	17.847	17.848	-0.001	95	21481	1.00	1.01	
142 Hexachlorobutadiene	225	18.055	18.057	-0.002	97	22348	1.00	1.04	
143 Naphthalene	128	18.090	18.092	-0.002	97	23201	1.00	1.11	
144 1,2,3-Trichlorobenzene	180	18.334	18.336	-0.002	95	17272	1.00	1.05	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		2.00	2.06	
S 146 Xylenes, Total	106				0		2.00	2.02	
S 147 1,2-Dichloroethene, Total	96				0		2.00	2.06	
S 148 1,3-Dichloropropene, Total	1				0		2.00	2.03	
S 149 Trihalomethanes, Total	1				0		4.00	4.17	
S 150 Xylenes, Total (URS)	1				0		2.00	2.02	
S 151 Total BTEX	1				0			5.13	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

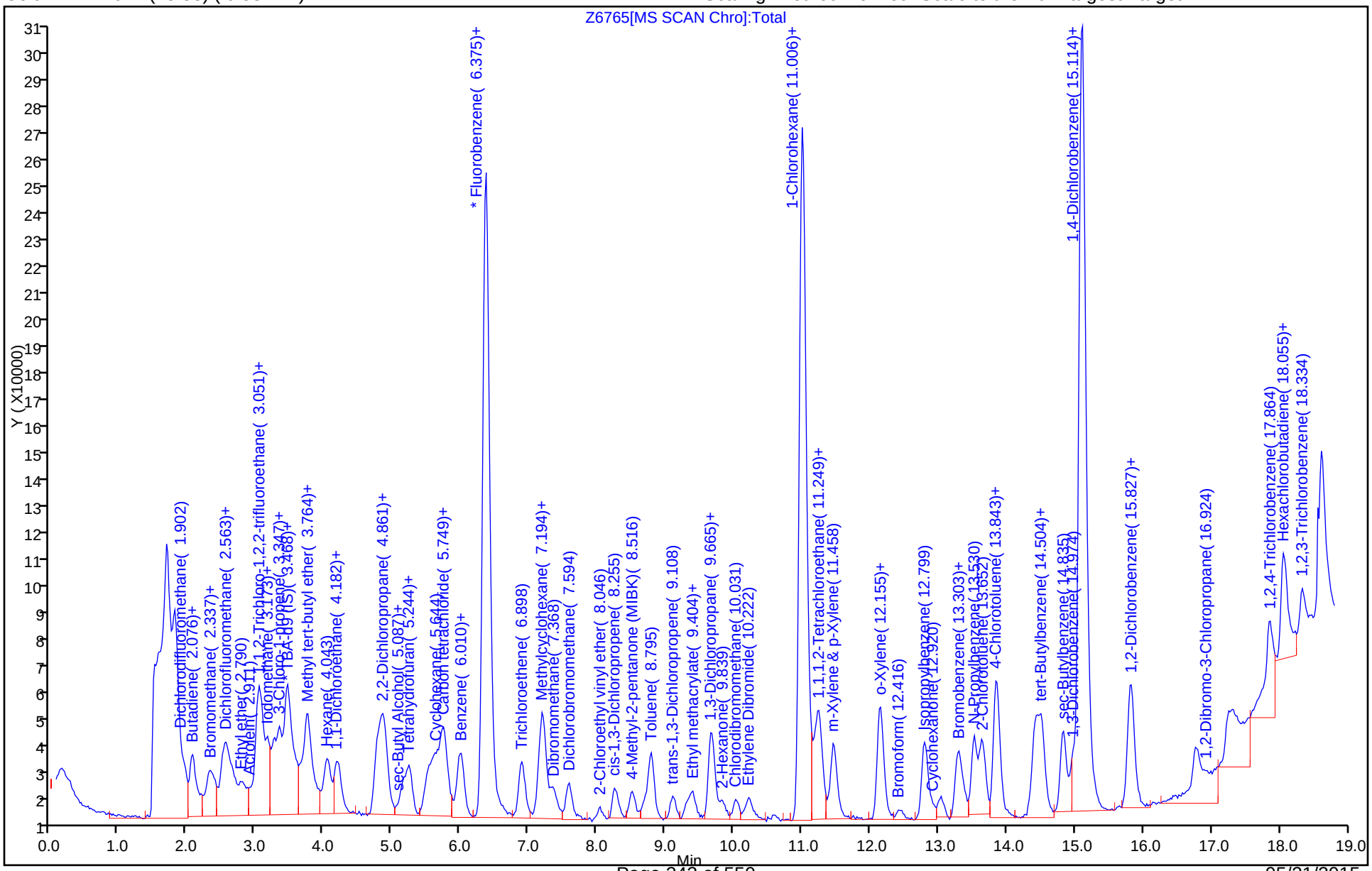
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	0.50	Units: uL
MV-Main A_00022	Amount Added:	0.50	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.50	Units: uL

Report Date: 02-May-2015 06:53:57 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6765.D				
Injection Date:	27-Apr-2015 08:22:30	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#:	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

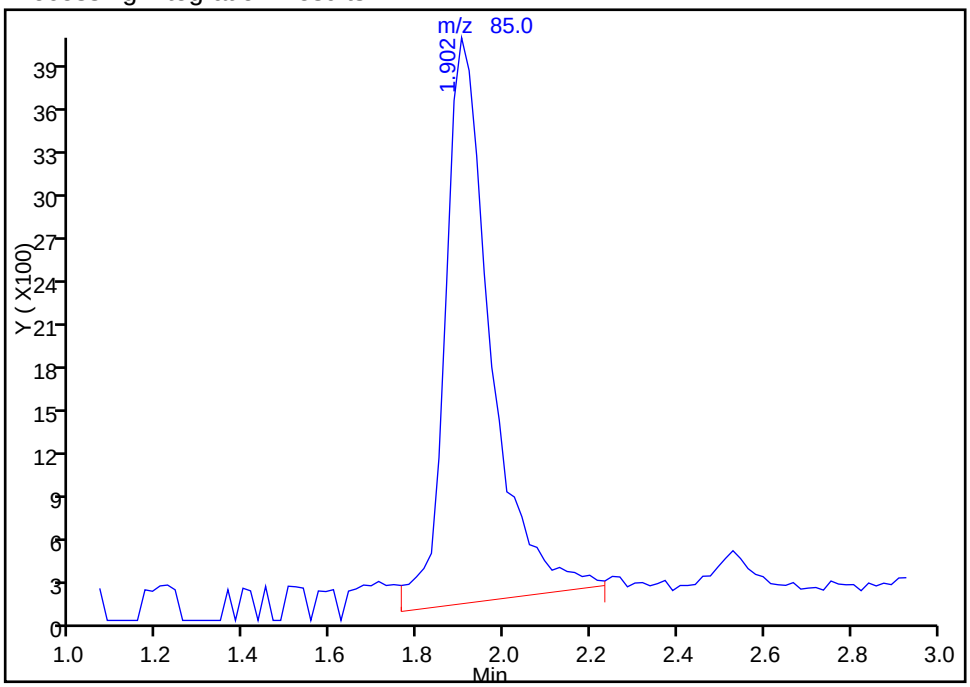
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6765.D				
Injection Date:	27-Apr-2015 08:22:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	5	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		

27 Dichlorodifluoromethane, CAS: 75-71-8

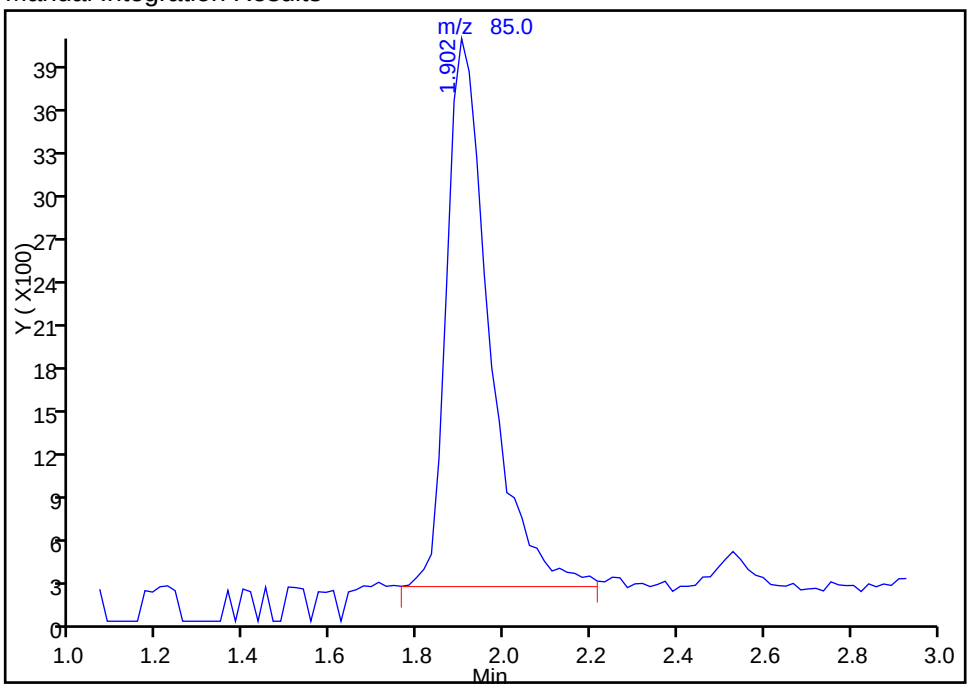
Processing Integration Results

RT: 1.90
Area: 28707
Amount: 0.922529
Amount Units: ug/l



Manual Integration Results

RT: 1.90
Area: 26099
Amount: 0.854106
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:34:55
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

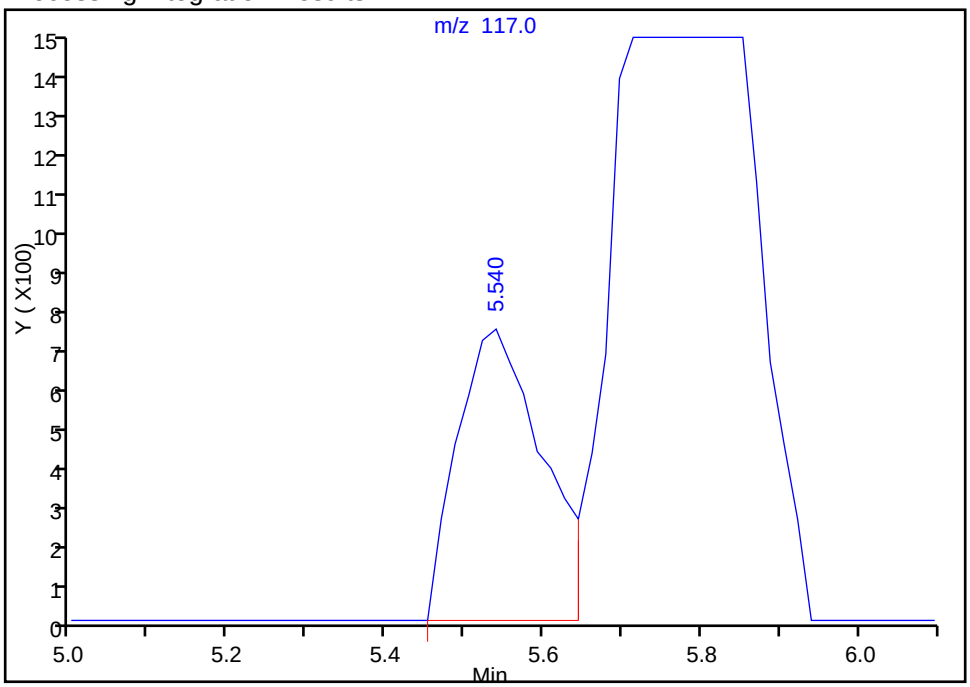
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6765.D				
Injection Date:	27-Apr-2015 08:22:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	5	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		

77 Carbon tetrachloride, CAS: 56-23-5

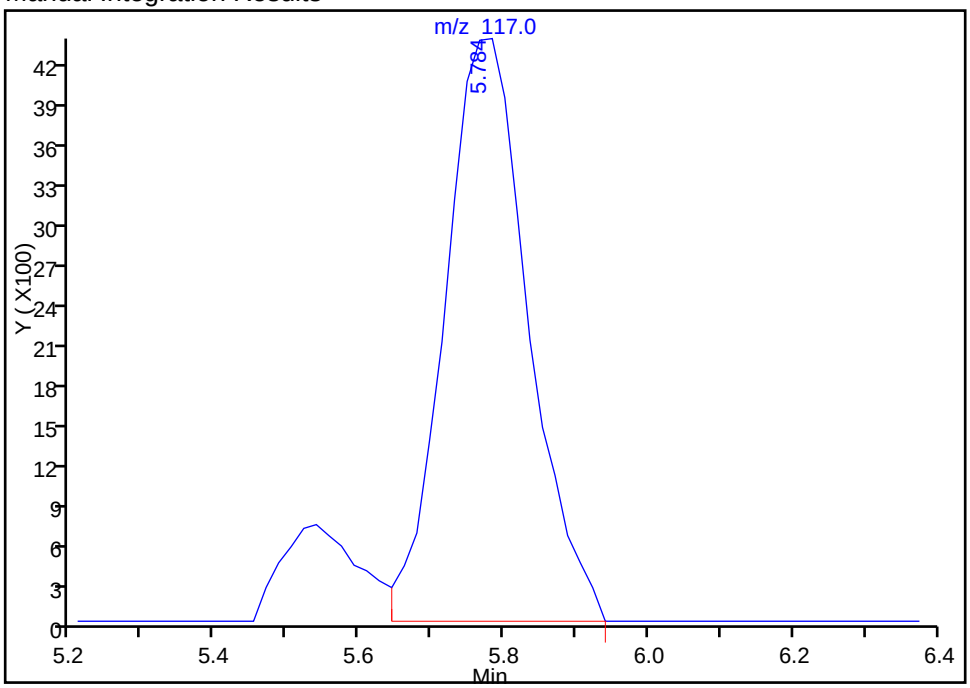
Processing Integration Results

RT: 5.54
Area: 5399
Amount: 0.560020
Amount Units: ug/l



Manual Integration Results

RT: 5.78
Area: 34754
Amount: 2.391349
Amount Units: ug/l



Reviewer: moanm, 02-May-2015 06:53:57
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

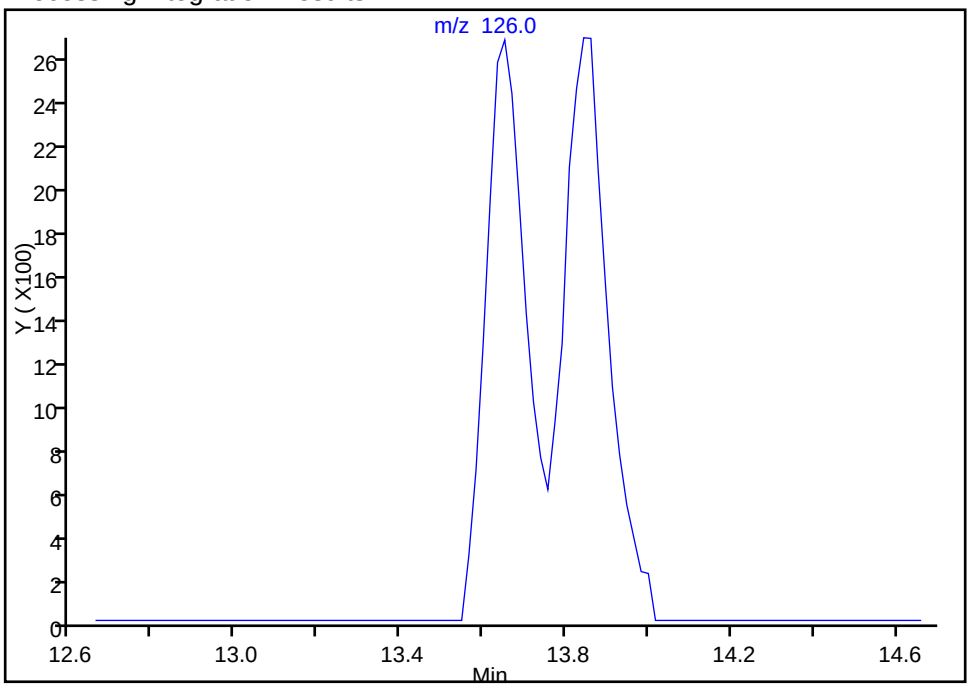
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6765.D				
Injection Date:	27-Apr-2015 08:22:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	5	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

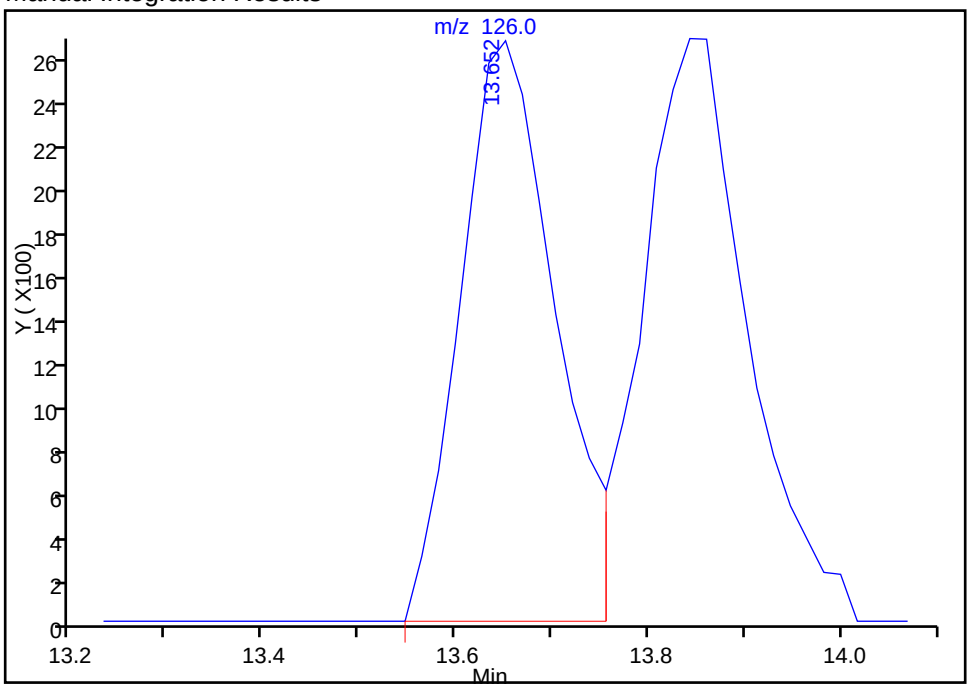
Processing Integration Results

Not Detected
Expected RT: 13.65



Manual Integration Results

RT: 13.65
Area: 18386
Amount: 1.087093
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:38:14
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6766.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 27-Apr-2015 08:45:30 ALS Bottle#: 6 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*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-May-2015 06:54:05 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: XAWRK007

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	131437	250.0	250.0	
* 2 Fluorobenzene	96	6.363	6.377	-0.014	97	739116	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.011	11.007	0.004	89	172853	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.101	15.115	-0.014	96	317479	12.5	12.5	
27 Dichlorodifluoromethane	85	1.907	1.921	-0.014	98	51113	2.00	1.66	M
30 Chloromethane	50	1.959	1.973	-0.014	99	35666	2.00	1.84	
31 Butadiene	54	2.064	2.078	-0.014	90	25236	NC	NC	
32 Vinyl chloride	62	2.081	2.112	-0.031	97	34547	2.00	1.87	
35 Bromomethane	94	2.325	2.339	-0.014	90	36971	2.00	1.95	
36 Chloroethane	64	2.377	2.391	-0.014	99	25262	2.00	1.95	
37 Dichlorofluoromethane	67	2.534	2.548	-0.014	97	90535	2.00	1.93	
38 Trichlorofluoromethane	101	2.603	2.600	0.003	99	84818	2.00	1.95	
40 Ethyl ether	59	2.795	2.809	-0.014	93	18174	2.00	2.00	
44 Acrolein	56	2.899	2.913	-0.014	97	8227	20.0	18.3	
45 1,1-Dichloroethene	96	3.021	3.035	-0.014	97	36217	2.00	1.87	
48 Acetone	43	3.038	3.052	-0.014	30	9987	8.00	8.97	
46 1,1,2-Trichloro-1,2,2-trif	151	3.073	3.087	-0.014	98	59591	2.00	1.98	
49 Iodomethane	142	3.178	3.192	-0.014	99	94803	2.00	1.92	
50 Carbon disulfide	76	3.265	3.279	-0.014	99	139621	2.00	1.95	
52 3-Chloro-1-propene	41	3.352	3.348	0.004	91	66719	2.00	1.99	
51 Methyl acetate	43	3.334	3.348	-0.014	64	43396	10.0	9.85	
54 Methylene Chloride	84	3.456	3.470	-0.014	97	39066	2.00	1.74	
55 2-Methyl-2-propanol	59	3.578	3.575	0.003	91	17535	20.0	20.5	M
58 Acrylonitrile	53	3.682	3.679	0.003	96	30750	20.0	21.3	
57 trans-1,2-Dichloroethene	96	3.752	3.766	-0.014	98	41276	2.00	2.00	
56 Methyl tert-butyl ether	73	3.769	3.783	-0.014	96	57439	2.00	1.95	
59 Hexane	57	4.048	4.062	-0.014	94	59594	2.00	1.96	
62 1,1-Dichloroethane	63	4.187	4.201	-0.014	96	76556	2.00	1.98	
61 Vinyl acetate	43	4.222	4.219	0.003	96	82947	4.00	3.97	
67 2-Butanone (MEK)	43	4.866	4.863	0.003	45	19114	8.00	7.89	
65 cis-1,2-Dichloroethene	96	4.866	4.863	0.003	85	38370	2.00	1.93	
66 2,2-Dichloropropane	77	4.884	4.897	-0.013	86	101546	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
70 sec-Butyl Alcohol	45	5.092	5.106	-0.014	94	24171	60.0	55.0	
71 Chlorobromomethane	128	5.162	5.159	0.003	96	19273	2.00	2.02	
74 Chloroform	83	5.249	5.263	-0.014	95	74323	2.00	1.95	
72 Tetrahydrofuran	42	5.232	5.263	-0.031	37	5157	4.00	3.57	
75 1,1,1-Trichloroethane	97	5.545	5.542	0.003	98	74867	2.00	1.99	
76 Cyclohexane	56	5.632	5.646	-0.014	93	64651	2.00	1.90	
78 1,1-Dichloropropene	75	5.736	5.733	0.003	96	64019	2.00	1.99	
77 Carbon tetrachloride	117	5.771	5.785	-0.014	77	66038	2.00	3.41	a
80 Isobutyl alcohol	41	5.893	5.855	0.038	91	8422	50.0	53.8	
82 1,2-Dichloroethane	62	5.998	5.994	0.004	55	29041	2.00	1.97	
81 Benzene	78	5.998	6.011	-0.013	96	116285	2.00	1.97	
84 n-Heptane	43	6.398	6.394	0.004	95	76598	2.00	1.95	
85 Trichloroethene	95	6.903	6.899	0.004	98	49883	2.00	1.93	
89 2-Pentanone	43	7.129	7.126	0.003	98	38570	8.00	7.93	
90 1,2-Dichloropropane	63	7.199	7.195	0.004	90	39239	2.00	1.90	
87 Methylcyclohexane	55	7.199	7.213	-0.014	90	58910	2.00	2.00	
92 Dibromomethane	93	7.355	7.369	-0.014	97	23191	2.00	1.96	
94 Dichlorobromomethane	83	7.582	7.596	-0.014	99	52426	2.00	1.80	
96 2-Chloroethyl vinyl ether	63	8.034	8.048	-0.014	90	12982	2.00	1.89	
97 cis-1,3-Dichloropropene	75	8.260	8.257	0.003	95	52219	2.00	1.90	
98 4-Methyl-2-pentanone (MIBK	43	8.522	8.518	0.004	97	55903	8.00	7.40	
99 Toluene	91	8.783	8.797	-0.014	99	126423	2.00	1.94	
100 trans-1,3-Dichloropropene	75	9.113	9.110	0.003	94	36163	2.00	1.91	
101 Ethyl methacrylate	69	9.322	9.319	0.003	90	27403	2.00	1.96	
102 1,1,2-Trichloroethane	97	9.409	9.406	0.003	90	20951	2.00	1.69	
104 1,3-Dichloropropane	76	9.670	9.667	0.003	92	37309	2.00	1.93	
103 Tetrachloroethene	164	9.688	9.684	0.004	97	45615	2.00	1.94	
105 2-Hexanone	43	9.845	9.841	0.003	97	37389	8.00	7.52	
107 Chlorodibromomethane	129	10.036	10.033	0.004	90	32606	2.00	1.78	
109 Ethylene Dibromide	107	10.227	10.224	0.003	98	28481	2.00	1.93	
111 Chlorobenzene	112	11.046	11.060	-0.014	89	84096	2.00	1.92	
110 1-Chlorohexane	91	11.046	11.060	-0.014	88	63223	2.00	1.90	
113 1,1,1,2-Tetrachloroethane	131	11.202	11.199	0.003	83	40369	2.00	1.91	
112 Ethylbenzene	106	11.254	11.268	-0.014	100	42759	2.00	1.97	
114 m-Xylene & p-Xylene	106	11.463	11.460	0.003	99	57037	2.00	1.94	
115 o-Xylene	106	12.142	12.139	0.003	96	49586	2.00	1.97	
116 Styrene	104	12.160	12.156	0.004	94	81160	2.00	1.95	
117 Bromoform	173	12.456	12.452	0.004	95	12207	2.00	1.92	
118 Isopropylbenzene	105	12.804	12.800	0.004	96	161584	2.00	1.98	
119 Cyclohexanone	55	12.926	12.922	0.004	90	14271	80.0	76.2	
121 Bromobenzene	156	13.291	13.288	0.003	94	41405	2.00	1.94	
122 1,1,2,2-Tetrachloroethane	83	13.291	13.305	-0.014	94	27088	2.00	1.81	
124 1,2,3-Trichloropropane	110	13.361	13.357	0.004	78	6639	2.00	1.99	
125 trans-1,4-Dichloro-2-buten	53	13.413	13.392	0.021	67	5862	2.00	1.71	
123 N-Propylbenzene	120	13.535	13.531	0.004	99	41787	2.00	1.99	
126 2-Chlorotoluene	126	13.639	13.653	-0.014	52	34337	2.00	1.98	a
128 4-Chlorotoluene	126	13.848	13.845	0.003	98	40804	2.00	2.01	
127 1,3,5-Trimethylbenzene	105	13.866	13.862	0.004	95	126724	2.00	2.01	
129 tert-Butylbenzene	119	14.440	14.436	0.004	93	139235	2.00	1.94	
130 1,2,4-Trimethylbenzene	105	14.527	14.524	0.003	95	121191	2.00	1.96	
131 sec-Butylbenzene	134	14.840	14.837	0.003	94	39187	2.00	1.98	
132 1,3-Dichlorobenzene	146	14.980	14.976	0.004	97	73044	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
133 4-Isopropyltoluene	119	15.119	15.115	0.004	95	154107	2.00	1.90	
134 1,4-Dichlorobenzene	146	15.136	15.150	-0.014	95	84626	2.00	1.90	
138 1,2-Dichlorobenzene	146	15.798	15.794	0.004	97	63154	2.00	1.96	
137 n-Butylbenzene	91	15.833	15.829	0.004	97	155380	2.00	2.01	
139 1,2-Dibromo-3-Chloropropan	157	16.912	16.908	0.004	88	3670	2.00	1.73	
141 1,2,4-Trichlorobenzene	180	17.852	17.848	0.004	95	42990	2.00	1.97	
142 Hexachlorobutadiene	225	18.061	18.057	0.004	97	44266	2.00	2.01	
143 Naphthalene	128	18.078	18.092	-0.014	97	43882	2.00	2.04	
144 1,2,3-Trichlorobenzene	180	18.339	18.336	0.003	95	34714	2.00	2.05	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		4.00	3.92	
S 146 Xylenes, Total	106				0		4.00	3.91	
S 147 1,2-Dichloroethene, Total	96				0		4.00	3.92	
S 148 1,3-Dichloropropene, Total	1				0		4.00	3.82	
S 149 Trihalomethanes, Total	1				0		8.00	7.44	
S 150 Xylenes, Total (URS)	1				0		4.00	3.91	
S 151 Total BTEX	1				0			9.79	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

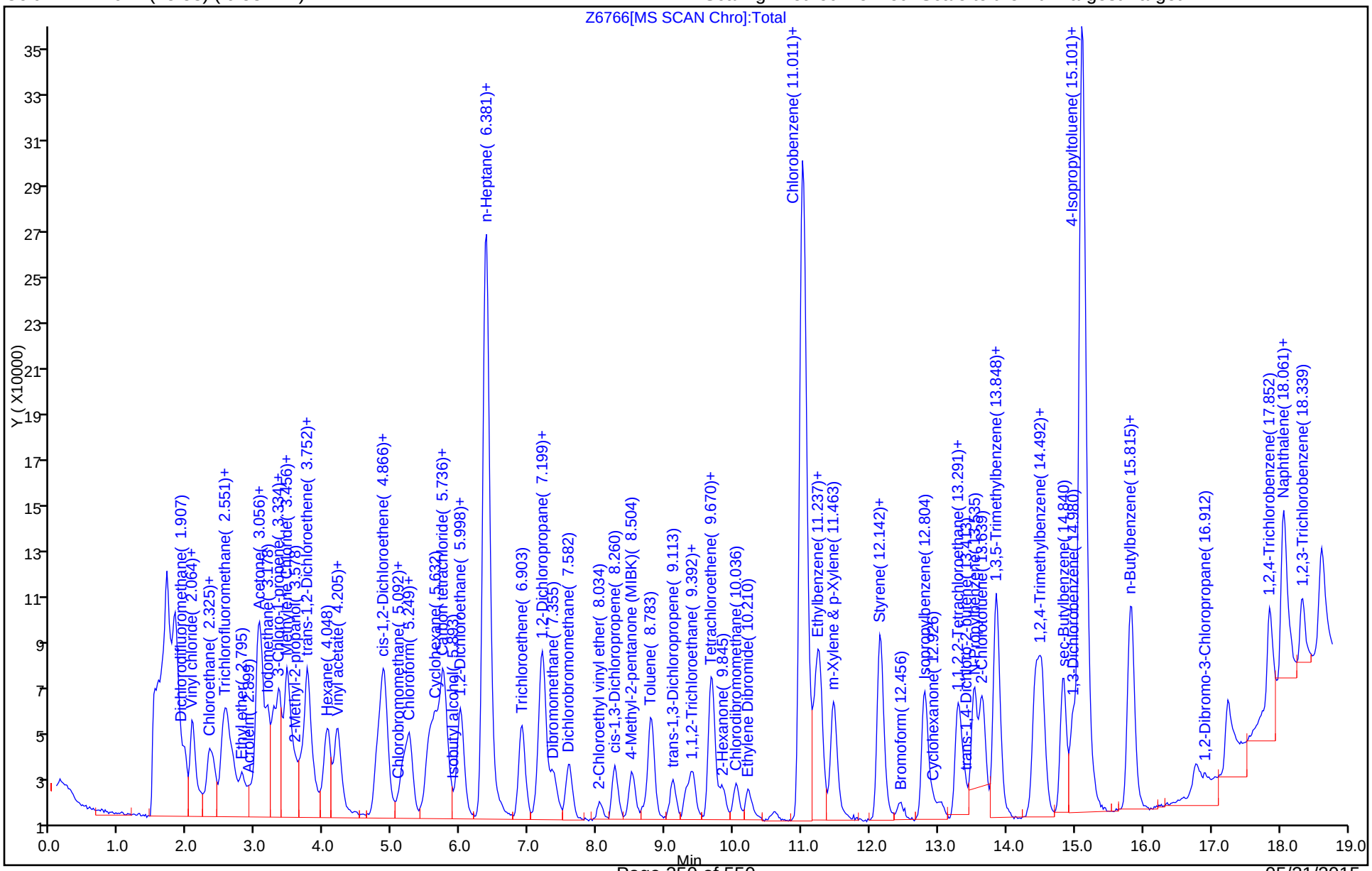
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	1.00	Units: uL

Report Date: 02-May-2015 06:54:06 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6766.D				
Injection Date:	27-Apr-2015 08:45:30	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#:	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

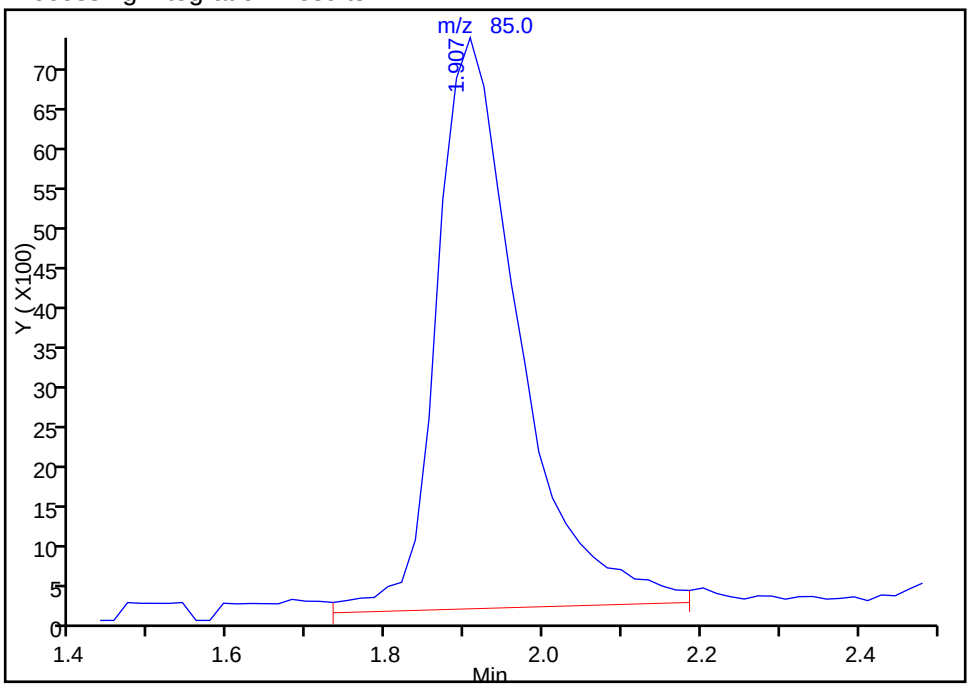
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6766.D				
Injection Date:	27-Apr-2015 08:45:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	6	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		

27 Dichlorodifluoromethane, CAS: 75-71-8

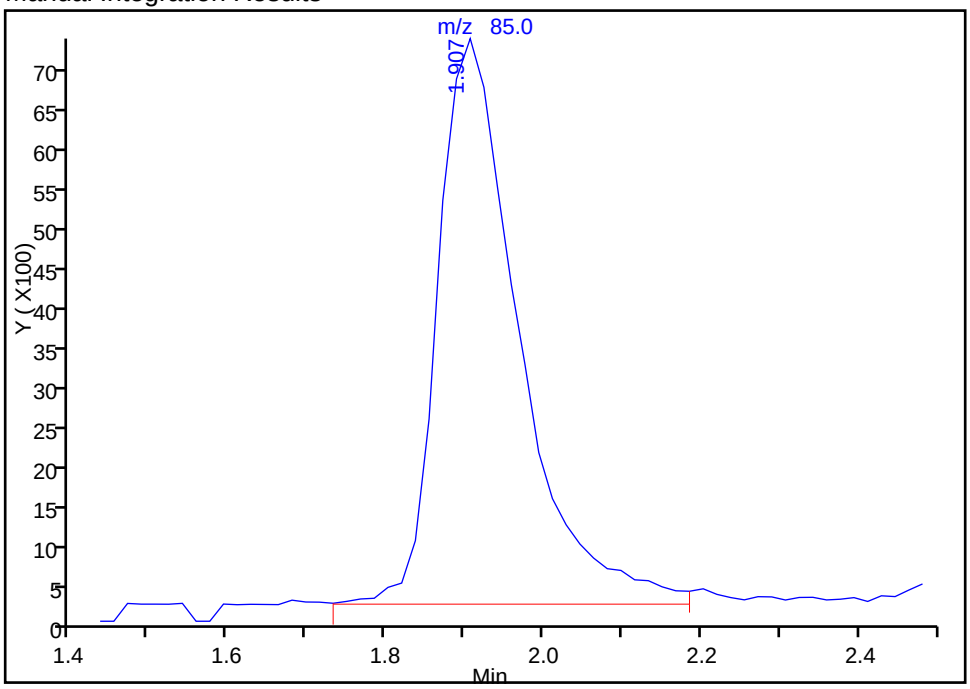
Processing Integration Results

RT: 1.91
Area: 52636
Amount: 1.702276
Amount Units: ug/l



Manual Integration Results

RT: 1.91
Area: 51113
Amount: 1.659834
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:35:11
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

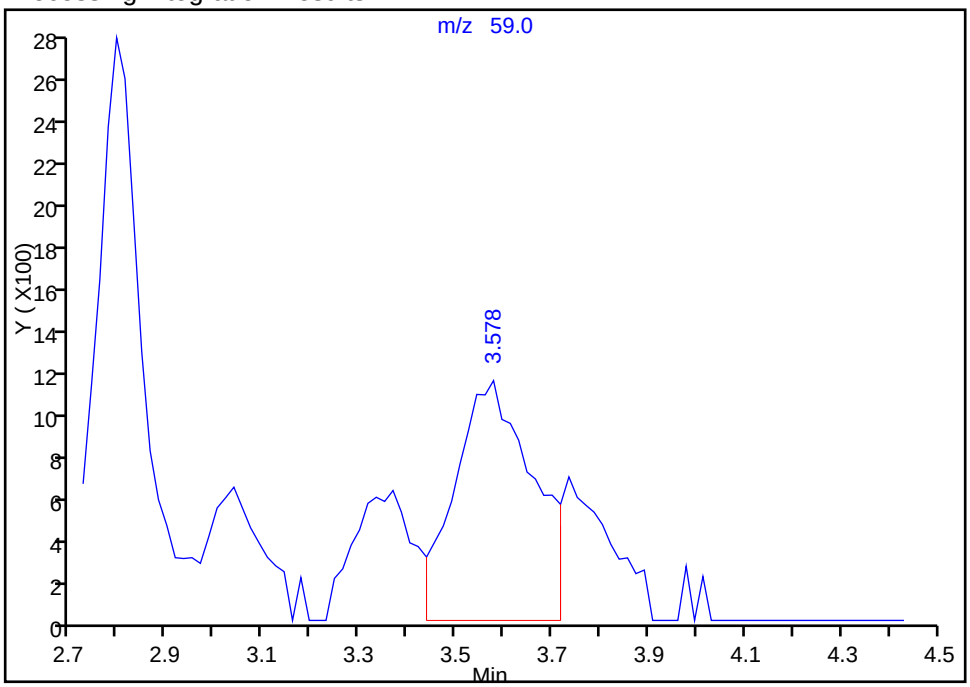
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6766.D				
Injection Date:	27-Apr-2015 08:45:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	6	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		

55 2-Methyl-2-propanol, CAS: 75-65-0

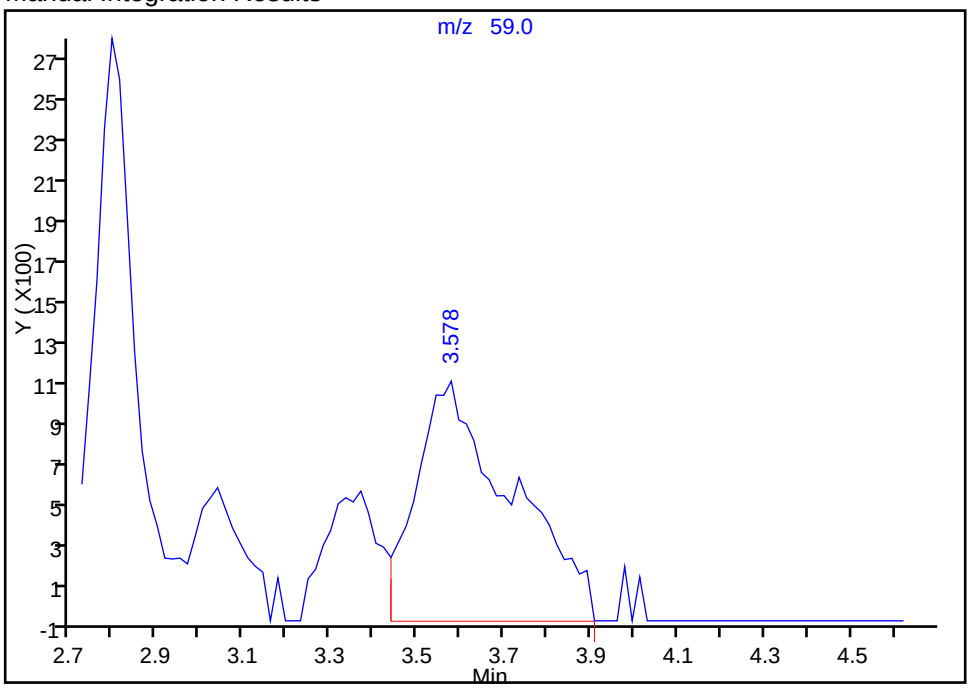
Processing Integration Results

RT: 3.58
Area: 13081
Amount: 5.958249
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 17535
Amount: 20.502226
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 14:11:29
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

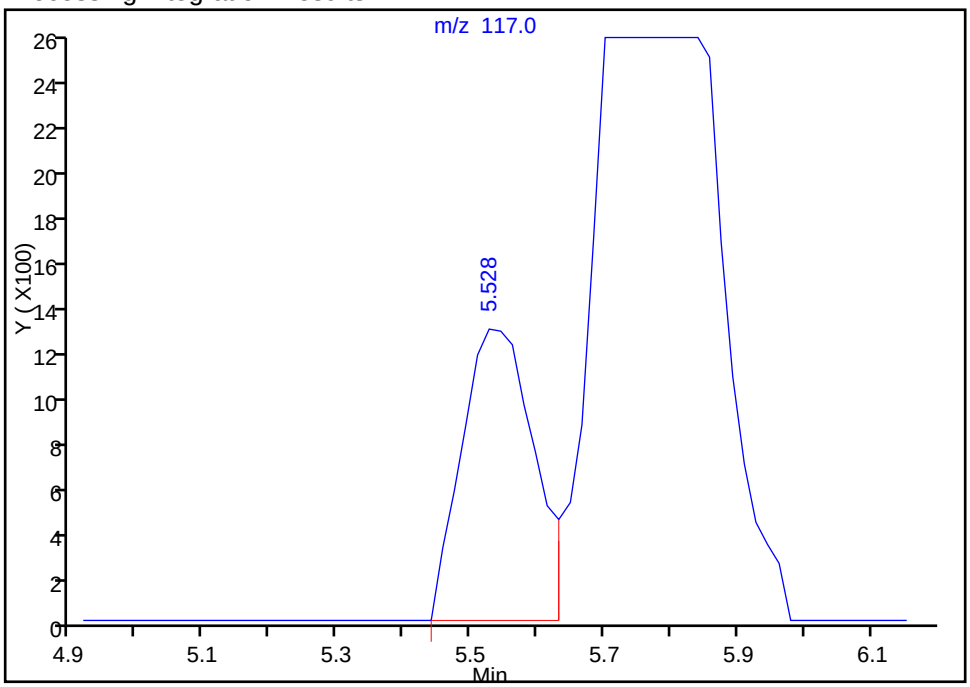
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6766.D				
Injection Date:	27-Apr-2015 08:45:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	6	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		

77 Carbon tetrachloride, CAS: 56-23-5

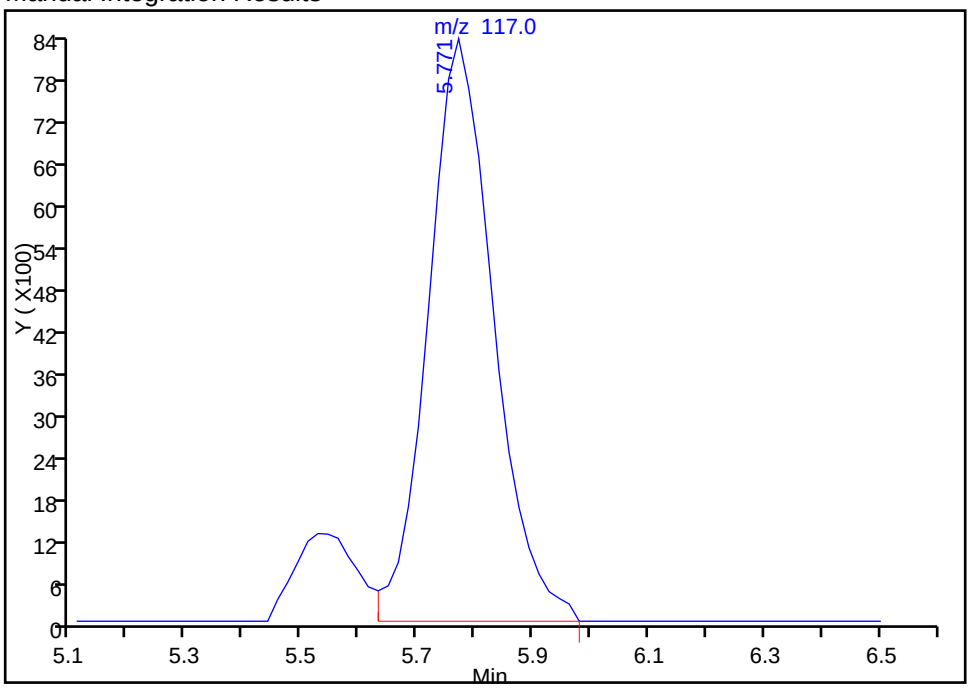
Processing Integration Results

RT: 5.53
Area: 9589
Amount: 0.654722
Amount Units: ug/l



Manual Integration Results

RT: 5.77
Area: 66038
Amount: 3.412817
Amount Units: ug/l



Reviewer: moanm, 02-May-2015 06:54:05
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

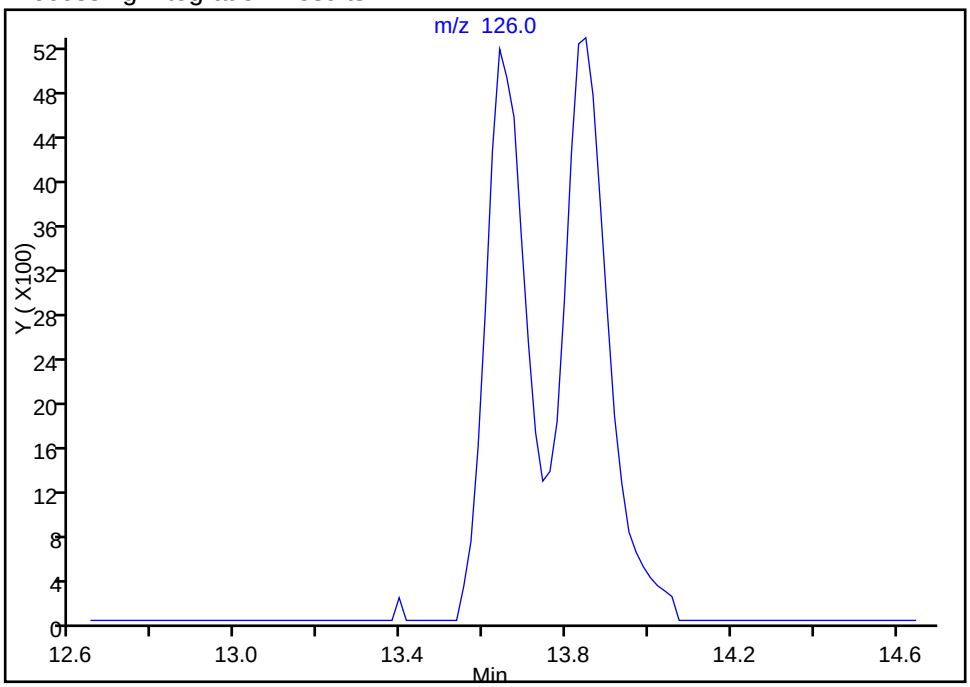
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6766.D				
Injection Date:	27-Apr-2015 08:45:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	6	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

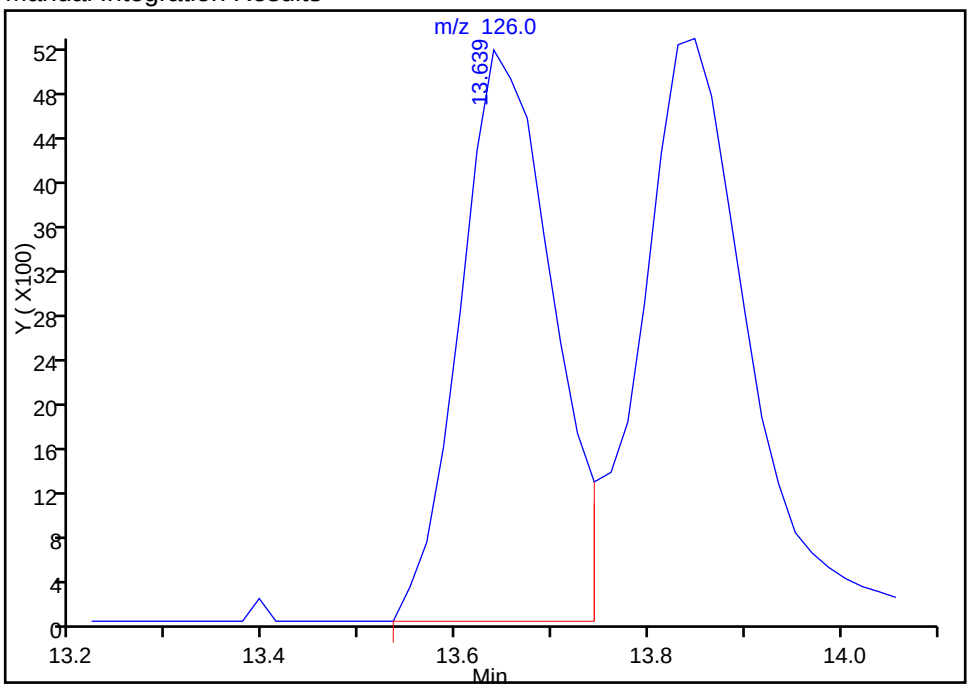
Not Detected
Expected RT: 13.65

Processing Integration Results



Manual Integration Results

RT: 13.64
Area: 34337
Amount: 1.976504
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:38:34
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6767.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 27-Apr-2015 09:07:30 ALS Bottle#: 7 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*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-May-2015 06:54:14 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: XAWRK007

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	3.471	3.487	-0.016	84	139600	250.0	250.0	
* 2 Fluorobenzene	96	6.378	6.377	0.001	98	737362	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.008	11.007	0.001	89	171500	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.099	15.115	-0.016	96	322172	12.5	12.5	
27 Dichlorodifluoromethane	85	1.905	1.921	-0.016	98	175880	5.00	5.73	
30 Chloromethane	50	1.974	1.973	0.001	99	108376	5.00	5.61	
31 Butadiene	54	2.061	2.078	-0.017	88	74237	NC	NC	
32 Vinyl chloride	62	2.096	2.112	-0.016	98	98834	5.00	5.36	
35 Bromomethane	94	2.322	2.339	-0.017	91	99676	5.00	5.28	
36 Chloroethane	64	2.375	2.391	-0.016	99	68236	5.00	5.27	
37 Dichlorofluoromethane	67	2.531	2.548	-0.017	98	247538	5.00	5.28	
38 Trichlorofluoromethane	101	2.601	2.600	0.001	99	230868	5.00	5.33	
40 Ethyl ether	59	2.792	2.809	-0.017	93	44854	5.00	5.26	
44 Acrolein	56	2.897	2.913	-0.016	99	25774	50.0	57.4	
45 1,1-Dichloroethene	96	3.036	3.035	0.001	98	102853	5.00	5.33	
48 Acetone	43	3.054	3.052	0.002	82	23710	20.0	21.3	
46 1,1,2-Trichloro-1,2,2-trif	151	3.071	3.087	-0.016	98	160541	5.00	5.34	
49 Iodomethane	142	3.175	3.192	-0.017	99	254683	5.00	5.18	
50 Carbon disulfide	76	3.262	3.279	-0.017	99	368031	5.00	5.16	
52 3-Chloro-1-propene	41	3.349	3.348	0.001	85	171773	5.00	5.14	
51 Methyl acetate	43	3.349	3.348	0.001	69	112647	25.0	25.6	
54 Methylene Chloride	84	3.454	3.470	-0.016	96	89216	5.00	5.07	
55 2-Methyl-2-propanol	59	3.558	3.575	-0.017	91	31852	50.0	46.9	M
58 Acrylonitrile	53	3.680	3.679	0.001	99	73534	50.0	51.1	
57 trans-1,2-Dichloroethene	96	3.750	3.766	-0.016	97	107250	5.00	5.20	
56 Methyl tert-butyl ether	73	3.767	3.783	-0.016	97	150121	5.00	5.11	
59 Hexane	57	4.046	4.062	-0.016	94	159495	5.00	5.29	
62 1,1-Dichloroethane	63	4.185	4.201	-0.016	96	192812	5.00	4.99	
61 Vinyl acetate	43	4.220	4.219	0.001	96	215739	10.0	10.4	
67 2-Butanone (MEK)	43	4.864	4.863	0.001	46	52173	20.0	21.6	
65 cis-1,2-Dichloroethene	96	4.864	4.863	0.001	85	103196	5.00	5.19	
66 2,2-Dichloropropane	77	4.899	4.897	0.002	90	212611	5.00	5.39	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
70 sec-Butyl Alcohol	45	5.090	5.106	-0.016	96	72102	150.0	154.3	
71 Chlorobromomethane	128	5.160	5.159	0.001	97	49954	5.00	5.24	
74 Chloroform	83	5.247	5.263	-0.016	95	194953	5.00	5.13	
72 Tetrahydrofuran	42	5.247	5.263	-0.016	36	15957	10.0	11.1	
75 1,1,1-Trichloroethane	97	5.543	5.542	0.001	98	199439	5.00	5.31	
76 Cyclohexane	56	5.630	5.646	-0.016	93	175967	5.00	5.19	
78 1,1-Dichloropropene	75	5.734	5.733	0.001	98	162231	5.00	5.05	
77 Carbon tetrachloride	117	5.769	5.785	-0.016	77	171387	5.00	7.09	a
80 Isobutyl alcohol	41	5.856	5.855	0.001	95	20285	125.0	122.0	
82 1,2-Dichloroethane	62	5.995	5.994	0.001	89	76932	5.00	5.24	
81 Benzene	78	5.995	6.011	-0.016	96	301430	5.00	5.12	
84 n-Heptane	43	6.396	6.394	0.002	94	204223	5.00	5.22	
85 Trichloroethene	95	6.900	6.899	0.001	98	133115	5.00	5.16	
89 2-Pentanone	43	7.127	7.126	0.001	99	102461	20.0	21.1	
90 1,2-Dichloropropane	63	7.196	7.195	0.001	96	102569	5.00	4.98	
87 Methylcyclohexane	55	7.214	7.213	0.001	90	150911	5.00	5.13	
92 Dibromomethane	93	7.353	7.369	-0.016	97	59398	5.00	5.04	
94 Dichlorobromomethane	83	7.597	7.596	0.001	99	149834	5.00	5.15	
96 2-Chloroethyl vinyl ether	63	8.032	8.048	-0.016	92	36887	5.00	5.39	
97 cis-1,3-Dichloropropene	75	8.258	8.257	0.001	95	137956	5.00	5.07	
98 4-Methyl-2-pentanone (MIBK	43	8.519	8.518	0.001	97	155023	20.0	20.6	
99 Toluene	91	8.798	8.797	0.001	99	329384	5.00	5.06	
100 trans-1,3-Dichloropropene	75	9.111	9.110	0.001	94	97197	5.00	5.15	
101 Ethyl methacrylate	69	9.303	9.319	-0.016	91	72518	5.00	5.23	
102 1,1,2-Trichloroethane	97	9.407	9.406	0.001	91	62625	5.00	5.53	
104 1,3-Dichloropropane	76	9.668	9.667	0.001	92	99420	5.00	5.18	
103 Tetrachloroethene	164	9.686	9.684	0.002	98	122962	5.00	5.27	
105 2-Hexanone	43	9.842	9.841	0.001	98	98111	20.0	19.9	
107 Chlorodibromomethane	129	10.034	10.033	0.002	89	87757	5.00	4.82	
109 Ethylene Dibromide	107	10.208	10.224	-0.016	98	75628	5.00	5.16	
111 Chlorobenzene	112	11.043	11.060	-0.017	92	222927	5.00	5.13	
110 1-Chlorohexane	91	11.043	11.060	-0.017	87	161452	5.00	4.90	
113 1,1,1,2-Tetrachloroethane	131	11.200	11.199	0.001	91	107518	5.00	5.13	
112 Ethylbenzene	106	11.252	11.268	-0.016	99	112189	5.00	5.22	
114 m-Xylene & p-Xylene	106	11.461	11.460	0.001	99	153017	5.00	5.24	
115 o-Xylene	106	12.140	12.139	0.001	98	132546	5.00	5.32	
116 Styrene	104	12.157	12.156	0.001	94	217885	5.00	5.27	
117 Bromoform	173	12.436	12.452	-0.016	96	36475	5.00	4.21	
118 Isopropylbenzene	105	12.801	12.800	0.001	96	423137	5.00	5.10	
119 Cyclohexanone	55	12.923	12.922	0.001	92	38016	200.0	204.5	
121 Bromobenzene	156	13.289	13.288	0.001	94	111521	5.00	5.16	
122 1,1,2,2-Tetrachloroethane	83	13.306	13.305	0.001	94	74973	5.00	4.94	
124 1,2,3-Trichloropropane	110	13.358	13.357	0.001	81	17579	5.00	5.18	
125 trans-1,4-Dichloro-2-buten	53	13.393	13.392	0.001	76	18698	5.00	5.36	
123 N-Propylbenzene	120	13.533	13.531	0.001	99	110212	5.00	5.17	
126 2-Chlorotoluene	126	13.654	13.653	0.001	76	89981	5.00	5.10	a
128 4-Chlorotoluene	126	13.846	13.845	0.001	98	108455	5.00	5.27	
127 1,3,5-Trimethylbenzene	105	13.863	13.862	0.001	95	318859	5.00	4.99	
129 tert-Butylbenzene	119	14.438	14.436	0.002	94	366113	5.00	5.04	
130 1,2,4-Trimethylbenzene	105	14.525	14.524	0.001	96	313826	5.00	5.01	
131 sec-Butylbenzene	134	14.838	14.837	0.001	94	104723	5.00	5.22	
132 1,3-Dichlorobenzene	146	14.977	14.976	0.001	97	194349	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
133 4-Isopropyltoluene	119	15.117	15.115	0.002	94	415946	5.00	5.07	
134 1,4-Dichlorobenzene	146	15.134	15.150	-0.016	95	231528	5.00	5.12	
138 1,2-Dichlorobenzene	146	15.795	15.794	0.001	97	166524	5.00	5.08	
137 n-Butylbenzene	91	15.830	15.829	0.001	97	394595	5.00	5.04	
139 1,2-Dibromo-3-Chloropropan	157	16.927	16.908	0.019	88	10386	5.00	4.82	
141 1,2,4-Trichlorobenzene	180	17.849	17.848	0.001	95	116983	5.00	5.29	
142 Hexachlorobutadiene	225	18.058	18.057	0.001	97	115976	5.00	5.20	
143 Naphthalene	128	18.093	18.092	0.001	97	110576	5.00	5.08	
144 1,2,3-Trichlorobenzene	180	18.337	18.336	0.001	95	87792	5.00	5.11	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		10.0	10.4	
S 146 Xylenes, Total	106				0		10.0	10.6	
S 147 1,2-Dichloroethene, Total	96				0		10.0	10.4	
S 148 1,3-Dichloropropene, Total	1				0		10.0	10.2	
S 149 Trihalomethanes, Total	1				0		20.0	19.3	
S 150 Xylenes, Total (URS)	1				0		10.0	10.6	
S 151 Total BTEX	1				0			25.9	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

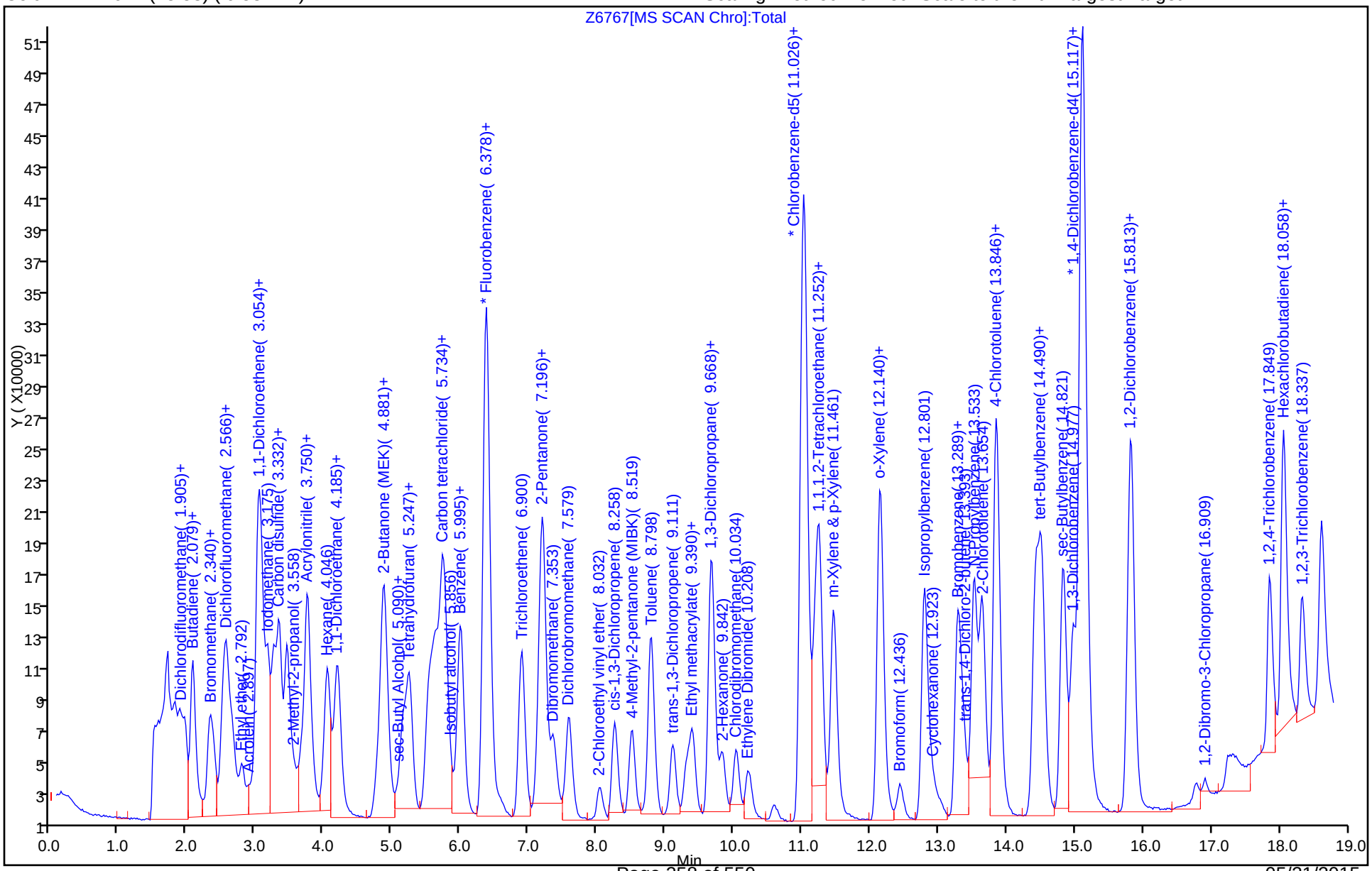
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	2.50	Units: uL
MV-Main A_00022	Amount Added:	2.50	Units: uL
MV-2cleve+AVA_00009	Amount Added:	2.50	Units: uL

Report Date: 02-May-2015 06:54:14 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6767.D				
Injection Date:	27-Apr-2015 09:07:30	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#:	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

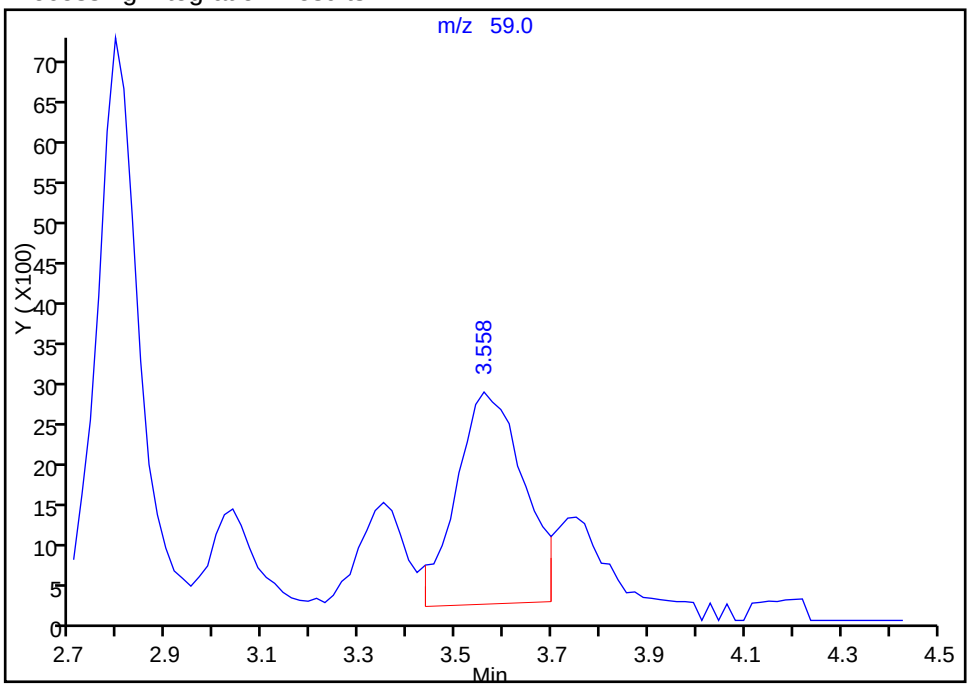
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6767.D				
Injection Date:	27-Apr-2015 09:07:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	7	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		

55 2-Methyl-2-propanol, CAS: 75-65-0

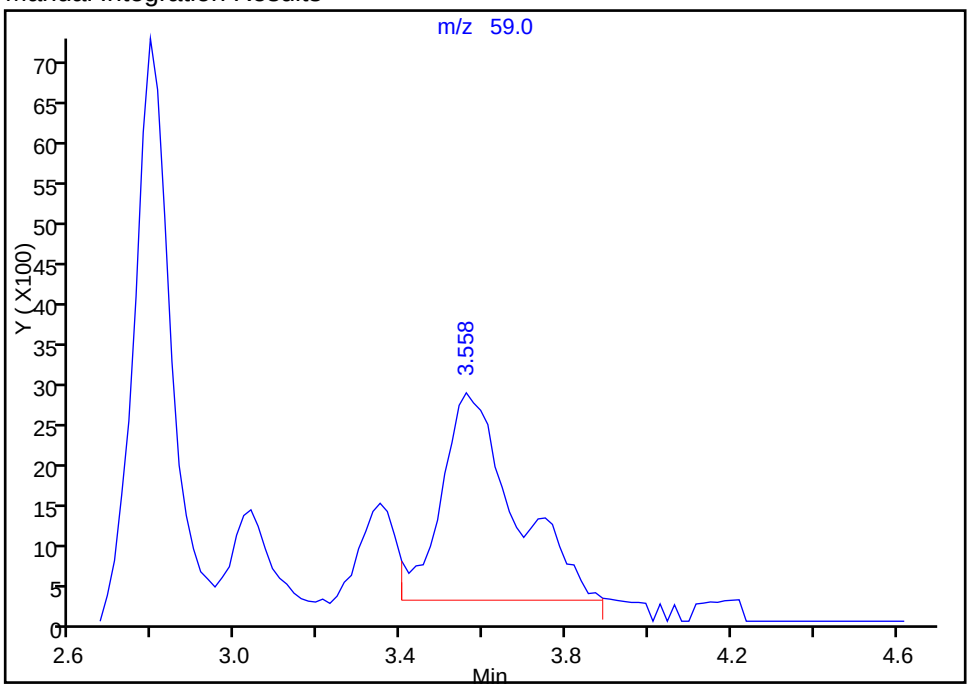
Processing Integration Results

RT: 3.56
Area: 25859
Amount: 37.469716
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 31852
Amount: 46.921958
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 14:13:04
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

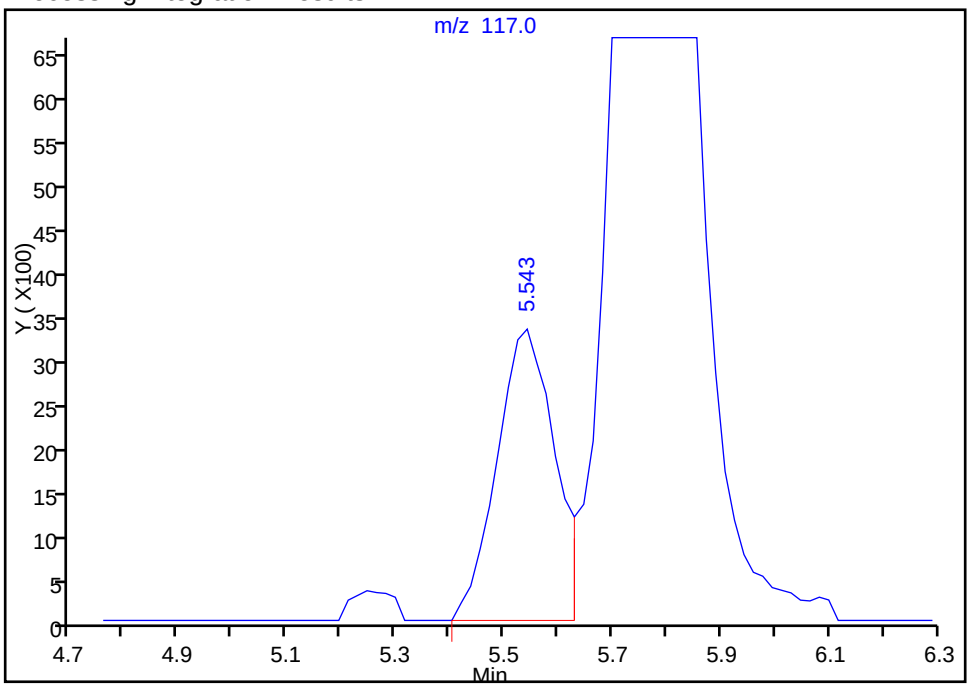
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6767.D				
Injection Date:	27-Apr-2015 09:07:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	7	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		

77 Carbon tetrachloride, CAS: 56-23-5

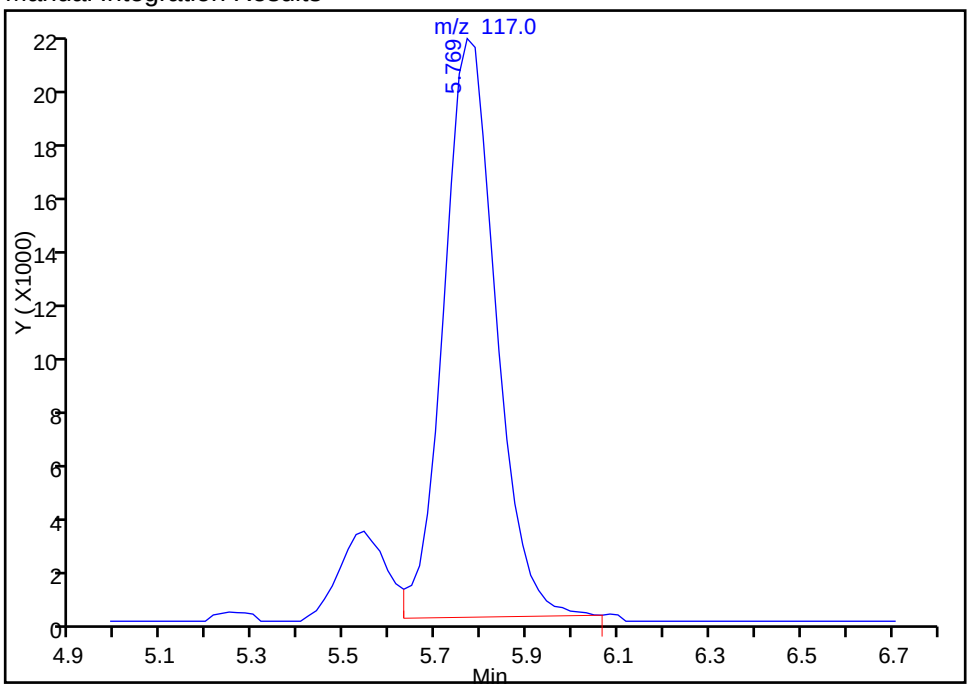
Processing Integration Results

RT: 5.54
Area: 24973
Amount: 1.293665
Amount Units: ug/l



Manual Integration Results

RT: 5.77
Area: 171387
Amount: 7.086634
Amount Units: ug/l



Reviewer: moanm, 02-May-2015 06:54:13
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

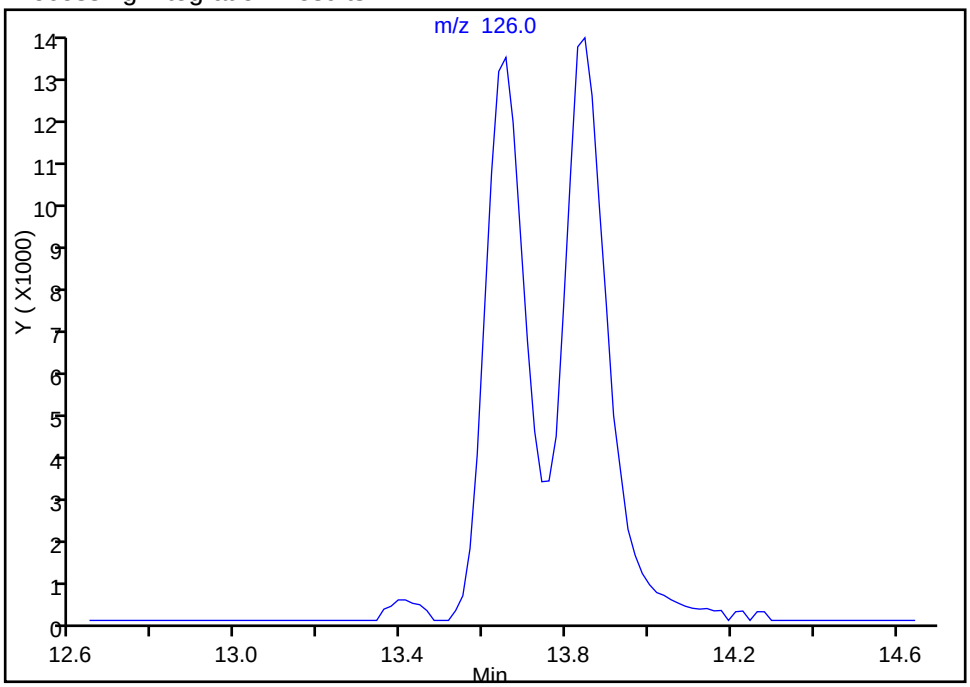
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6767.D				
Injection Date:	27-Apr-2015 09:07:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	7	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

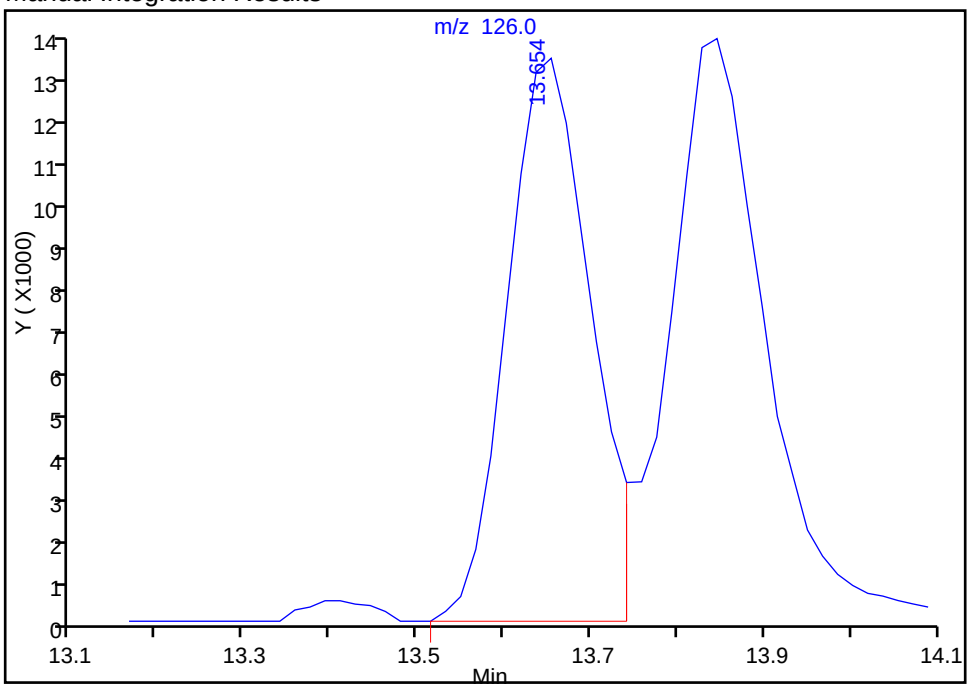
Not Detected
Expected RT: 13.65

Processing Integration Results



RT: 13.65
Area: 89981
Amount: 5.104031
Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 27-Apr-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\20150427-34370.b\Z6769.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Apr-2015 09:53:30 ALS Bottle#: 9 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*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-May-2015 06:54:23 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: XAWRK007

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	3.487	3.487	0.000	90	139213	250.0	250.0	
* 2 Fluorobenzene	96	6.376	6.377	-0.001	98	754637	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.007	11.007	0.000	90	169233	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.115	15.115	0.000	96	329754	12.5	12.5	
27 Dichlorodifluoromethane	85	1.903	1.921	-0.018	98	980917	30.0	31.2	
30 Chloromethane	50	1.990	1.973	0.017	99	553379	30.0	28.0	M
31 Butadiene	54	2.077	2.078	-0.001	95	411852	NC	NC	
32 Vinyl chloride	62	2.112	2.112	0.000	98	557481	30.0	29.5	
35 Bromomethane	94	2.338	2.339	-0.001	90	561715	30.0	29.1	
36 Chloroethane	64	2.390	2.391	-0.001	99	367165	30.0	27.7	
37 Dichlorofluoromethane	67	2.547	2.548	-0.001	98	1383912	30.0	28.9	
38 Trichlorofluoromethane	101	2.599	2.600	-0.001	100	1248216	30.0	28.1	
40 Ethyl ether	59	2.808	2.809	-0.001	94	244592	30.0	28.9	
44 Acrolein	56	2.912	2.913	-0.001	100	150727	300.0	328.1	
45 1,1-Dichloroethene	96	3.034	3.035	-0.001	98	566354	30.0	28.7	
48 Acetone	43	3.052	3.052	0.000	97	129048	120.0	113.5	
46 1,1,2-Trichloro-1,2,2-trif	151	3.087	3.087	0.000	97	877515	30.0	28.5	
49 Iodomethane	142	3.191	3.192	-0.001	98	1446050	30.0	28.7	
50 Carbon disulfide	76	3.261	3.279	-0.018	99	2019621	30.0	27.7	
52 3-Chloro-1-propene	41	3.348	3.348	0.000	84	932982	30.0	27.3	
51 Methyl acetate	43	3.348	3.348	0.000	70	648404	150.0	144.2	
54 Methylene Chloride	84	3.452	3.470	-0.018	94	472409	30.0	29.7	
55 2-Methyl-2-propanol	59	3.574	3.575	-0.001	92	172116	300.0	328.0	M
58 Acrylonitrile	53	3.678	3.679	-0.001	98	398821	300.0	270.9	
57 trans-1,2-Dichloroethene	96	3.765	3.766	-0.001	98	604153	30.0	28.6	
56 Methyl tert-butyl ether	73	3.783	3.783	0.000	96	855750	30.0	28.5	
59 Hexane	57	4.061	4.062	-0.001	94	870829	30.0	29.3	
62 1,1-Dichloroethane	63	4.183	4.201	-0.018	96	1079953	30.0	27.3	
61 Vinyl acetate	43	4.218	4.219	-0.001	96	1247128	60.0	58.5	
67 2-Butanone (MEK)	43	4.862	4.863	-0.001	97	293168	120.0	118.5	
65 cis-1,2-Dichloroethene	96	4.879	4.863	0.016	85	599157	30.0	29.5	
66 2,2-Dichloropropane	77	4.897	4.897	0.000	88	1008248	30.0	28.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
70 sec-Butyl Alcohol	45	5.106	5.106	0.000	96	425310	900.0	913.0	
71 Chlorobromomethane	128	5.158	5.159	-0.001	96	288154	30.0	29.5	
74 Chloroform	83	5.262	5.263	-0.001	95	1102245	30.0	28.3	
72 Tetrahydrofuran	42	5.245	5.263	-0.018	37	90208	60.0	61.2	
75 1,1,1-Trichloroethane	97	5.541	5.542	-0.001	98	1060281	30.0	27.6	
76 Cyclohexane	56	5.645	5.646	-0.001	91	996464	30.0	28.7	
78 1,1-Dichloropropene	75	5.732	5.733	-0.001	96	904780	30.0	27.5	
77 Carbon tetrachloride	117	5.767	5.785	-0.018	76	997800	30.0	33.8	a
80 Isobutyl alcohol	41	5.872	5.855	0.017	94	119441	750.0	720.4	
82 1,2-Dichloroethane	62	5.994	5.994	0.000	92	437331	30.0	29.1	
81 Benzene	78	6.011	6.011	0.000	96	1724125	30.0	28.6	
84 n-Heptane	43	6.394	6.394	0.000	94	1141734	30.0	28.5	
85 Trichloroethene	95	6.899	6.899	0.000	98	740490	30.0	28.0	
89 2-Pentanone	43	7.125	7.126	-0.001	99	596672	120.0	120.1	
90 1,2-Dichloropropane	63	7.195	7.195	0.000	92	600247	30.0	28.5	
87 Methylcyclohexane	55	7.212	7.213	-0.001	90	854628	30.0	28.4	
92 Dibromomethane	93	7.369	7.369	0.000	97	342110	30.0	28.3	
94 Dichlorobromomethane	83	7.595	7.596	-0.001	99	937795	30.0	31.5	
96 2-Chloroethyl vinyl ether	63	8.048	8.048	0.000	93	205489	30.0	29.3	
97 cis-1,3-Dichloropropene	75	8.256	8.257	-0.001	96	788816	30.0	29.4	
98 4-Methyl-2-pentanone (MIBK	43	8.518	8.518	0.000	97	916440	120.0	118.8	
99 Toluene	91	8.796	8.797	-0.001	99	1882392	30.0	28.2	
100 trans-1,3-Dichloropropene	75	9.109	9.110	-0.001	94	547906	30.0	28.4	
101 Ethyl methacrylate	69	9.318	9.319	-0.001	91	426714	30.0	31.2	
102 1,1,2-Trichloroethane	97	9.405	9.406	-0.001	90	336509	30.0	30.0	
104 1,3-Dichloropropane	76	9.666	9.667	-0.001	93	566516	30.0	29.9	
103 Tetrachloroethene	164	9.684	9.684	0.000	98	707097	30.0	30.7	
105 2-Hexanone	43	9.840	9.841	-0.001	98	599846	120.0	123.3	
107 Chlorodibromomethane	129	10.049	10.033	0.017	90	615912	30.0	34.3	
109 Ethylene Dibromide	107	10.223	10.224	-0.001	98	450775	30.0	31.2	
111 Chlorobenzene	112	11.059	11.060	-0.001	89	1302298	30.0	30.4	
110 1-Chlorohexane	91	11.059	11.060	-0.001	83	912093	30.0	28.1	
113 1,1,1,2-Tetrachloroethane	131	11.198	11.199	-0.001	96	640998	30.0	31.0	
112 Ethylbenzene	106	11.268	11.268	0.000	99	634876	30.0	29.9	
114 m-Xylene & p-Xylene	106	11.477	11.460	0.017	99	866942	30.0	30.1	
115 o-Xylene	106	12.138	12.139	-0.001	94	741180	30.0	30.1	
116 Styrene	104	12.156	12.156	0.000	91	1262930	30.0	30.9	
117 Bromoform	173	12.451	12.452	-0.001	96	300779	30.0	29.4	
118 Isopropylbenzene	105	12.800	12.800	0.000	96	2373803	30.0	27.9	
119 Cyclohexanone	55	12.921	12.922	-0.001	92	237151	1200.0	1292.7	
121 Bromobenzene	156	13.287	13.288	-0.001	95	658397	30.0	29.7	
122 1,1,2,2-Tetrachloroethane	83	13.304	13.305	-0.001	95	443601	30.0	28.6	
124 1,2,3-Trichloropropane	110	13.357	13.357	0.000	85	102024	30.0	29.4	
125 trans-1,4-Dichloro-2-buten	53	13.409	13.392	0.017	74	101780	30.0	28.5	
123 N-Propylbenzene	120	13.531	13.531	0.000	99	613919	30.0	28.1	
126 2-Chlorotoluene	126	13.653	13.653	0.000	83	511647	30.0	28.4	a
128 4-Chlorotoluene	126	13.844	13.845	-0.001	98	593867	30.0	28.2	
127 1,3,5-Trimethylbenzene	105	13.861	13.862	-0.001	95	1830728	30.0	28.0	
129 tert-Butylbenzene	119	14.436	14.436	0.000	93	2023864	30.0	27.2	
130 1,2,4-Trimethylbenzene	105	14.523	14.524	-0.001	95	1762794	30.0	27.5	
131 sec-Butylbenzene	134	14.836	14.837	-0.001	94	571898	30.0	27.9	
132 1,3-Dichlorobenzene	146	14.993	14.976	0.017	98	1085274	30.0	28.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
133 4-Isopropyltoluene	119	15.115	15.115	0.000	97	2337730	30.0	27.8	
134 1,4-Dichlorobenzene	146	15.150	15.150	0.000	95	1348336	30.0	29.1	
138 1,2-Dichlorobenzene	146	15.794	15.794	0.000	99	986317	30.0	29.4	
137 n-Butylbenzene	91	15.828	15.829	-0.001	97	2197160	30.0	27.4	
139 1,2-Dibromo-3-Chloropropan	157	16.908	16.908	0.000	89	69759	30.0	31.6	
141 1,2,4-Trichlorobenzene	180	17.848	17.848	0.000	95	639843	30.0	28.3	
142 Hexachlorobutadiene	225	18.057	18.057	0.000	97	631562	30.0	27.7	
143 Naphthalene	128	18.091	18.092	-0.001	97	623233	30.0	28.0	
144 1,2,3-Trichlorobenzene	180	18.335	18.336	-0.001	97	480089	30.0	27.3	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		60.0	58.1	
S 146 Xylenes, Total	106				0		60.0	60.2	
S 147 1,2-Dichloroethene, Total	96				0		60.0	58.1	
S 148 1,3-Dichloropropene, Total	1				0		60.0	57.8	
S 149 Trihalomethanes, Total	1				0		120.0	123.5	
S 150 Xylenes, Total (URS)	1				0		60.0	60.2	
S 151 Total BTEX	1				0			147.0	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

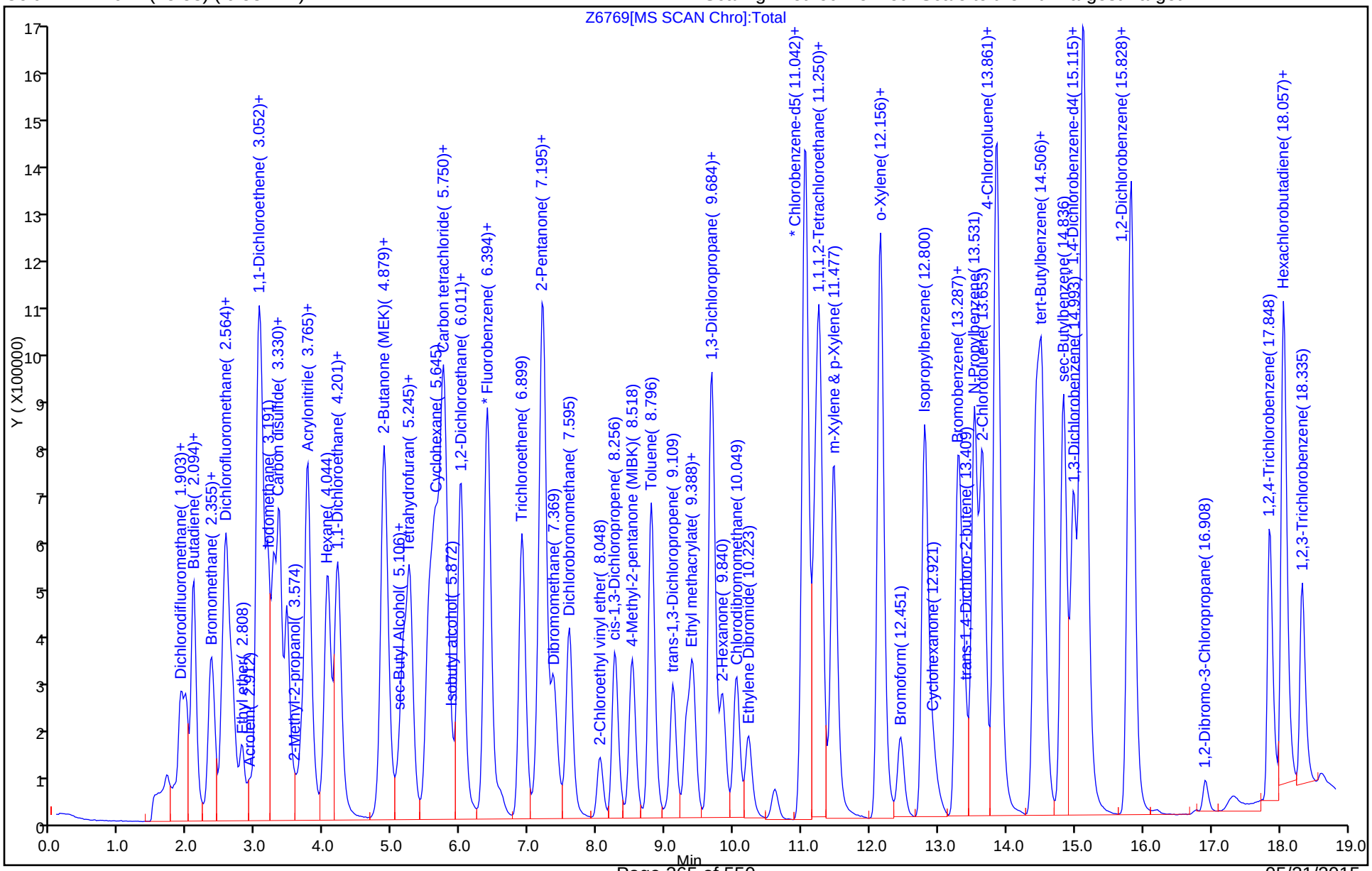
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 15.00	Units: uL
MV-Main A_00022	Amount Added: 15.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 15.00	Units: uL

Report Date: 02-May-2015 06:54:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6769.D				
Injection Date:	27-Apr-2015 09:53:30	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#:	9
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

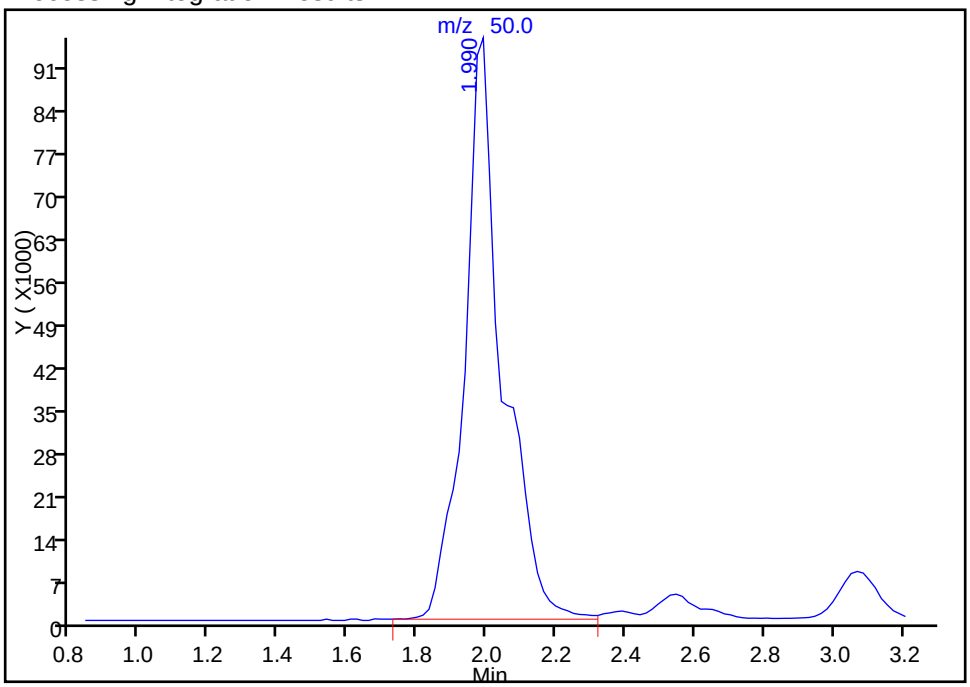
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6769.D				
Injection Date:	27-Apr-2015 09:53:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	9	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

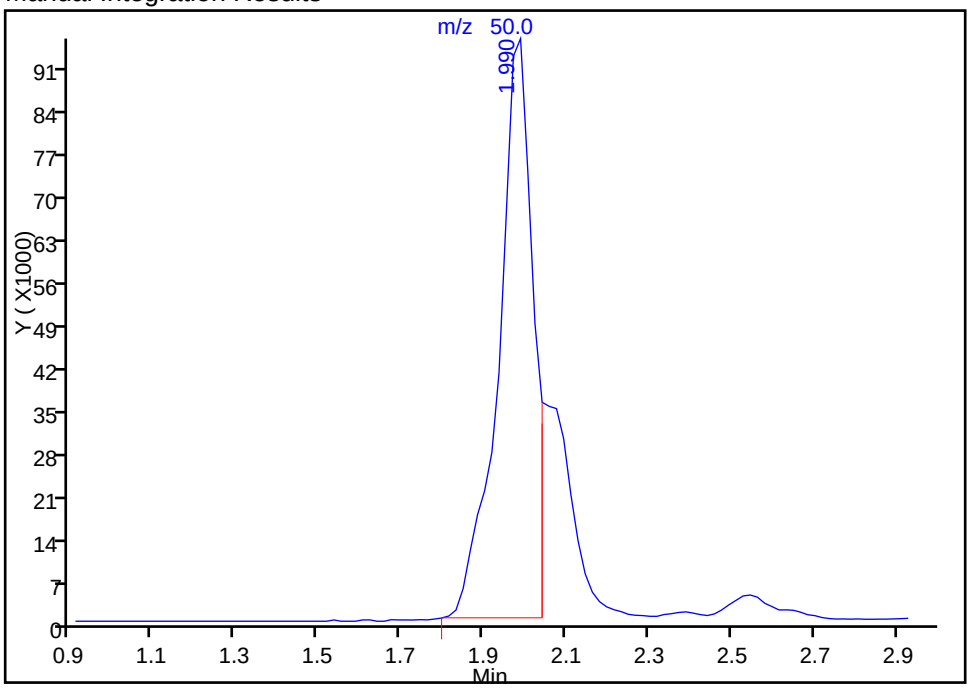
Processing Integration Results

RT: 1.99
Area: 722387
Amount: 33.067776
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 553379
Amount: 27.988748
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:36:40
Audit Action: Manually Integrated
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

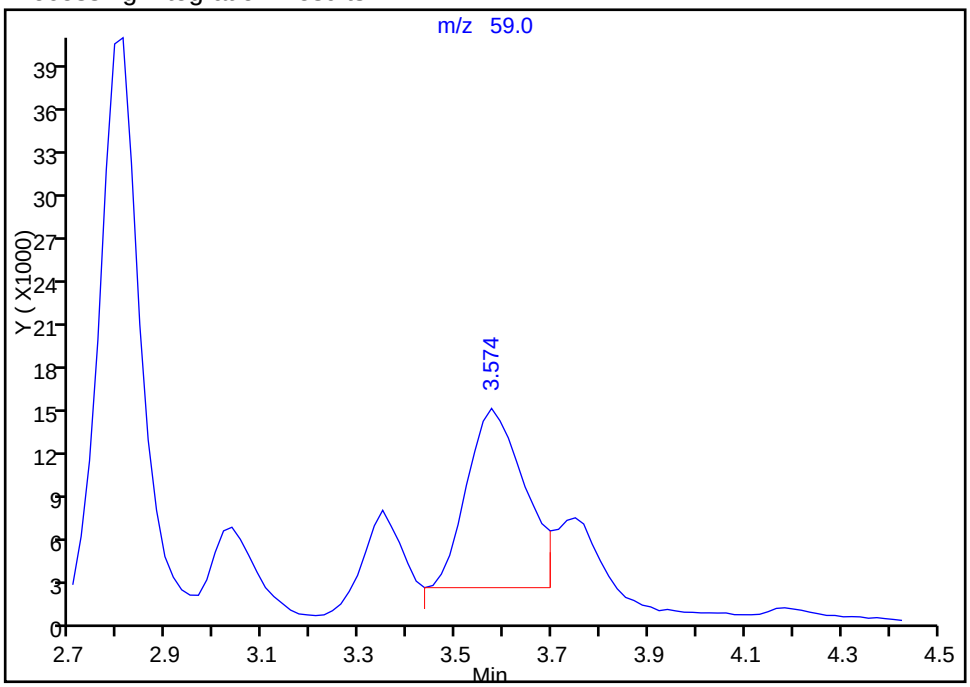
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6769.D				
Injection Date:	27-Apr-2015 09:53:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	9	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

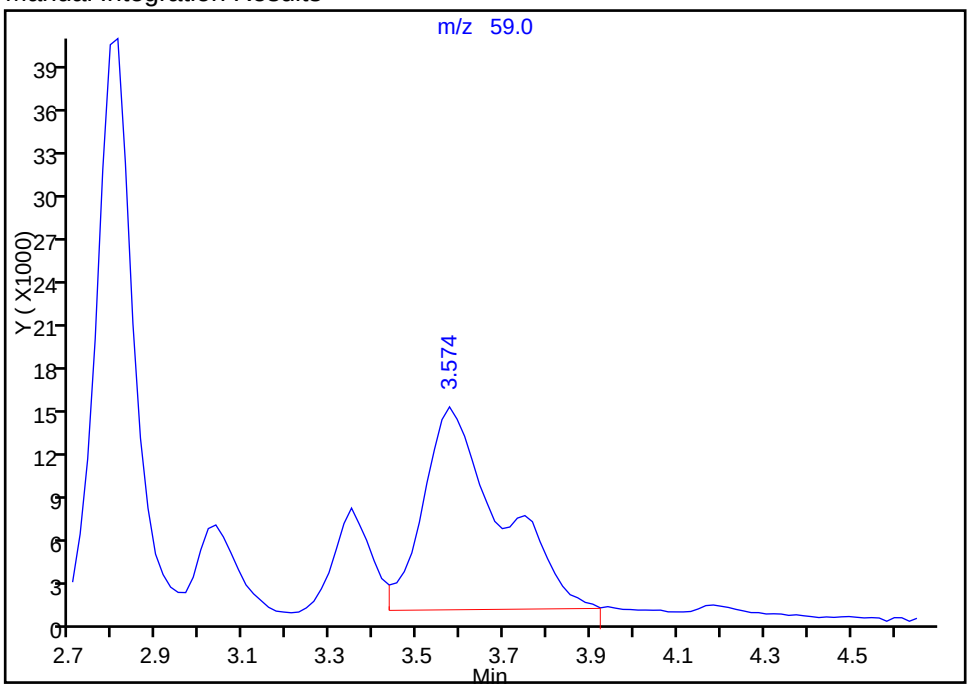
Processing Integration Results

RT: 3.57
Area: 102944
Amount: 273.4910
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 172116
Amount: 328.0215
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 14:15:54
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

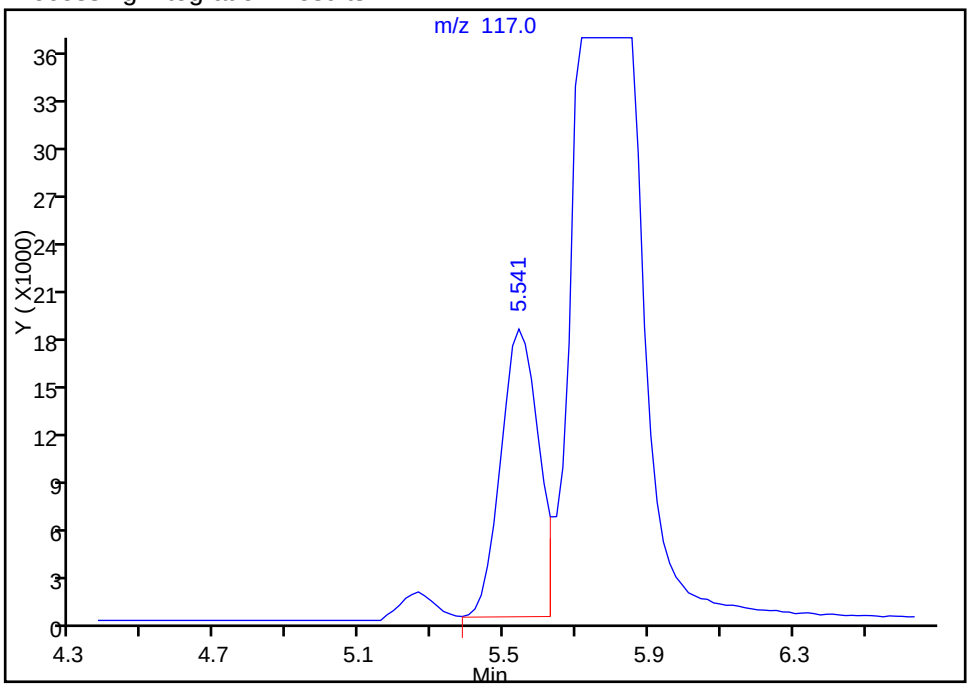
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6769.D				
Injection Date:	27-Apr-2015 09:53:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	9	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		

77 Carbon tetrachloride, CAS: 56-23-5

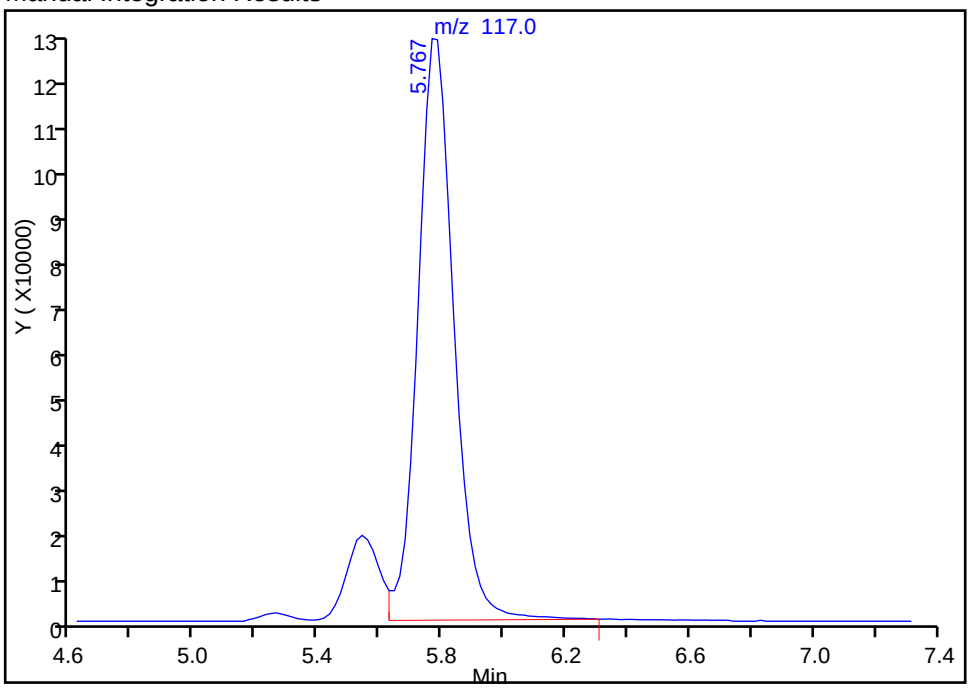
Processing Integration Results

RT: 5.54
Area: 131894
Amount: 5.328805
Amount Units: ug/l



Manual Integration Results

RT: 5.77
Area: 997800
Amount: 33.753099
Amount Units: ug/l



Reviewer: moanm, 02-May-2015 06:54:23
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

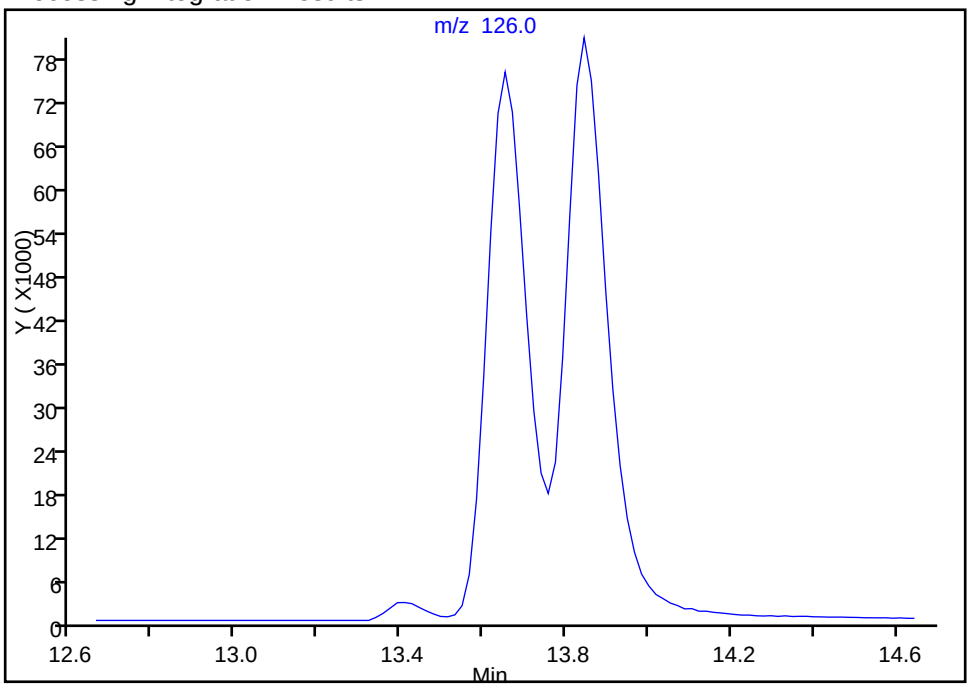
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6769.D				
Injection Date:	27-Apr-2015 09:53:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	9	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

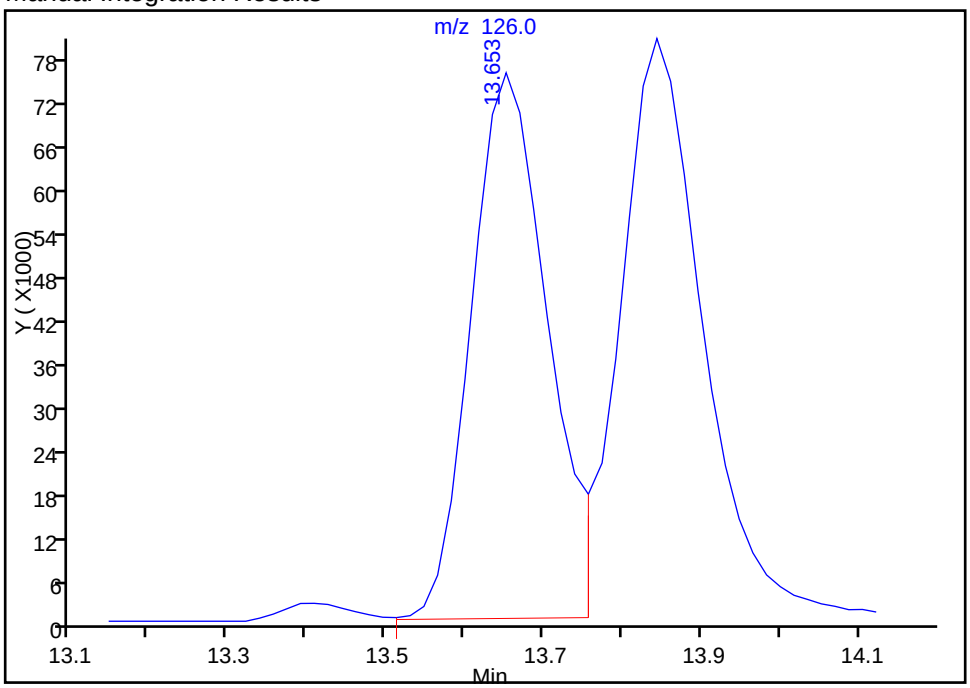
Not Detected
Expected RT: 13.65

Processing Integration Results



Manual Integration Results

RT: 13.65
Area: 511647
Amount: 28.355067
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:38:59
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6770.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Apr-2015 10:16:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: moanm Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150427-34370.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-May-2015 06:54:32 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: XAWRK007

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	3.487	0.016	80	131466	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.377	-0.002	98	742650	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.006	11.007	-0.001	90	166604	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.114	15.115	-0.001	83	310508	12.5	12.5	
27 Dichlorodifluoromethane	85	1.902	1.921	-0.019	98	1906014	60.0	61.6	
30 Chloromethane	50	1.989	1.973	0.016	99	1170028	60.0	60.1	M
31 Butadiene	54	2.076	2.078	-0.002	96	785137	NC	NC	
32 Vinyl chloride	62	2.111	2.112	-0.001	98	1083537	60.0	58.3	
35 Bromomethane	94	2.337	2.339	-0.002	90	1114295	60.0	58.6	
36 Chloroethane	64	2.389	2.391	-0.002	99	718040	60.0	55.1	
37 Dichlorofluoromethane	67	2.546	2.548	-0.002	99	2709431	60.0	57.4	
38 Trichlorofluoromethane	101	2.598	2.600	-0.002	100	2364574	60.0	54.2	
40 Ethyl ether	59	2.789	2.809	-0.020	94	480519	60.0	58.0	
44 Acrolein	56	2.911	2.913	-0.002	100	299054	599.9	661.4	
45 1,1-Dichloroethene	96	3.033	3.035	-0.002	98	1099849	60.0	56.6	
48 Acetone	43	3.051	3.052	-0.001	98	245502	240.0	219.4	
46 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.087	-0.002	98	1691030	60.0	55.8	
49 Iodomethane	142	3.172	3.192	-0.020	98	2880641	60.0	58.1	
50 Carbon disulfide	76	3.259	3.279	-0.020	98	3929554	60.0	54.7	
52 3-Chloro-1-propene	41	3.346	3.348	-0.002	86	1833100	60.0	54.4	
51 Methyl acetate	43	3.346	3.348	-0.002	97	1260888	300.0	284.9	
54 Methylene Chloride	84	3.451	3.470	-0.019	96	929571	60.0	60.3	
55 2-Methyl-2-propanol	59	3.590	3.575	0.015	92	282840	600.0	583.2	M
58 Acrylonitrile	53	3.677	3.679	-0.002	98	779574	600.0	538.1	
57 trans-1,2-Dichloroethene	96	3.747	3.766	-0.019	98	1181821	60.0	56.9	
56 Methyl tert-butyl ether	73	3.782	3.783	-0.001	96	1632196	60.0	55.2	
59 Hexane	57	4.043	4.062	-0.019	94	1674693	60.0	57.2	
62 1,1-Dichloroethane	63	4.182	4.201	-0.019	96	2144564	60.0	55.1	
61 Vinyl acetate	43	4.217	4.219	-0.002	96	2279047	120.0	108.6	
67 2-Butanone (MEK)	43	4.878	4.863	0.015	98	556437	240.0	228.5	
65 cis-1,2-Dichloroethene	96	4.878	4.863	0.015	85	1193366	60.0	59.6	
66 2,2-Dichloropropane	77	4.896	4.897	-0.001	88	1908795	60.0	56.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
70 sec-Butyl Alcohol	45	5.105	5.106	-0.001	96	825730	1800.0	1877.0	
71 Chlorobromomethane	128	5.174	5.159	0.015	97	574921	60.0	59.9	
74 Chloroform	83	5.261	5.263	-0.002	95	2189196	60.0	57.2	
72 Tetrahydrofuran	42	5.261	5.263	-0.002	37	180139	120.0	124.1	
75 1,1,1-Trichloroethane	97	5.540	5.542	-0.002	98	2066691	60.0	54.7	
76 Cyclohexane	56	5.644	5.646	-0.002	92	1899762	60.0	55.6	
78 1,1-Dichloropropene	75	5.749	5.733	0.016	96	1732245	60.0	53.5	
77 Carbon tetrachloride	117	5.783	5.785	-0.002	79	1936167	60.0	57.4	a
80 Isobutyl alcohol	41	5.870	5.855	0.015	95	233493	1500.0	1491.2	
82 1,2-Dichloroethane	62	5.992	5.994	-0.002	90	852506	60.0	57.7	
81 Benzene	78	6.010	6.011	-0.001	96	3411578	60.0	57.6	
84 n-Heptane	43	6.393	6.394	-0.001	94	2155178	60.0	54.7	
85 Trichloroethene	95	6.897	6.899	-0.002	98	1450017	60.0	55.8	
89 2-Pentanone	43	7.141	7.126	0.015	99	1128783	240.0	230.9	
90 1,2-Dichloropropane	63	7.193	7.195	-0.002	93	1166242	60.0	56.2	
87 Methylcyclohexane	55	7.211	7.213	-0.002	90	1607003	60.0	54.3	
92 Dibromomethane	93	7.367	7.369	-0.002	96	659343	60.0	55.5	
94 Dichlorobromomethane	83	7.594	7.596	-0.002	99	1862140	60.0	63.6	
96 2-Chloroethyl vinyl ether	63	8.046	8.048	-0.002	92	393591	60.0	57.1	
97 cis-1,3-Dichloropropene	75	8.255	8.257	-0.002	96	1537392	60.0	58.1	
98 4-Methyl-2-pentanone (MIBK	43	8.516	8.518	-0.002	97	1727894	240.0	227.6	
99 Toluene	91	8.795	8.797	-0.002	99	3667587	60.0	55.9	
100 trans-1,3-Dichloropropene	75	9.108	9.110	-0.002	94	1036172	60.0	54.5	
101 Ethyl methacrylate	69	9.317	9.319	-0.002	90	801831	60.0	59.5	
102 1,1,2-Trichloroethane	97	9.404	9.406	-0.002	90	649109	60.0	59.0	
104 1,3-Dichloropropane	76	9.665	9.667	-0.002	92	1108151	60.0	59.4	
103 Tetrachloroethene	164	9.683	9.684	-0.001	98	1365011	60.0	60.2	
105 2-Hexanone	43	9.839	9.841	-0.002	97	1115524	240.0	232.9	
107 Chlorodibromomethane	129	10.048	10.033	0.016	90	1219503	60.0	68.9	
109 Ethylene Dibromide	107	10.222	10.224	-0.002	98	871932	60.0	61.2	
111 Chlorobenzene	112	11.058	11.060	-0.002	90	2535360	60.0	60.0	
110 1-Chlorohexane	91	11.058	11.060	-0.002	81	1707784	60.0	53.4	
113 1,1,1,2-Tetrachloroethane	131	11.197	11.199	-0.002	97	1246187	60.0	61.2	
112 Ethylbenzene	106	11.267	11.268	-0.001	99	1214720	60.0	58.1	
114 m-Xylene & p-Xylene	106	11.475	11.460	0.015	99	1672926	60.0	58.9	
115 o-Xylene	106	12.137	12.139	-0.002	96	1436667	60.0	59.3	
116 Styrene	104	12.172	12.156	0.016	92	2434851	60.0	60.6	
117 Bromoform	173	12.450	12.452	-0.002	97	638029	60.0	62.5	
118 Isopropylbenzene	105	12.798	12.800	-0.002	96	4468243	60.0	55.9	
119 Cyclohexanone	55	12.920	12.922	-0.002	92	432620	2400.0	2395.4	
121 Bromobenzene	156	13.286	13.288	-0.002	94	1285597	60.0	61.7	
122 1,1,2,2-Tetrachloroethane	83	13.303	13.305	-0.002	95	833886	60.0	57.0	
124 1,2,3-Trichloropropane	110	13.355	13.357	-0.002	84	191973	60.0	58.7	
125 trans-1,4-Dichloro-2-buten	53	13.408	13.392	0.016	78	179412	60.0	53.4	
123 N-Propylbenzene	120	13.530	13.531	-0.001	99	1153892	60.0	56.2	
126 2-Chlorotoluene	126	13.651	13.653	-0.002	90	970451	60.0	57.1	a
128 4-Chlorotoluene	126	13.843	13.845	-0.002	98	1154263	60.0	58.2	
127 1,3,5-Trimethylbenzene	105	13.860	13.862	-0.002	96	3442965	60.0	55.9	
129 tert-Butylbenzene	119	14.435	14.436	-0.001	94	3760541	60.0	53.7	
130 1,2,4-Trimethylbenzene	105	14.522	14.524	-0.002	96	3321411	60.0	55.0	
131 sec-Butylbenzene	134	14.835	14.837	-0.002	94	1044484	60.0	54.1	
132 1,3-Dichlorobenzene	146	14.992	14.976	0.016	98	2166324	60.0	59.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
133 4-Isopropyltoluene	119	15.114	15.115	-0.001	97	4299850	60.0	54.3	
134 1,4-Dichlorobenzene	146	15.148	15.150	-0.002	95	2448202	60.0	56.1	
138 1,2-Dichlorobenzene	146	15.792	15.794	-0.002	98	1863620	60.0	59.0	
137 n-Butylbenzene	91	15.845	15.829	0.016	97	3953067	60.0	52.4	
139 1,2-Dibromo-3-Chloropropan	157	16.924	16.908	0.016	90	138404	60.0	66.6	
141 1,2,4-Trichlorobenzene	180	17.864	17.848	0.016	95	1180189	60.0	55.4	
142 Hexachlorobutadiene	225	18.055	18.057	-0.002	97	1123434	60.0	52.2	
143 Naphthalene	128	18.090	18.092	-0.002	97	1139307	60.0	54.3	
144 1,2,3-Trichlorobenzene	180	18.334	18.336	-0.002	96	890819	60.0	53.8	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		120.0	116.5	
S 146 Xylenes, Total	106				0		120.0	118.3	
S 147 1,2-Dichloroethene, Total	96				0		120.0	116.5	
S 148 1,3-Dichloropropene, Total	1				0		120.0	112.7	
S 149 Trihalomethanes, Total	1				0		240.0	252.1	
S 150 Xylenes, Total (URS)	1				0		120.0	118.3	
S 151 Total BTEX	1				0			289.9	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

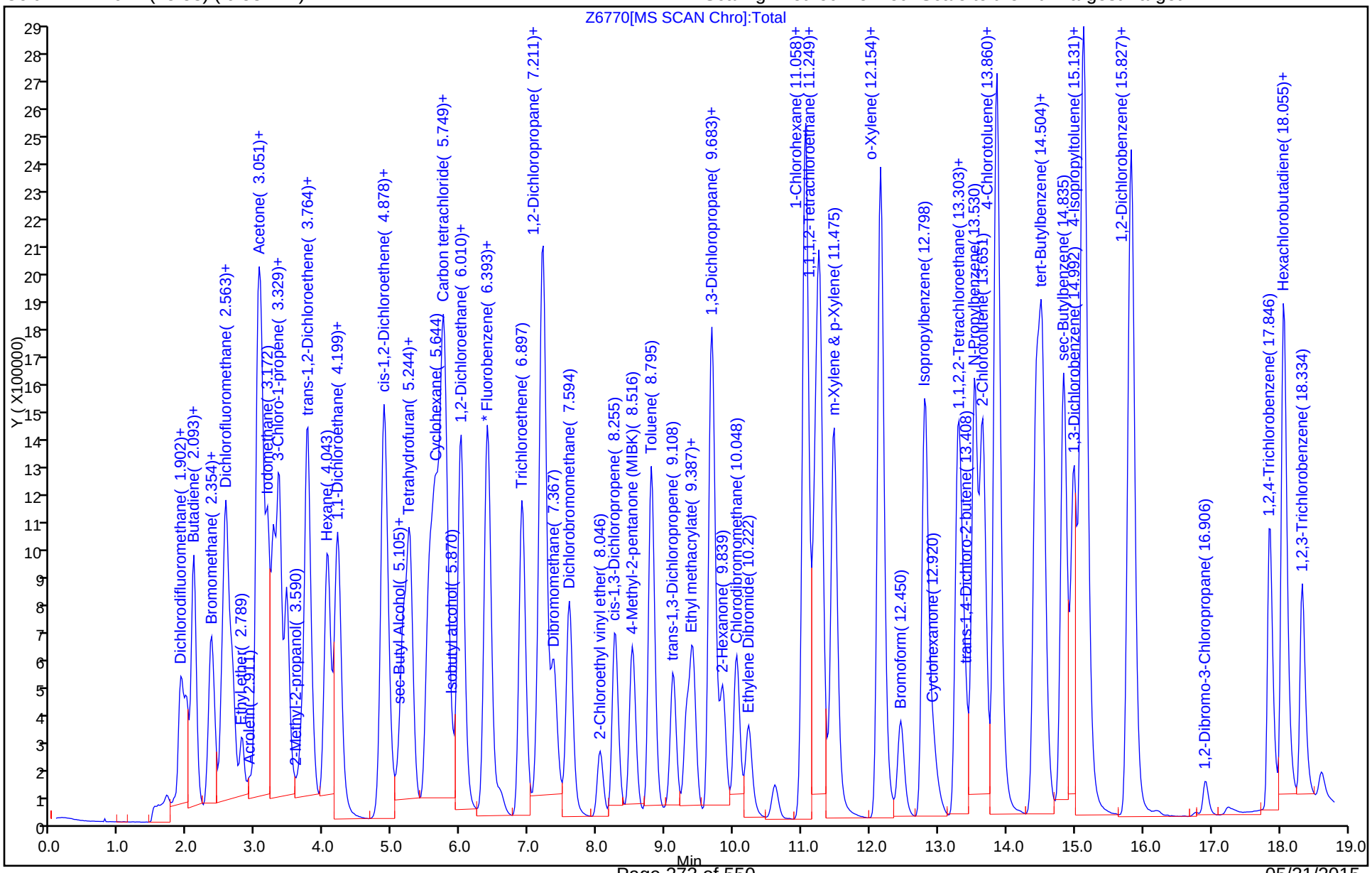
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 30.00	Units: uL
MV-Main A_00022	Amount Added: 30.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 30.00	Units: uL

Report Date: 02-May-2015 06:54:32 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6770.D				
Injection Date:	27-Apr-2015 10:16:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ic			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

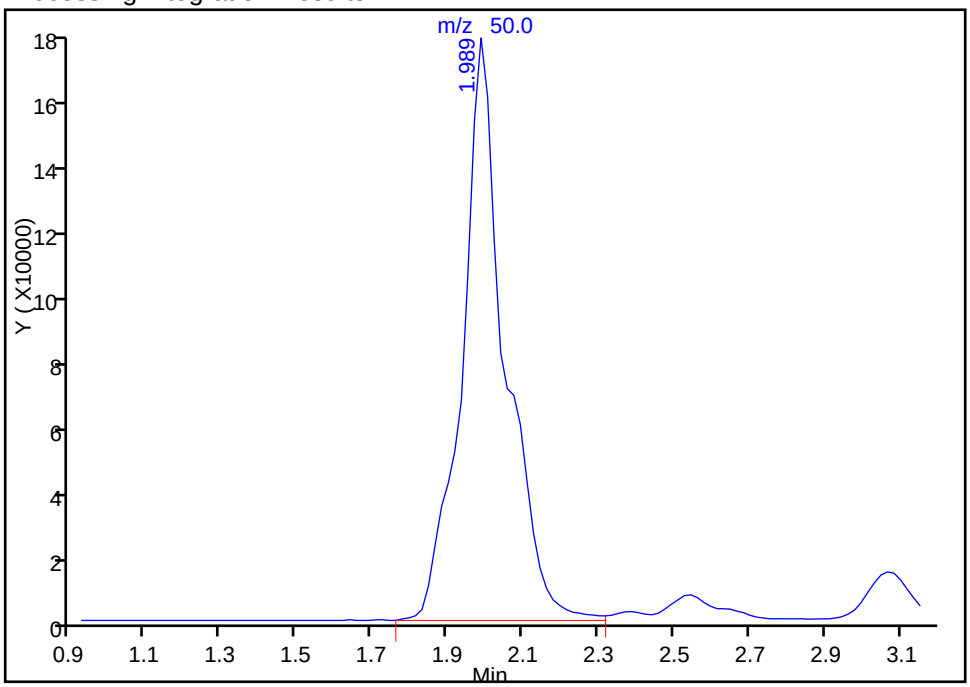
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6770.D				
Injection Date:	27-Apr-2015 10:16:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
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

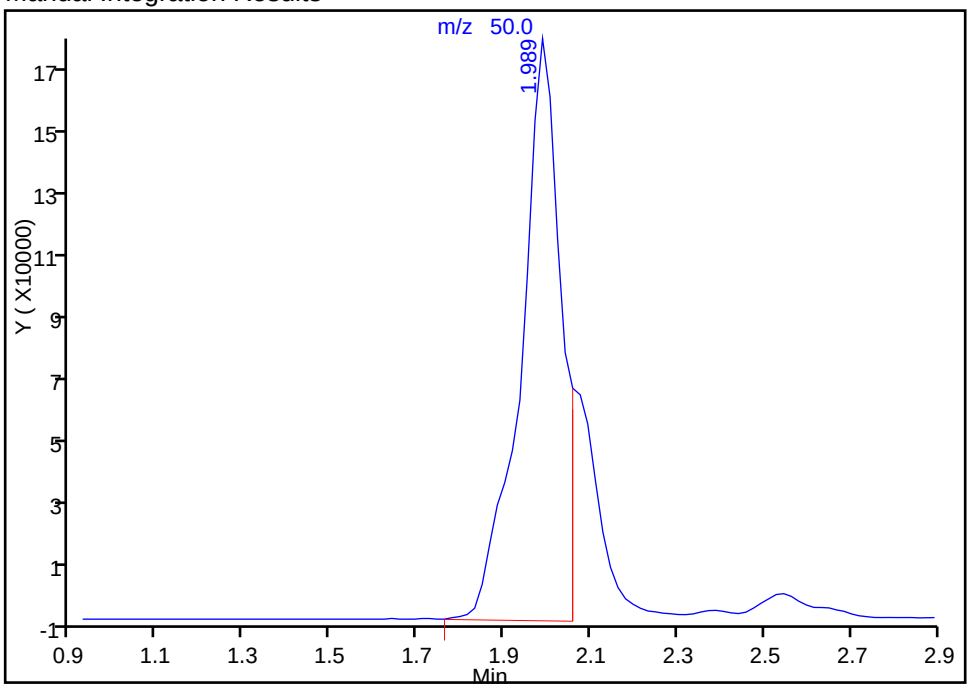
Processing Integration Results

RT: 1.99
Area: 1426089
Amount: 68.871145
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 1170028
Amount: 60.132737
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:37:53
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

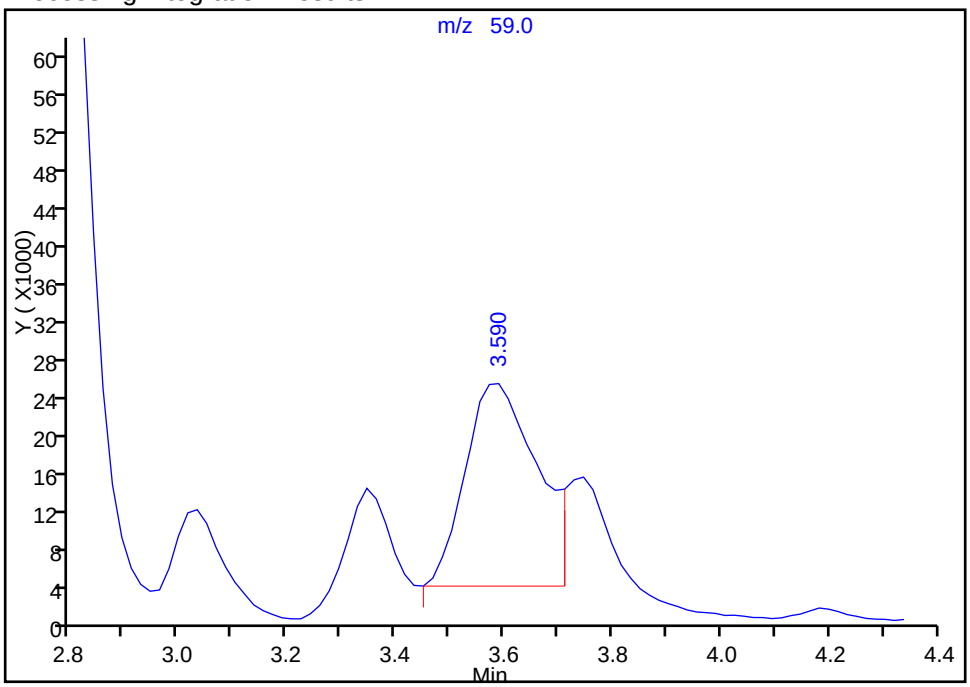
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6770.D				
Injection Date:	27-Apr-2015 10:16:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
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

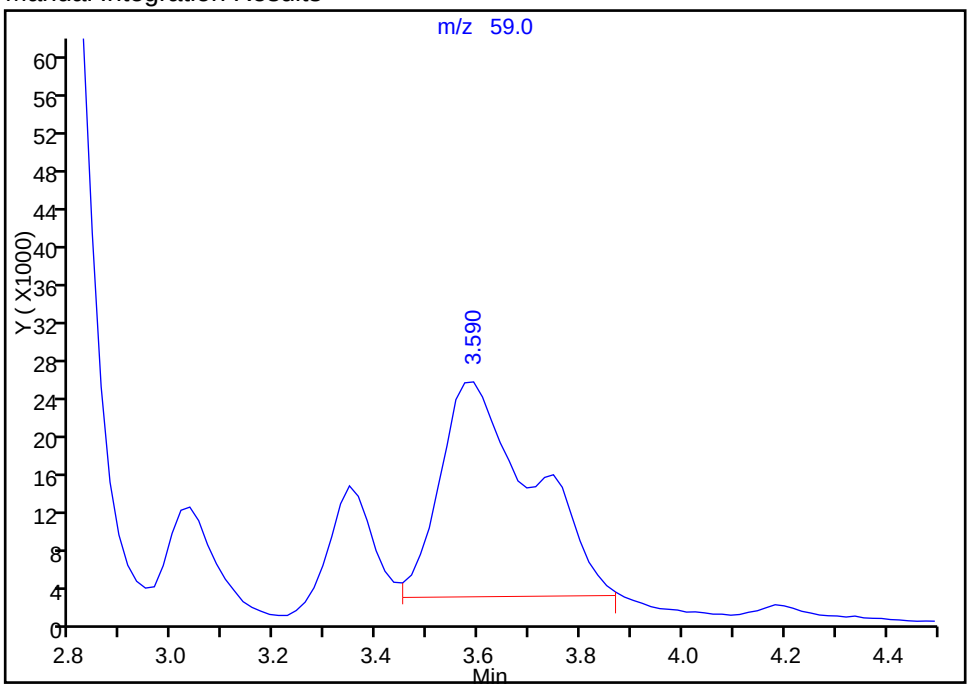
Processing Integration Results

RT: 3.59
Area: 198140
Amount: 493.1283
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 282840
Amount: 583.1623
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 14:17:28
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

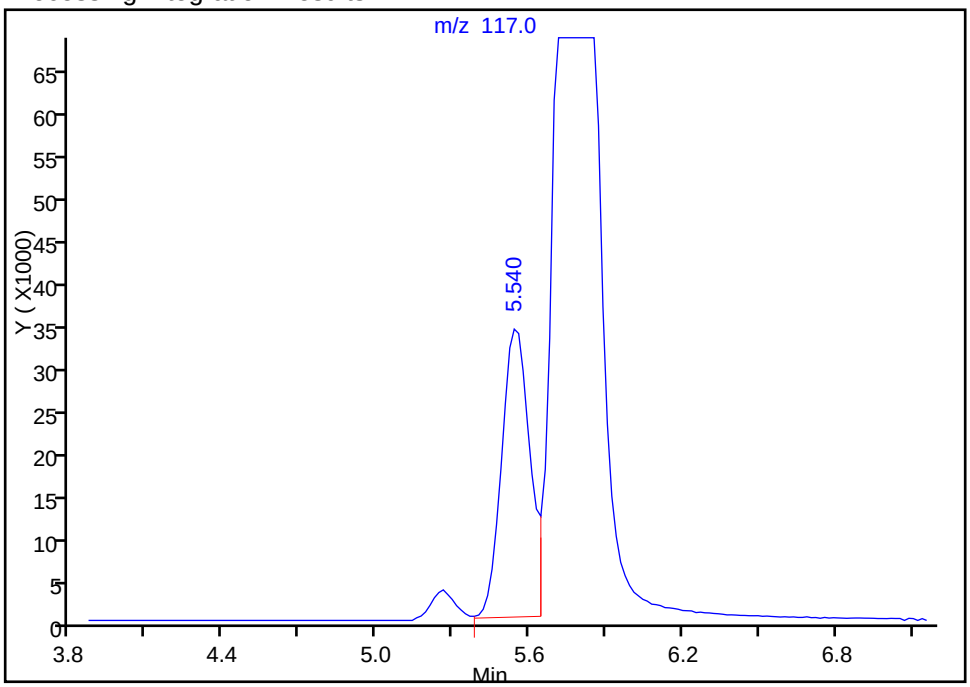
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6770.D				
Injection Date:	27-Apr-2015 10:16:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
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		

77 Carbon tetrachloride, CAS: 56-23-5

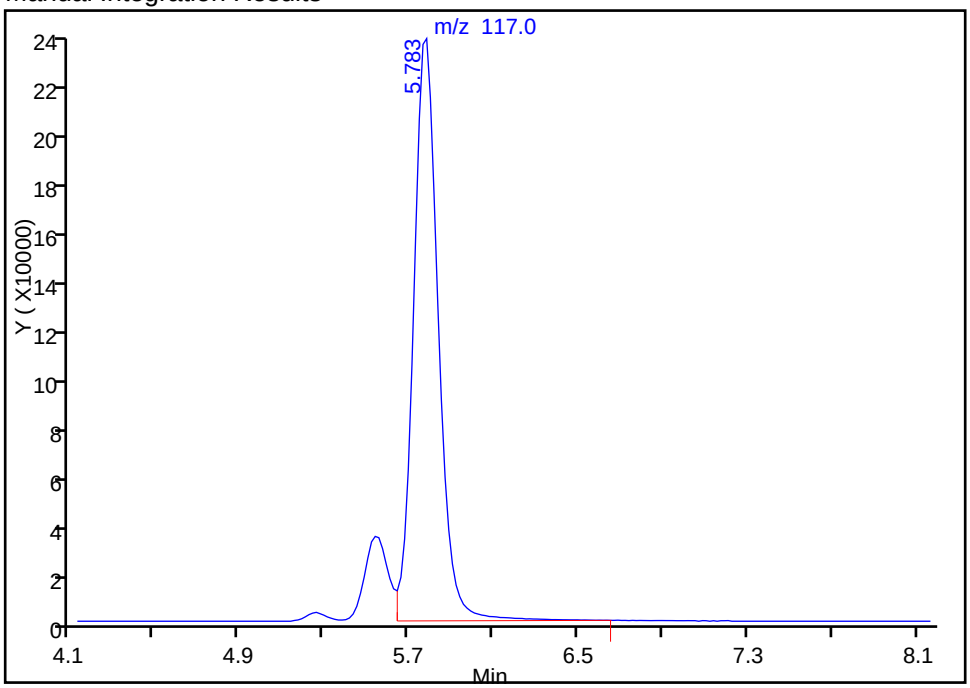
Processing Integration Results

RT: 5.54
Area: 267864
Amount: 9.207430
Amount Units: ug/l



Manual Integration Results

RT: 5.78
Area: 1936167
Amount: 57.408168
Amount Units: ug/l



Reviewer: moanm, 02-May-2015 06:54:32
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

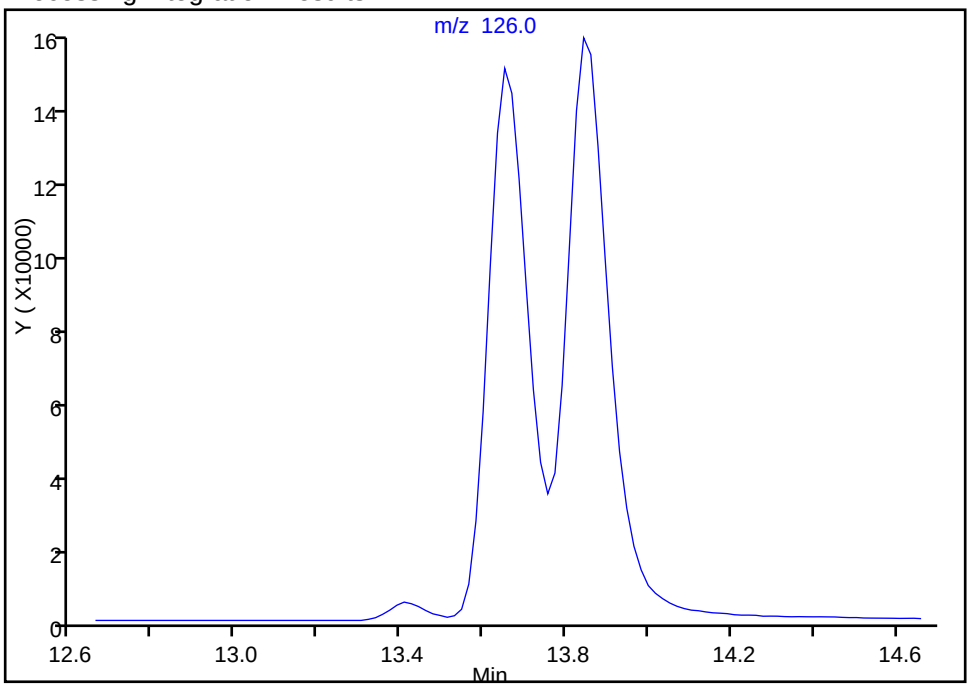
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150427-34370.b\Z6770.D				
Injection Date:	27-Apr-2015 10:16:30	Instrument ID:	VMS_Z		
Lims ID:	ic				
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

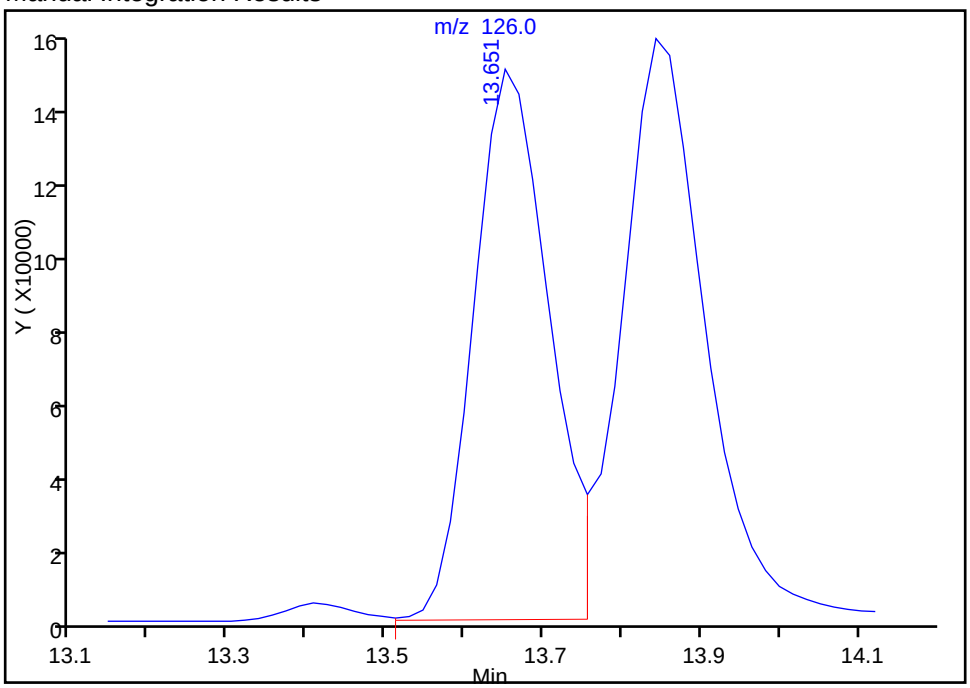
Not Detected
Expected RT: 13.65

Processing Integration Results



Manual Integration Results

RT: 13.65
Area: 970451
Amount: 57.115126
Amount Units: ug/l



Reviewer: moanm, 27-Apr-2015 11:39:06
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

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

Lab Name: TestAmerica Denver Job No.: 280-68518-1 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.: 280-68518-1 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.: 280-68518-1 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.: 280-68518-1 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:

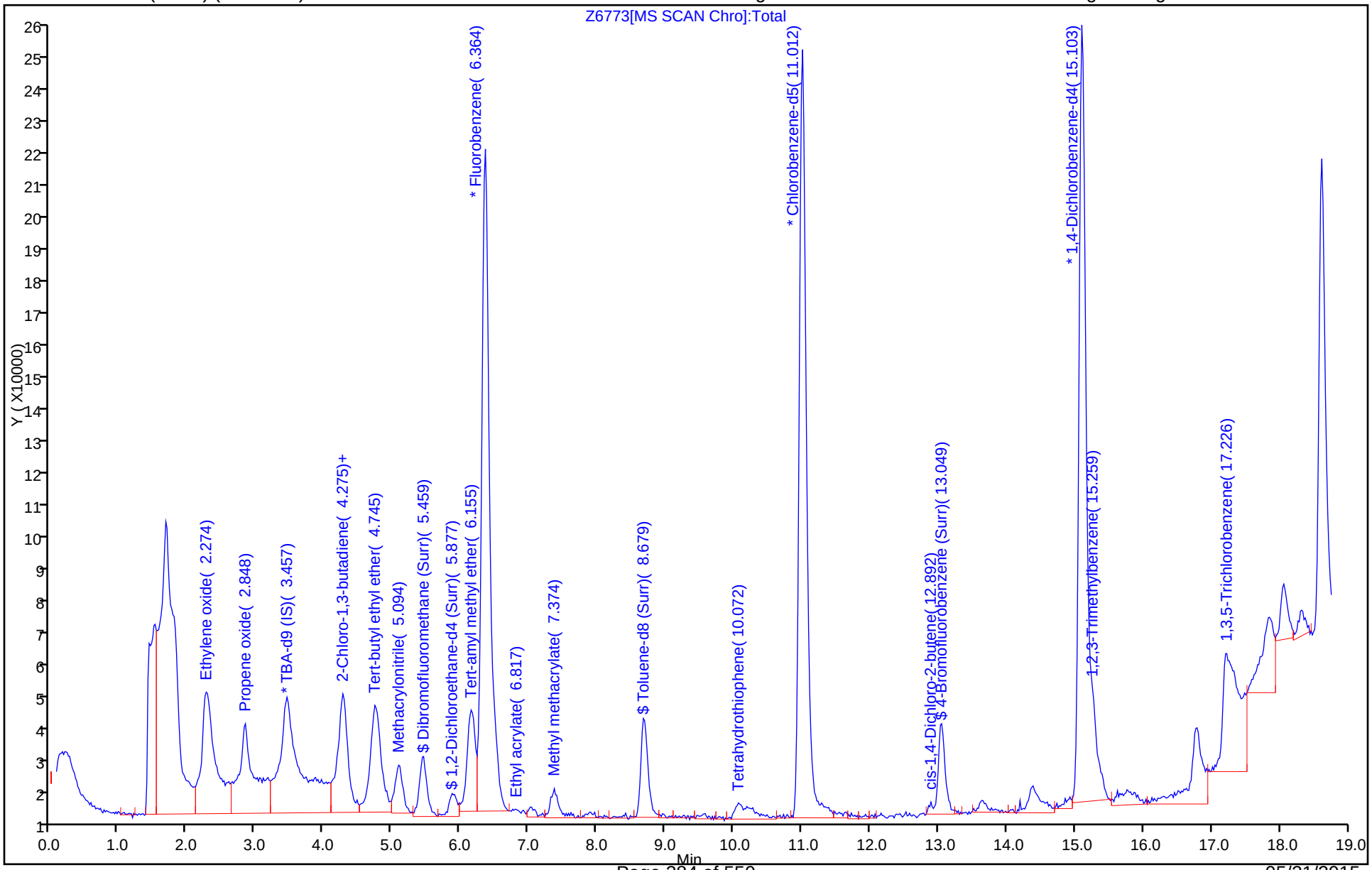
MV-ARCH SS A_00042	Amount Added:	0.08	Units: uL
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp A_00011	Amount Added:	0.50	Units: uL

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

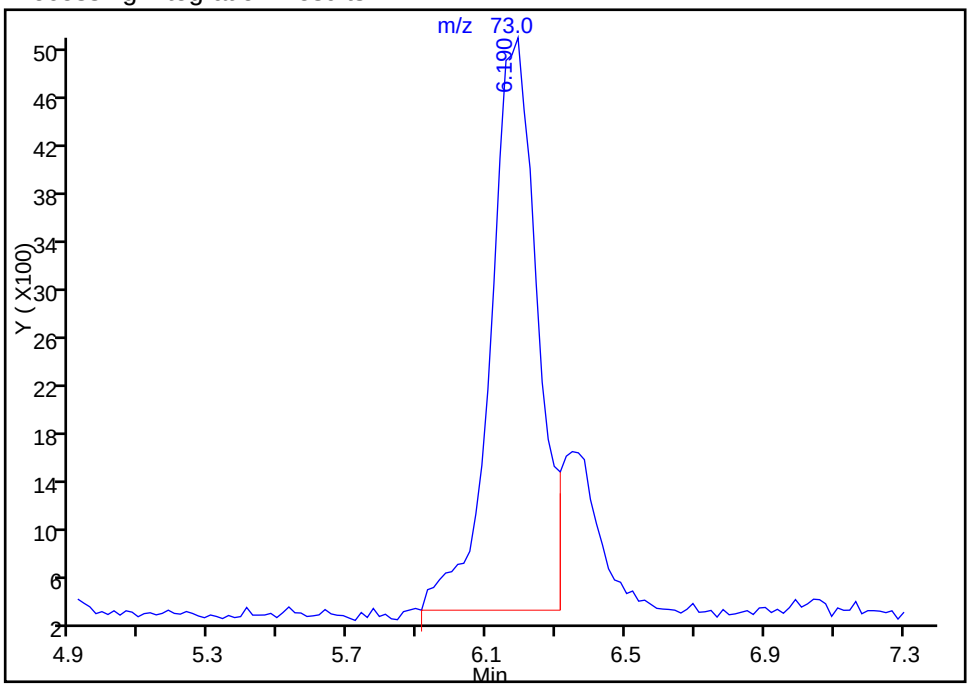
TestAmerica Denver

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

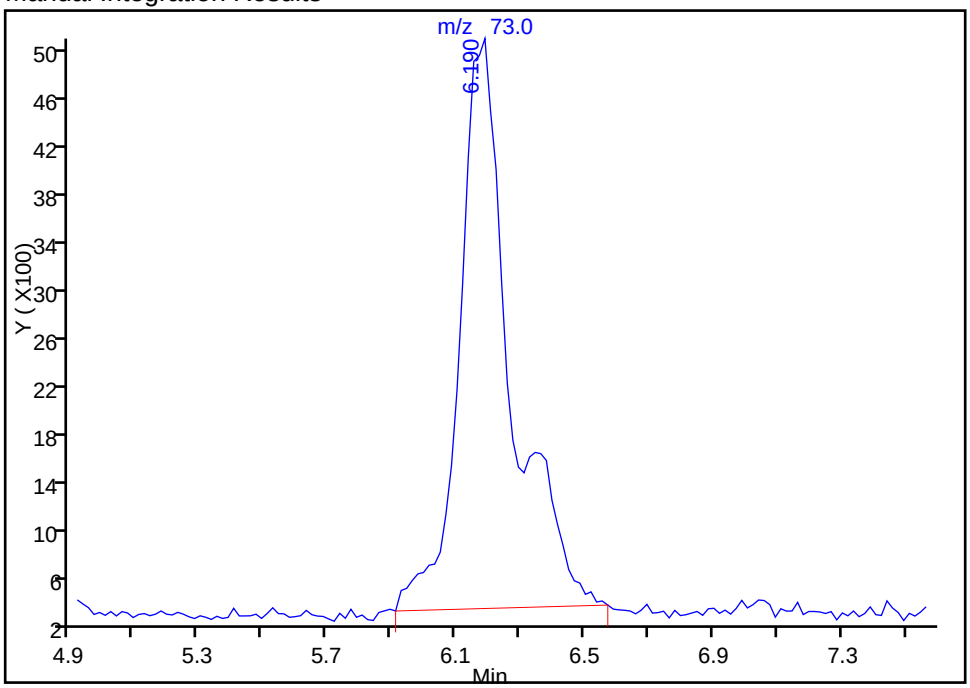
Processing Integration Results

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:

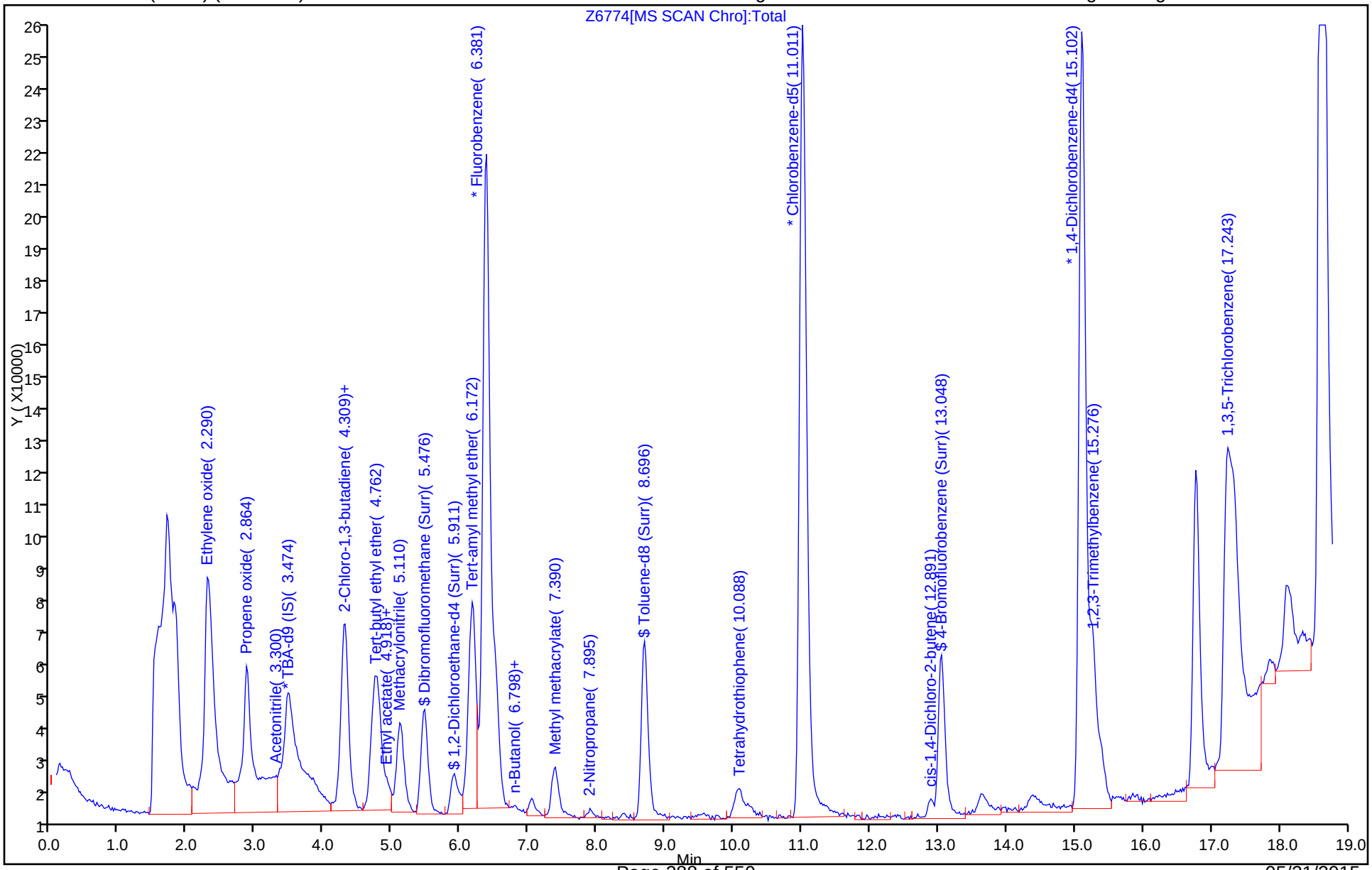
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.16	Units: uL
MV-Supp A_00011	Amount Added:	1.00	Units: uL

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

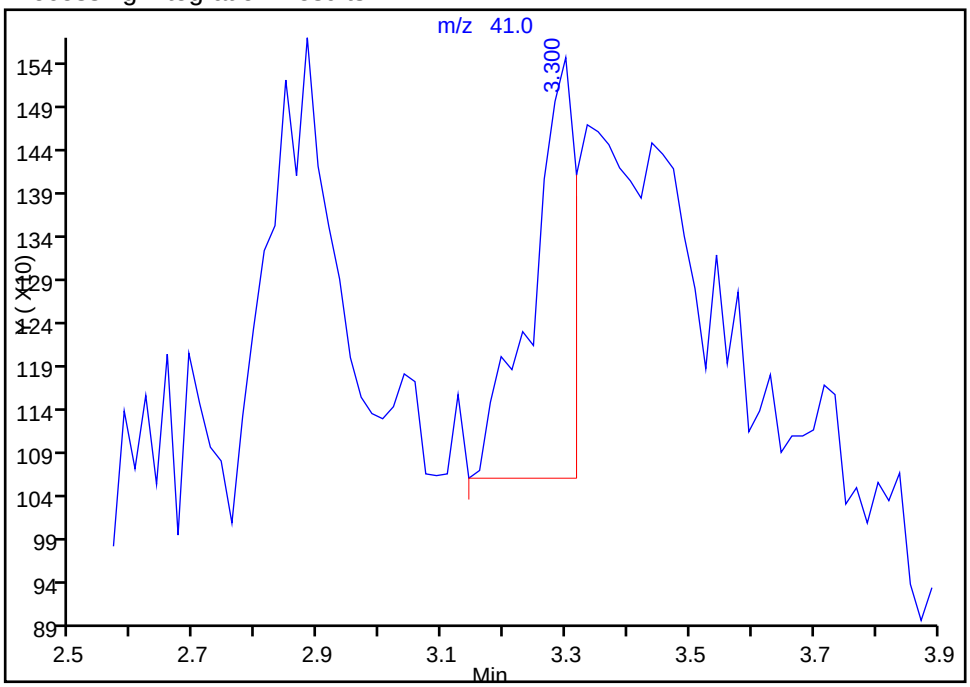
TestAmerica Denver

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

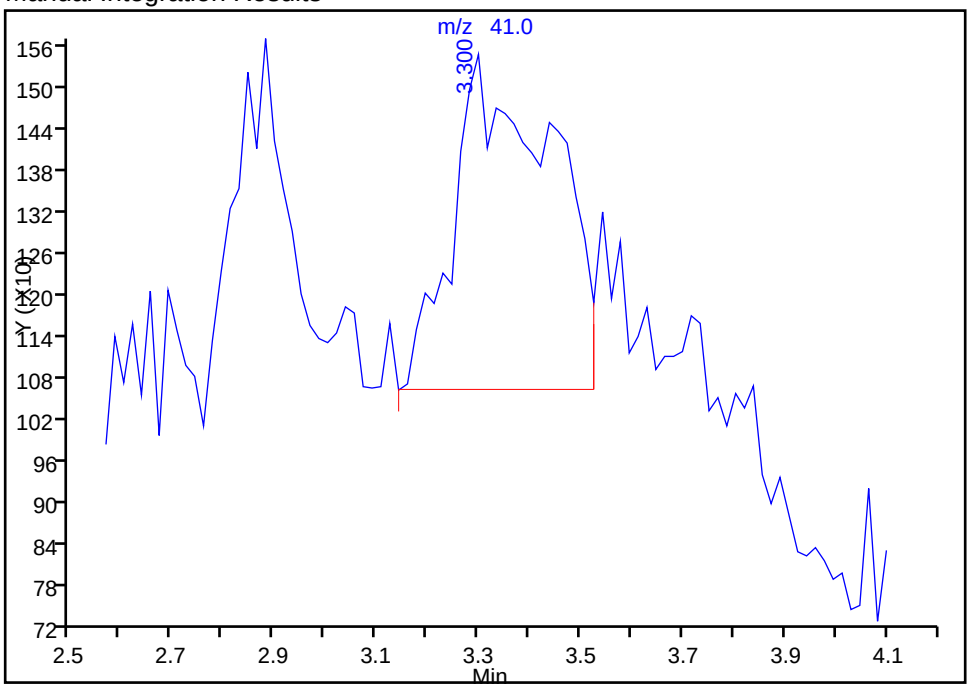
Processing Integration Results

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

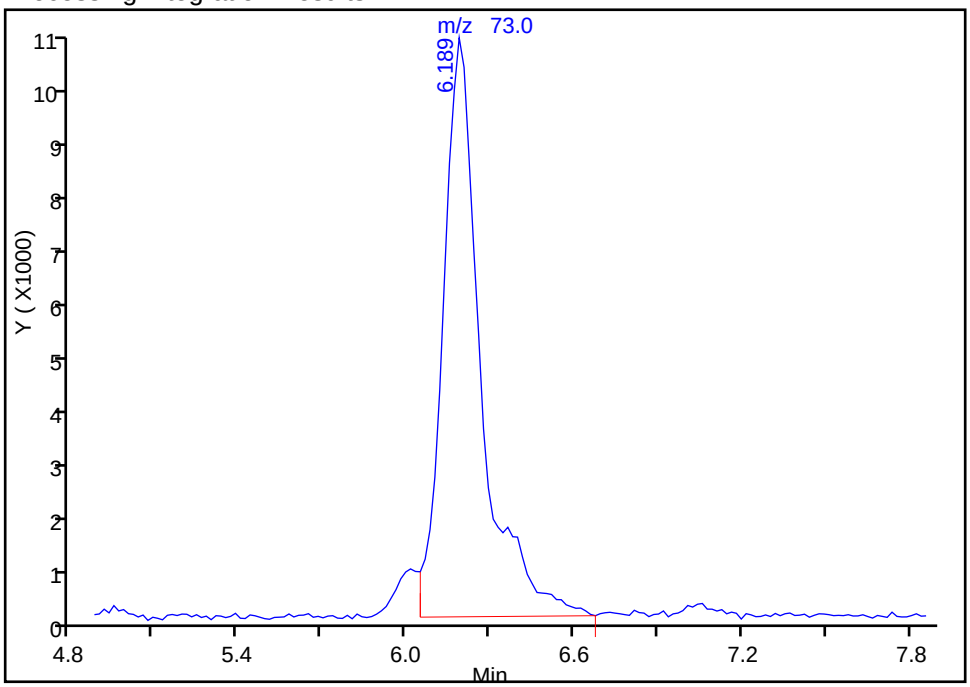
TestAmerica Denver

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

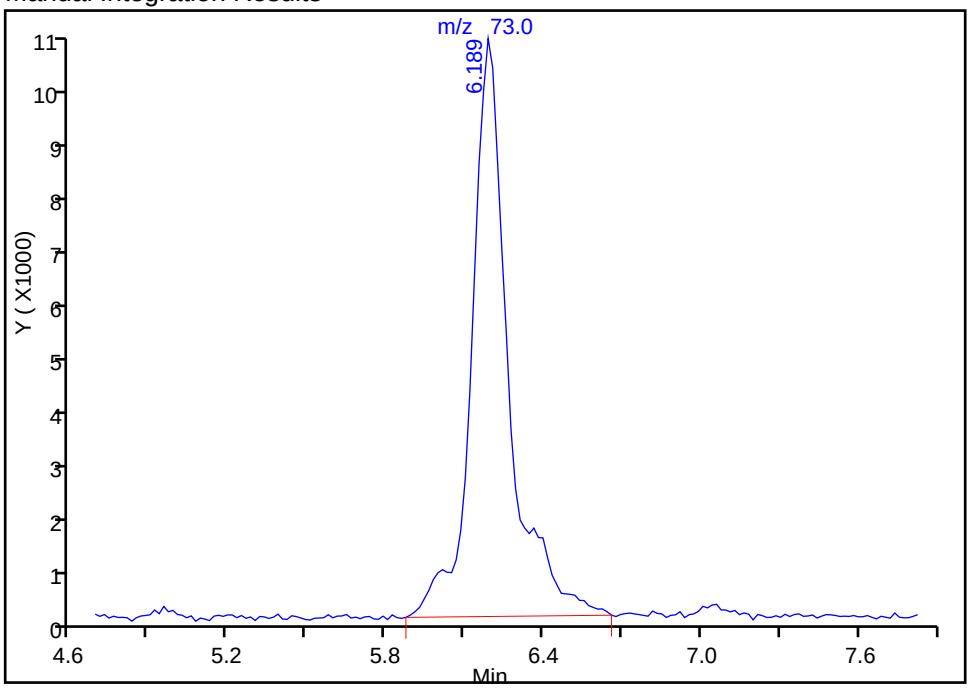
Processing Integration Results

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:

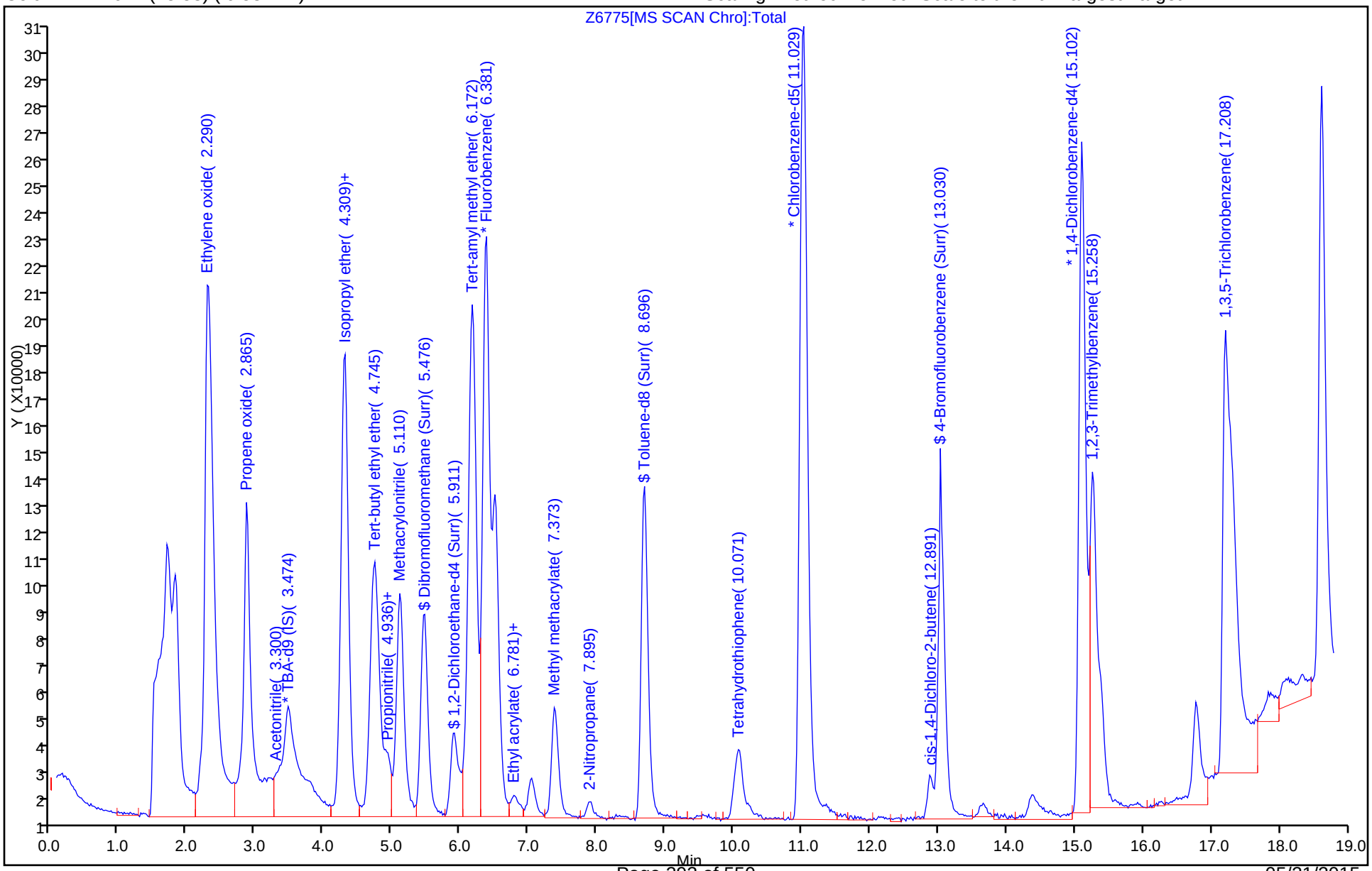
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.40	Units: uL
MV-Supp A_00011	Amount Added:	2.50	Units: uL

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

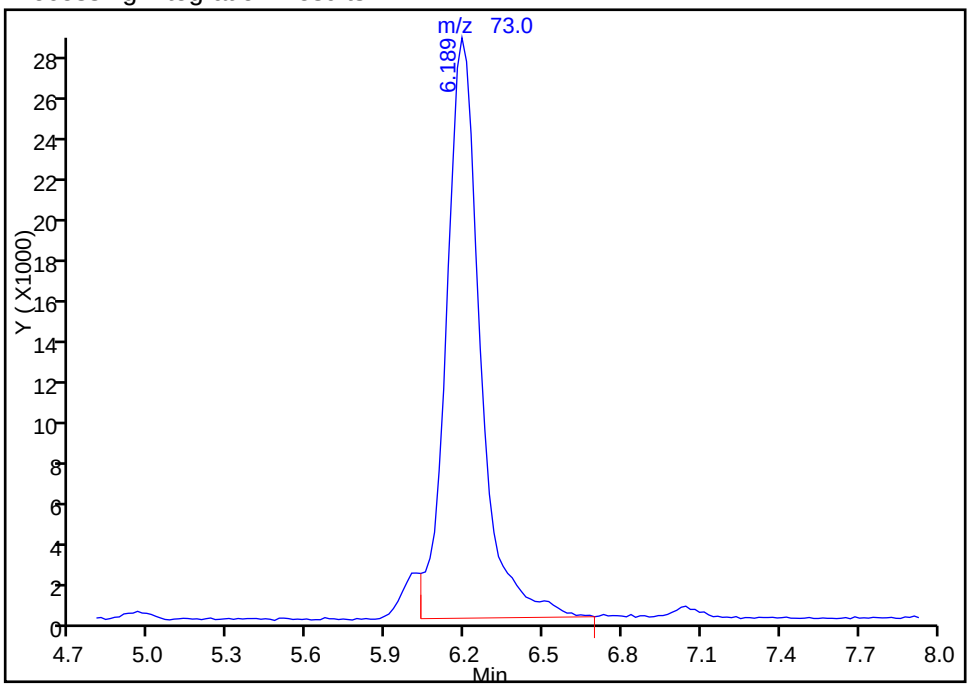
TestAmerica Denver

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

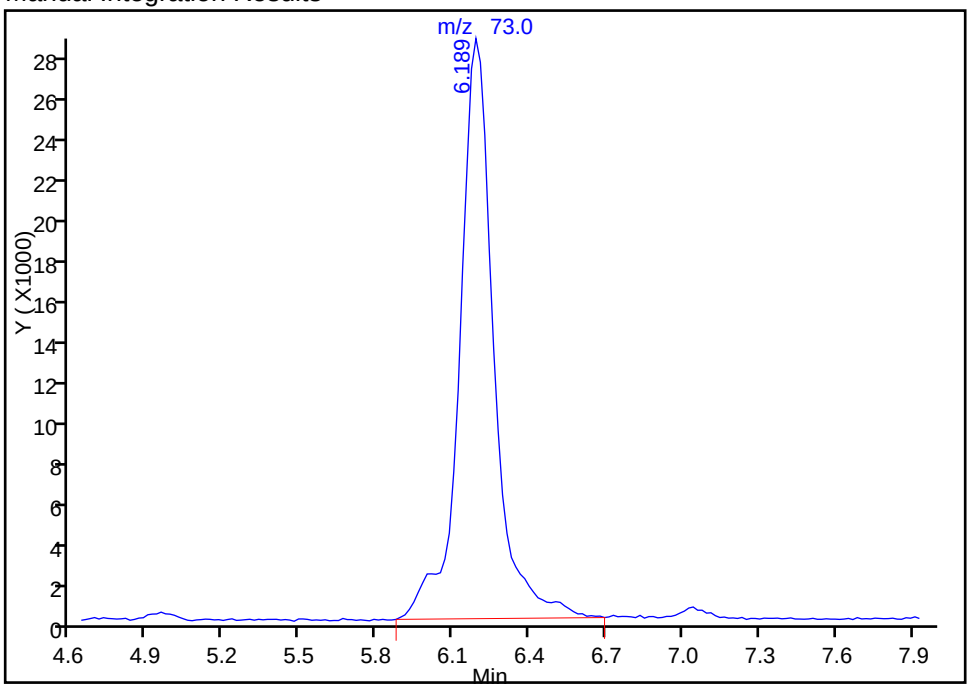
Processing Integration Results

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:

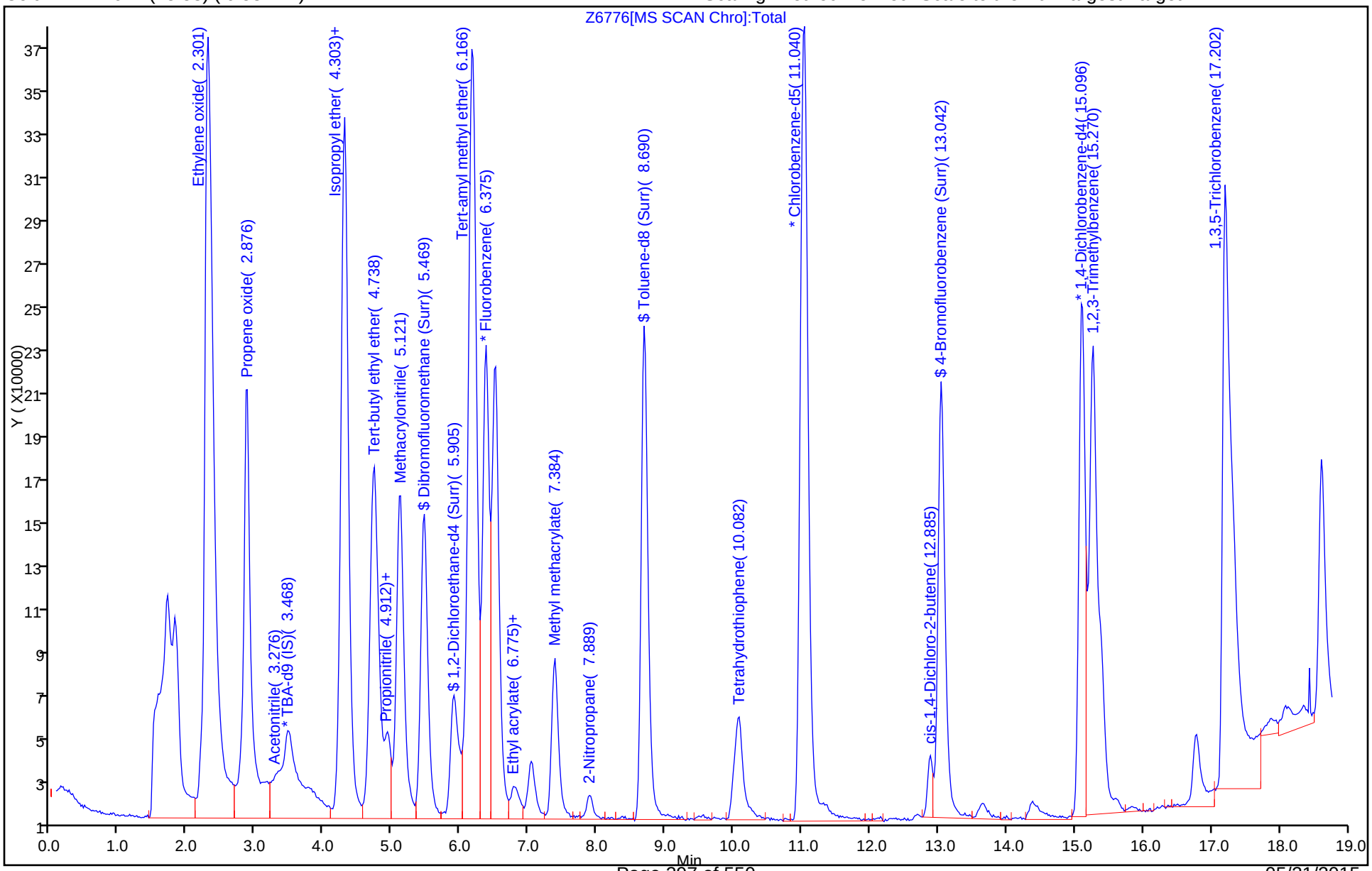
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL
MV-Supp A_00011	Amount Added:	5.00	Units: uL

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



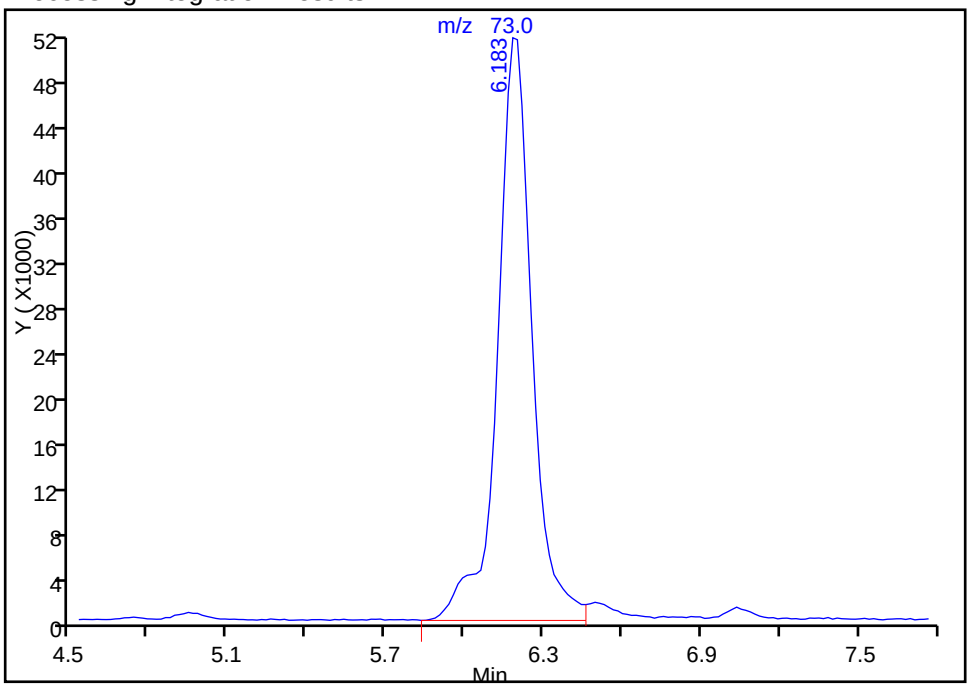
TestAmerica Denver

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

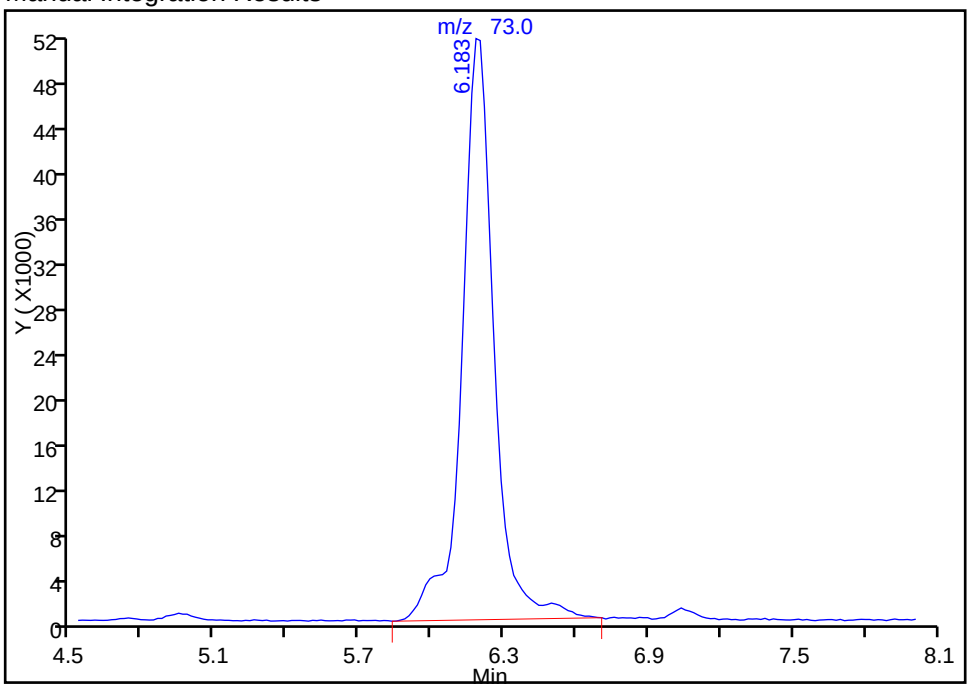
Processing Integration Results

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:

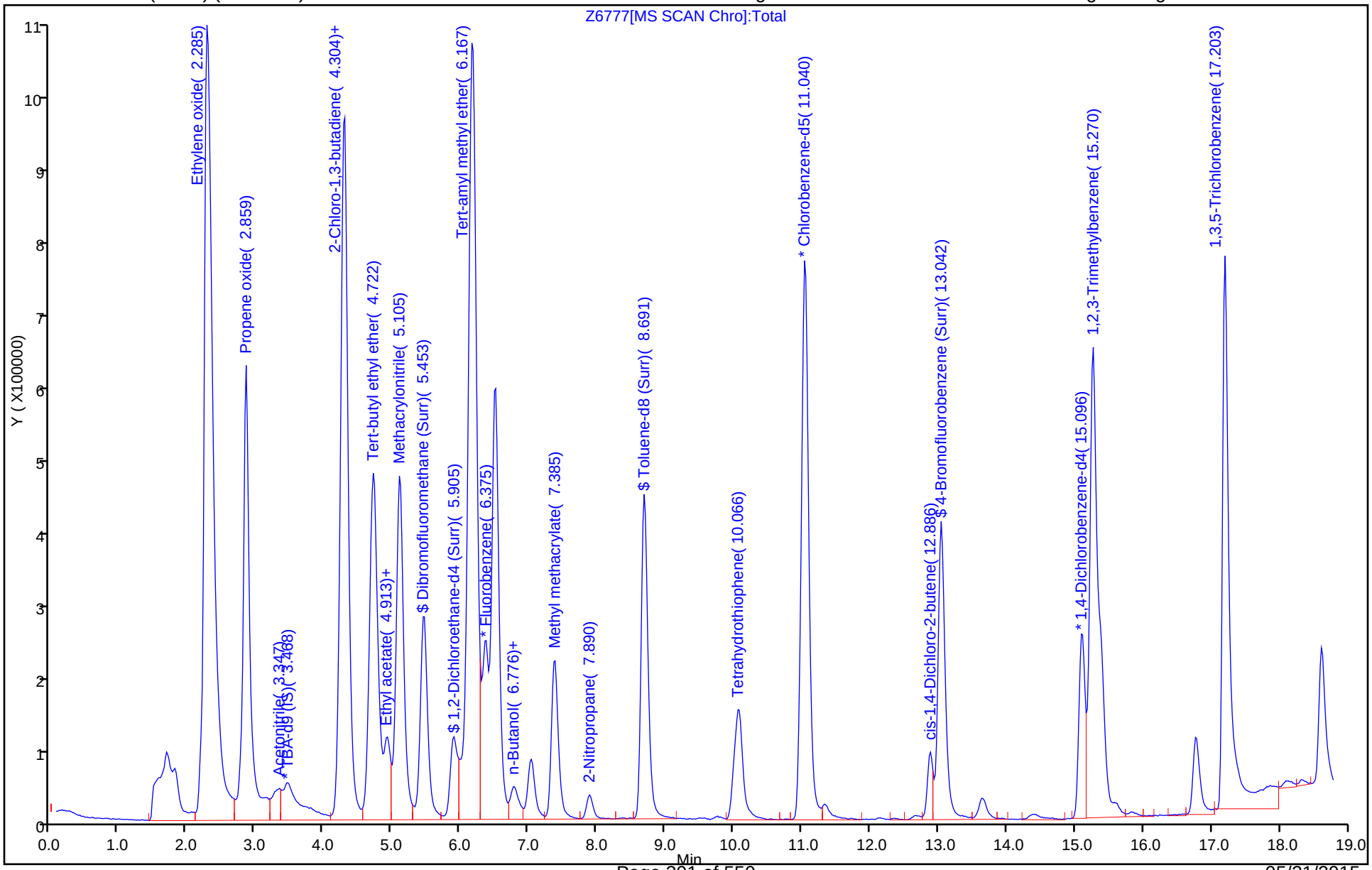
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 1.60	Units: uL
MV-Supp A_00011	Amount Added: 15.00	Units: uL

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

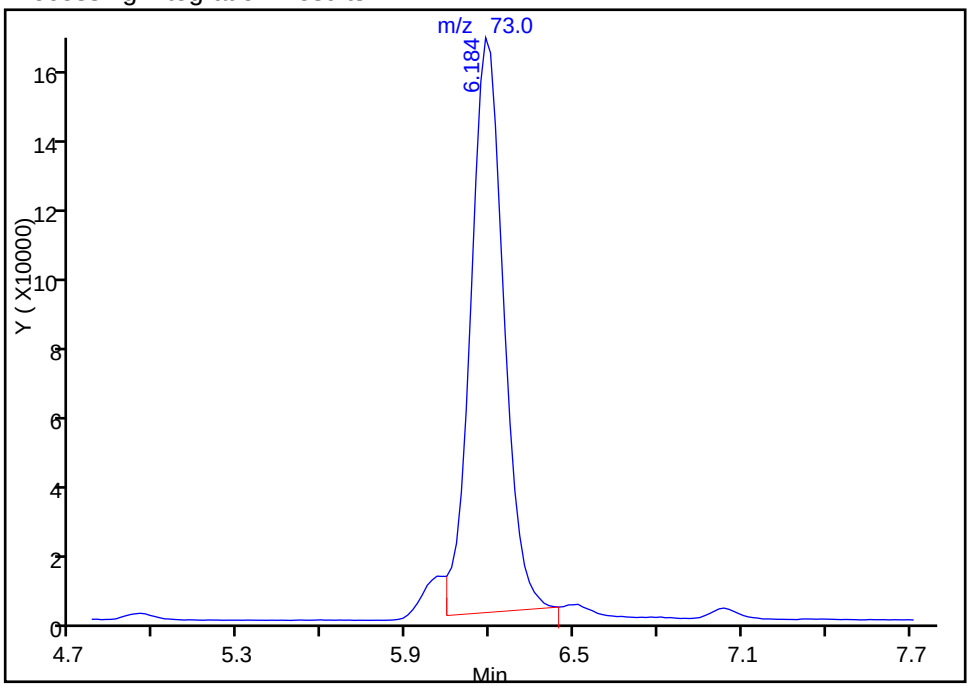
TestAmerica Denver

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

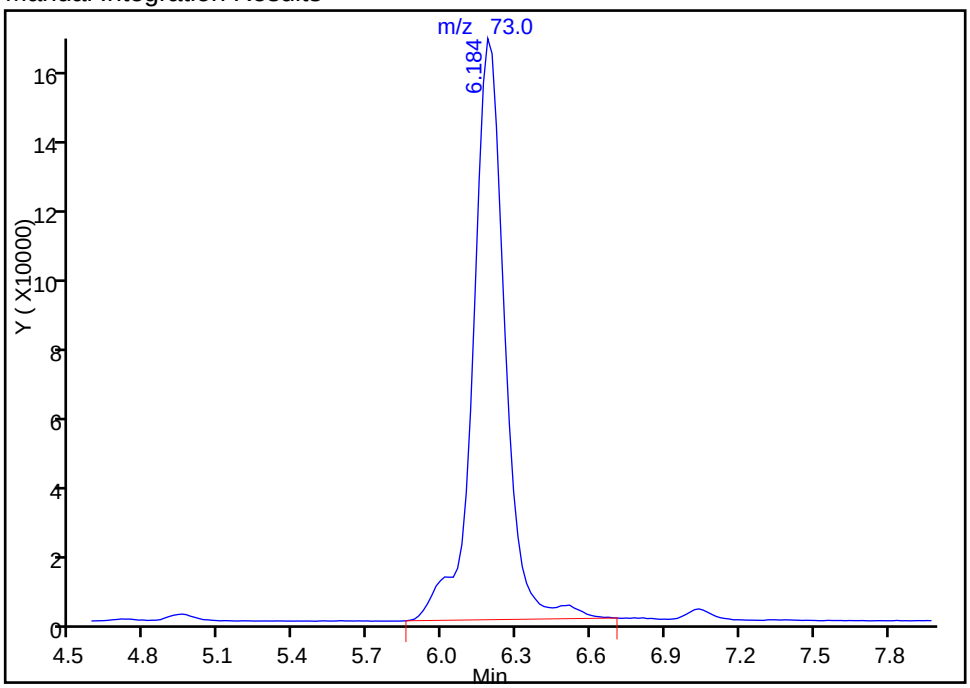
Processing Integration Results

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:

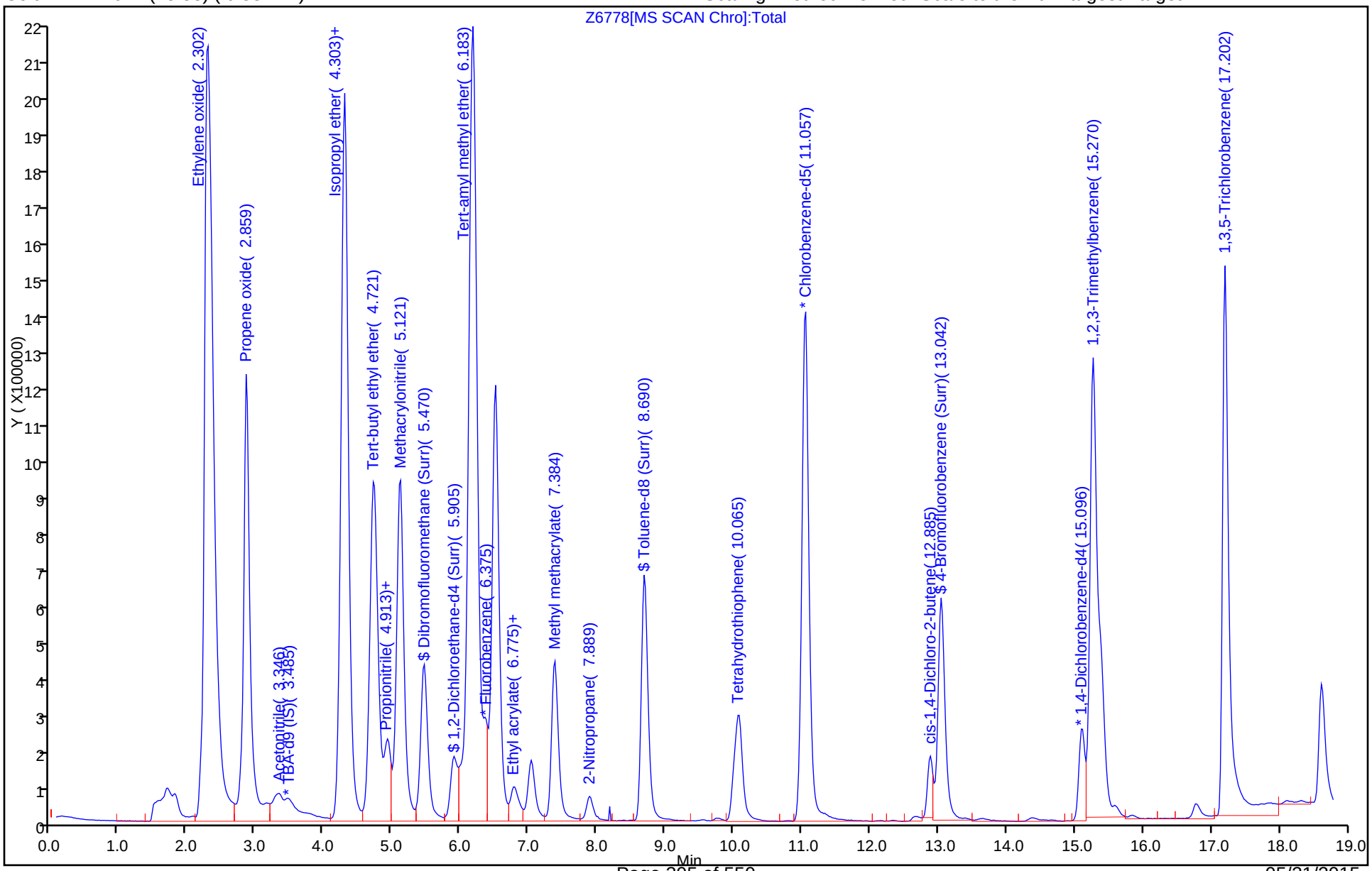
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 2.40	Units: uL
MV-Supp A_00011	Amount Added: 30.00	Units: uL

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



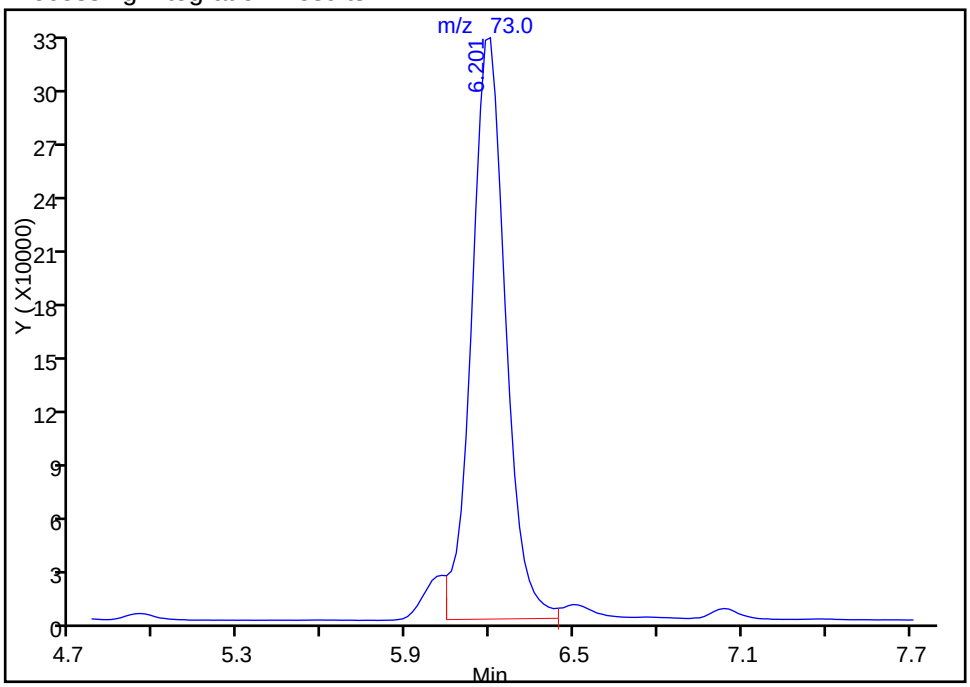
TestAmerica Denver

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

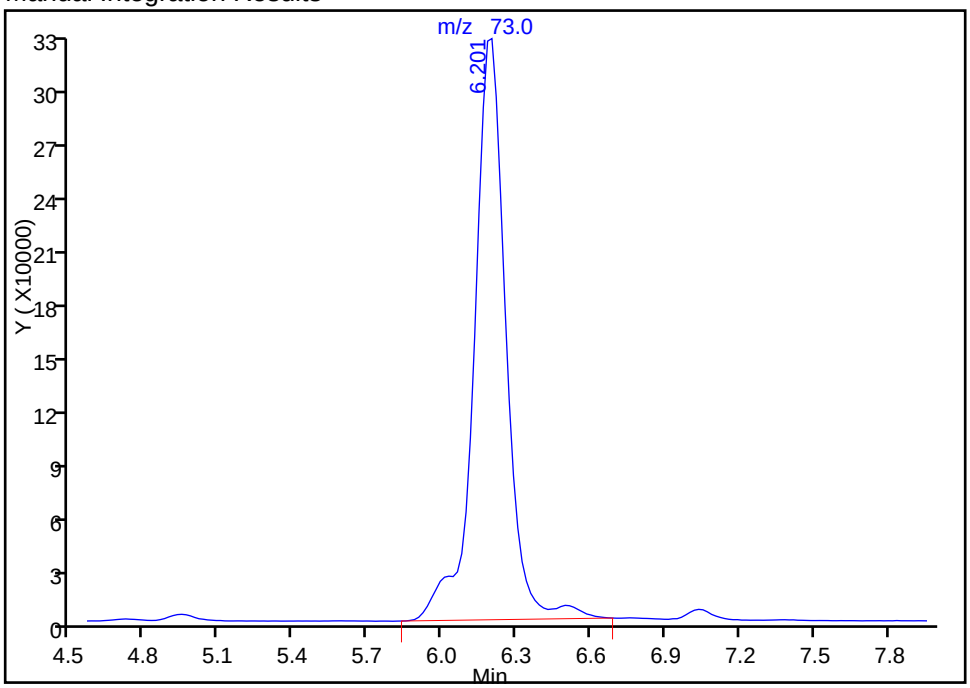
Processing Integration Results

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.: 280-68518-1 Analy Batch No.: 275642

SDG No.:

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

Calibration Start Date: 05/02/2015 07:56 Calibration End Date: 05/02/2015 09:27 Calibration ID: 22178

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-275642/10	Z7039.D
Level 2	IC 280-275642/11	Z7040.D
Level 3	IC 280-275642/12	Z7041.D
Level 4	IC 280-275642/13	Z7042.D
Level 5	IC 280-275642/14	Z7043.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.6736	0.5478	0.5268	0.5149	0.5181	Ave		0.5562				12.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2865	0.2238	0.2221	0.2163	0.2101	Ave		0.2317				13.4		15.0			
Toluene-d8 (Surr)	5.7774	4.6309	4.4317	4.2091	4.3412	Ave		4.6781				13.5		15.0			
4-Bromofluorobenzene (Surr)	1.8603	1.4548	1.3647	1.3048	1.3337	Lin2	1.1819	1.2549							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 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-68518-1 Analy Batch No.: 275642

SDG No.:

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

Calibration Start Date: 05/02/2015 07:56 Calibration End Date: 05/02/2015 09:27 Calibration ID: 22178

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-275642/10	Z7039.D
Level 2	IC 280-275642/11	Z7040.D
Level 3	IC 280-275642/12	Z7041.D
Level 4	IC 280-275642/13	Z7042.D
Level 5	IC 280-275642/14	Z7043.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Dibromofluoromethane (Surr)	FB	Ave	88076	180200	351107	679167	1021912	2.00	5.00	10.0	20.0	30.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	37462	73618	148004	285259	414377	2.00	5.00	10.0	20.0	30.0
Toluene-d8 (Surr)	CBZ	Ave	171164	348164	673191	1272541	1946855	2.00	5.00	10.0	20.0	30.0
4-Bromofluorobenzene (Surr)	DCB	Lin2	98970	192106	365614	707375	1064856	2.00	5.00	10.0	20.0	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_Z\20150502-34583.b\Z7039.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	02-May-2015 07:56:30	ALS Bottle#:	6	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*sub79				
Method:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-May-2015 10:20:59	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: moanm Date: 02-May-2015 08:28:32

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	3.484	3.473	0.011	95	136350	250.0	250.0	
* 2 Fluorobenzene	96	6.373	6.362	0.011	98	817185	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.004	10.992	0.012	88	185164	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.112	15.100	0.012	95	332498	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.468	5.457	0.011	94	88076	2.00	2.42	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.886	5.892	-0.006	93	37462	2.00	2.47	
$ 10 Toluene-d8 (Surr)	98	8.689	8.695	-0.006	93	171164	2.00	2.47	
$ 11 4-Bromofluorobenzene (Surr	95	13.040	13.029	0.011	88	98970	2.00	2.02	

Reagents:

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

Report Date: 02-May-2015 10:20:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7039.D

Injection Date: 02-May-2015 07:56:30 Instrument ID: VMS_Z Operator ID: moanm

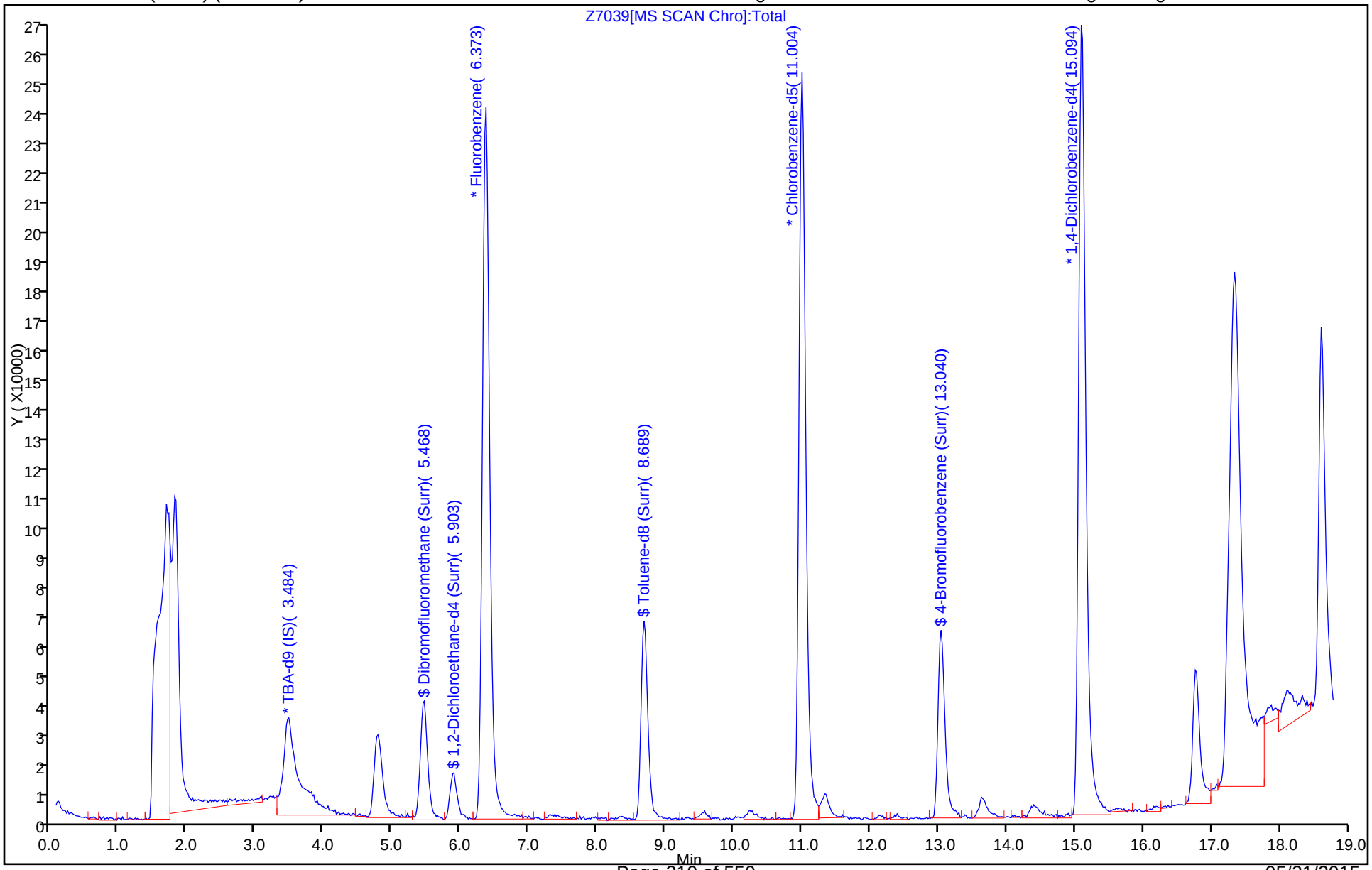
Lims ID: ic Worklist Smp#: 10

Client ID:

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



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7040.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	02-May-2015 08:19:30	ALS Bottle#:	7	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*sub79				
Method:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-May-2015 10:21:00	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: moanm Date: 02-May-2015 08:43:50

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	3.473	0.012	95	119947	250.0	250.0	
* 2 Fluorobenzene	96	6.375	6.362	0.013	98	822385	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.005	10.992	0.013	88	187955	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.096	15.100	-0.004	95	330119	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.452	5.457	-0.005	94	180200	5.00	4.92	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.905	5.892	0.013	94	73618	5.00	4.83	
$ 10 Toluene-d8 (Surr)	98	8.690	8.695	-0.005	93	348164	5.00	4.95	
$ 11 4-Bromofluorobenzene (Surr	95	13.042	13.029	0.013	88	192106	5.00	4.85	

Reagents:

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

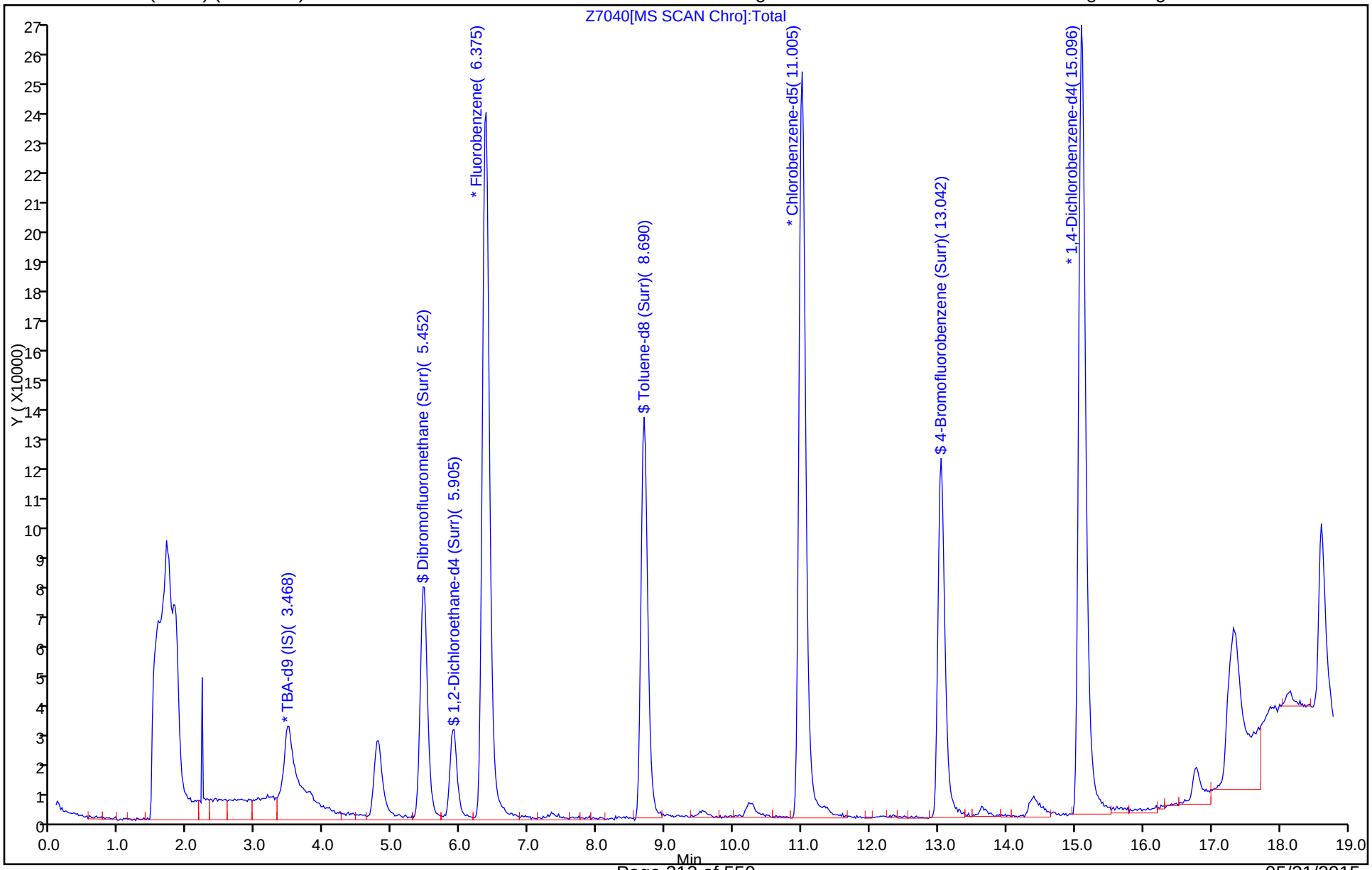
Report Date: 02-May-2015 10:21:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7040.D

Injection Date:	02-May-2015 08:19:30	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#:	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



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7041.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	02-May-2015 08:41:30	ALS Bottle#:	8	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*sub79				
Method:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-May-2015 10:21:01	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: moanm Date: 02-May-2015 09:25:46

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	3.473	3.473	0.000	94	136281	250.0	250.0	
* 2 Fluorobenzene	96	6.362	6.362	0.000	98	833146	12.5	12.5	
* 4 Chlorobenzene-d5	119	10.992	10.992	0.000	88	189880	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.100	15.100	0.000	96	334881	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.457	5.457	0.000	93	351107	10.0	9.47	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.892	5.892	0.000	94	148004	10.0	9.58	
$ 10 Toluene-d8 (Surr)	98	8.695	8.695	0.000	93	673191	10.0	9.47	
$ 11 4-Bromofluorobenzene (Surr	95	13.029	13.029	0.000	88	365614	10.0	9.93	

Reagents:

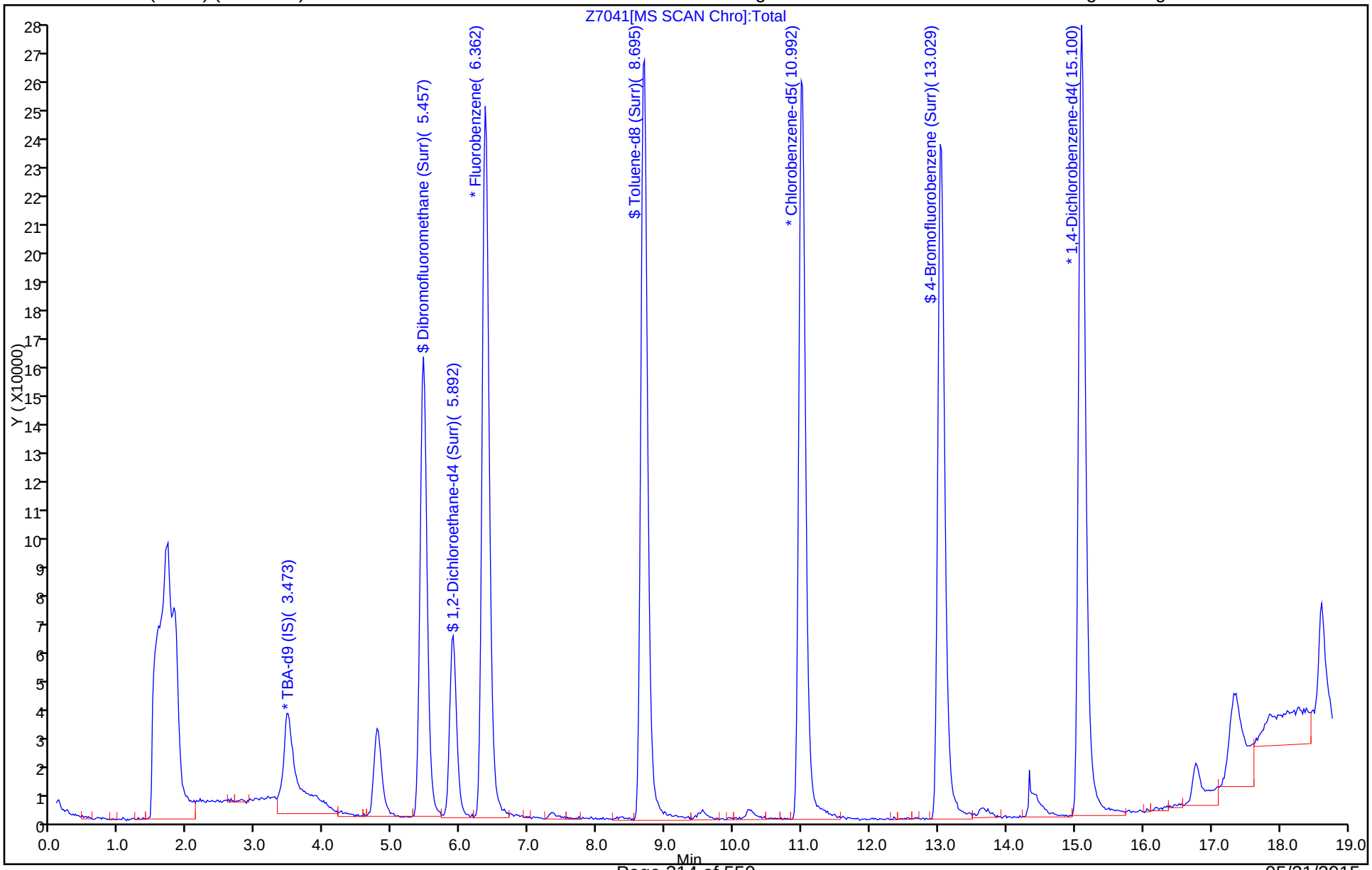
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 02-May-2015 10:21:01 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7041.D				
Injection Date:	02-May-2015 08:41:30	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#:	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



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7042.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	02-May-2015 09:04:30	ALS Bottle#:	9	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*sub79				
Method:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-May-2015 10:21:02	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: moanm Date: 02-May-2015 09:25:33

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	3.473	0.015	93	149784	250.0	250.0	
* 2 Fluorobenzene	96	6.361	6.362	-0.001	98	824349	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.008	10.992	0.016	88	188959	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.099	15.100	-0.001	95	338844	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.455	5.457	-0.002	94	679167	20.0	18.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.891	5.892	-0.001	94	285259	20.0	18.7	
$ 10 Toluene-d8 (Surr)	98	8.693	8.695	-0.002	93	1272541	20.0	18.0	
$ 11 4-Bromofluorobenzene (Surr	95	13.045	13.029	0.016	87	707375	20.0	19.9	

Reagents:

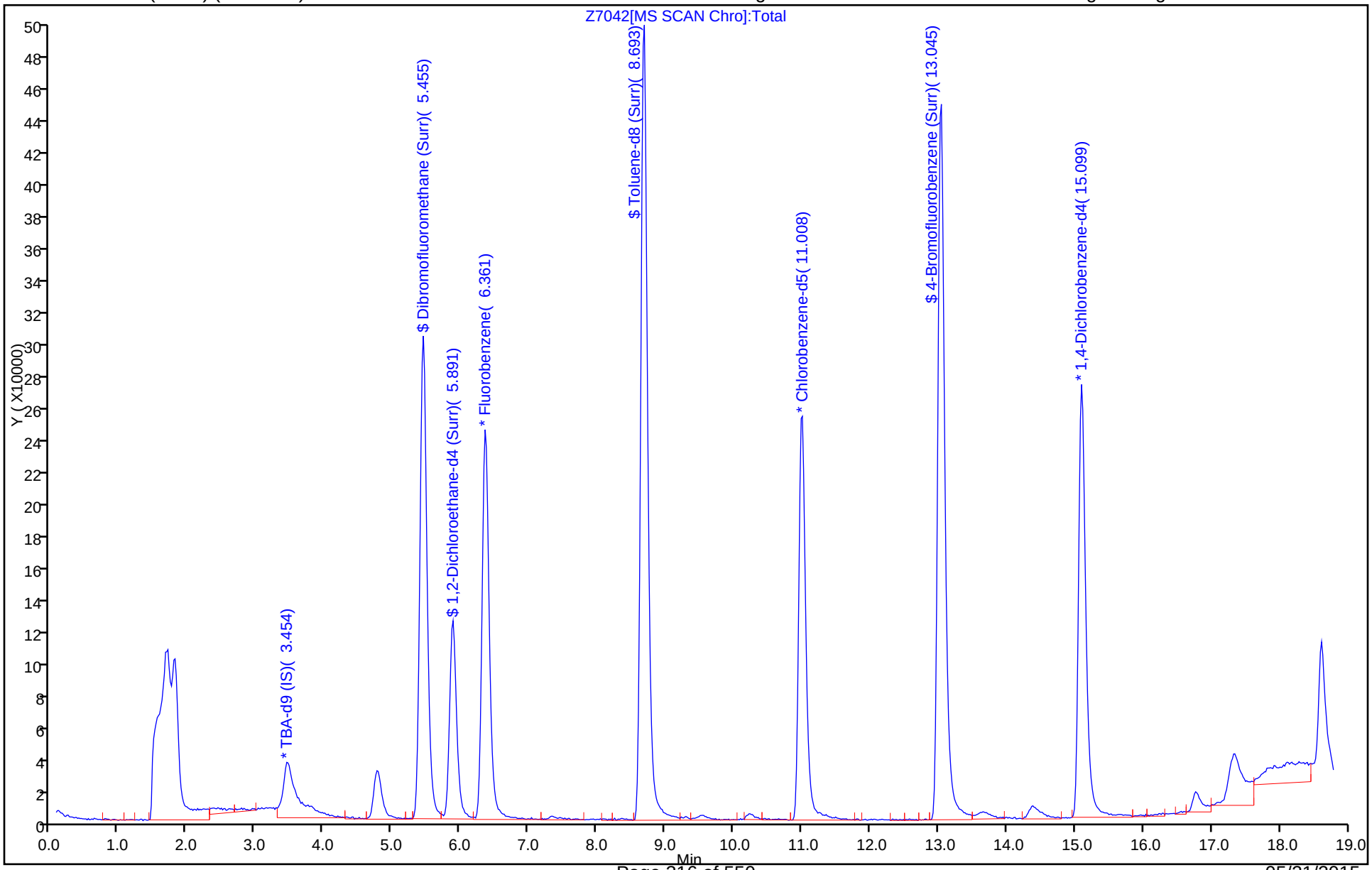
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00042	Amount Added: 1.60	Units: uL

Report Date: 02-May-2015 10:21:02 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7042.D				
Injection Date:	02-May-2015 09:04:30	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#:	9
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
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	02-May-2015 09:27:30	ALS Bottle#:	10	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*sub79				
Method:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-May-2015 10:21:02	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: moanm Date: 02-May-2015 09:49:34

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	3.473	0.018	93	131370	250.0	250.0	
* 2 Fluorobenzene	96	6.363	6.362	0.001	98	821910	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.011	10.992	0.019	88	186857	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.101	15.100	0.001	95	332684	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.458	5.457	0.001	94	1021912	30.0	27.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.893	5.892	0.001	94	414377	30.0	27.2	
$ 10 Toluene-d8 (Surr)	98	8.696	8.695	0.001	93	1946855	30.0	27.8	
$ 11 4-Bromofluorobenzene (Surr	95	13.047	13.029	0.018	88	1064856	30.0	30.9	

Reagents:

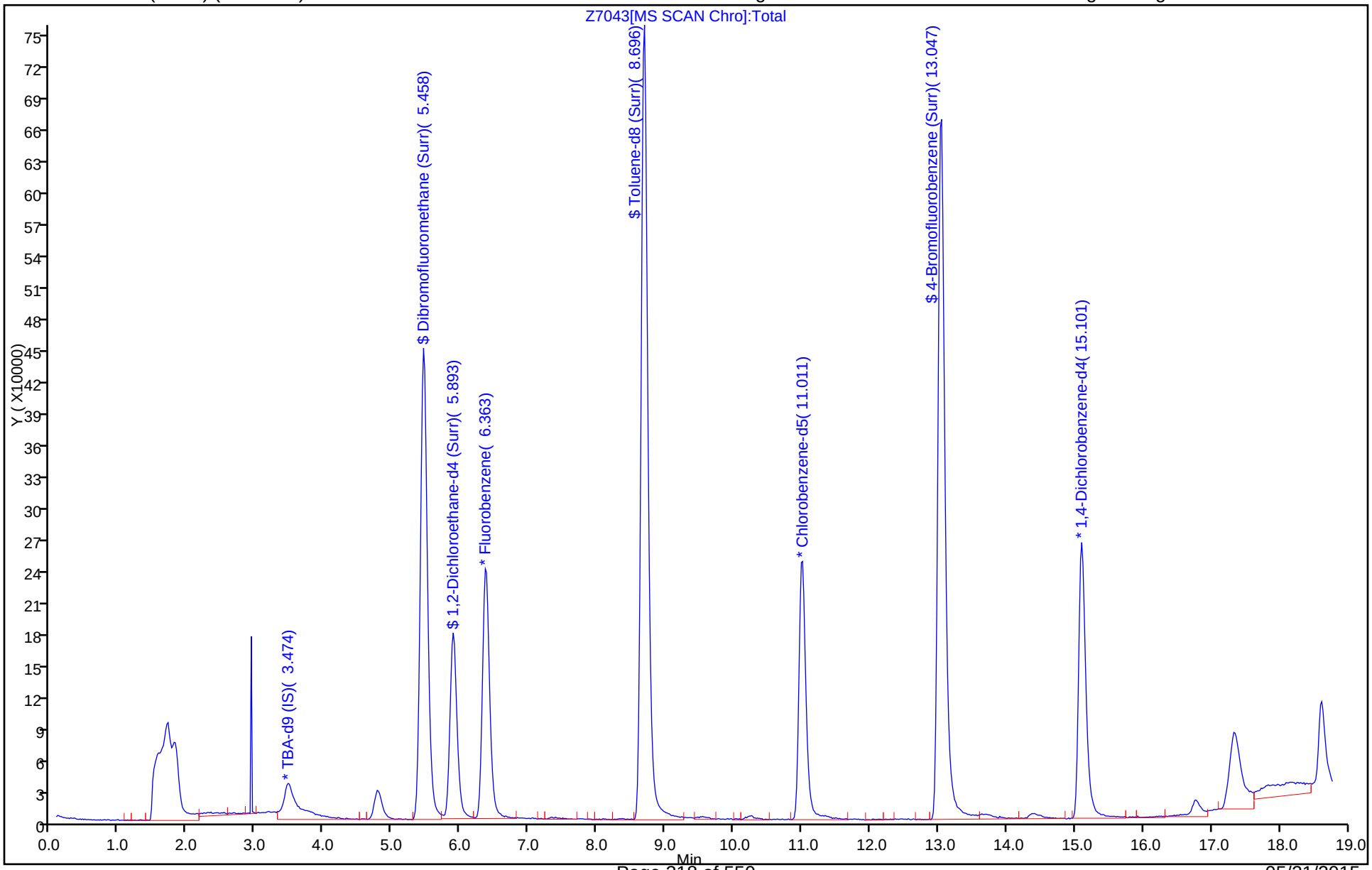
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	2.40	Units: uL

Report Date: 02-May-2015 10:21:03 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Injection Date:	02-May-2015 09:27:30	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#:	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.: 280-68518-1

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:

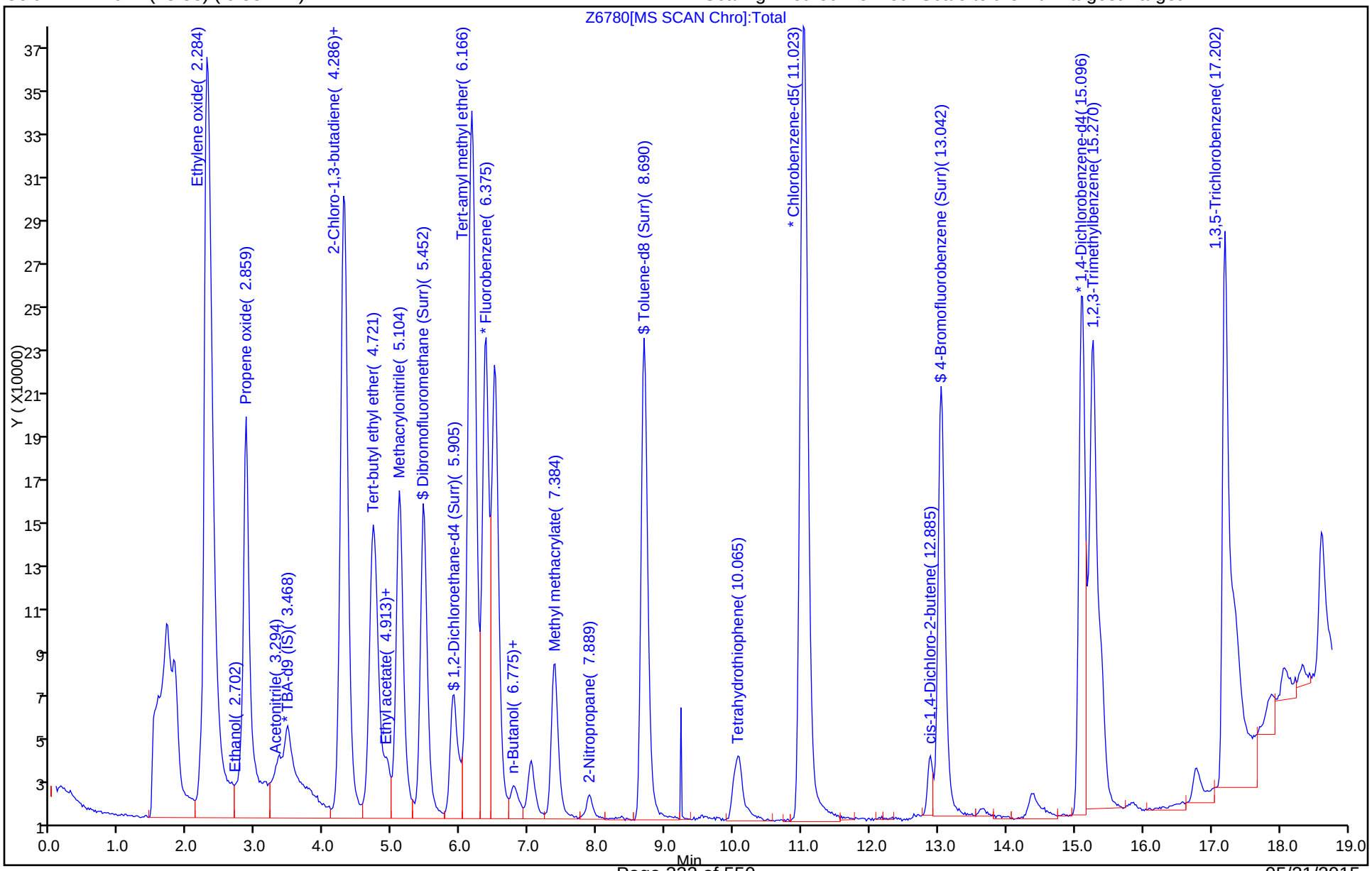
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

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.: 280-68518-1

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:

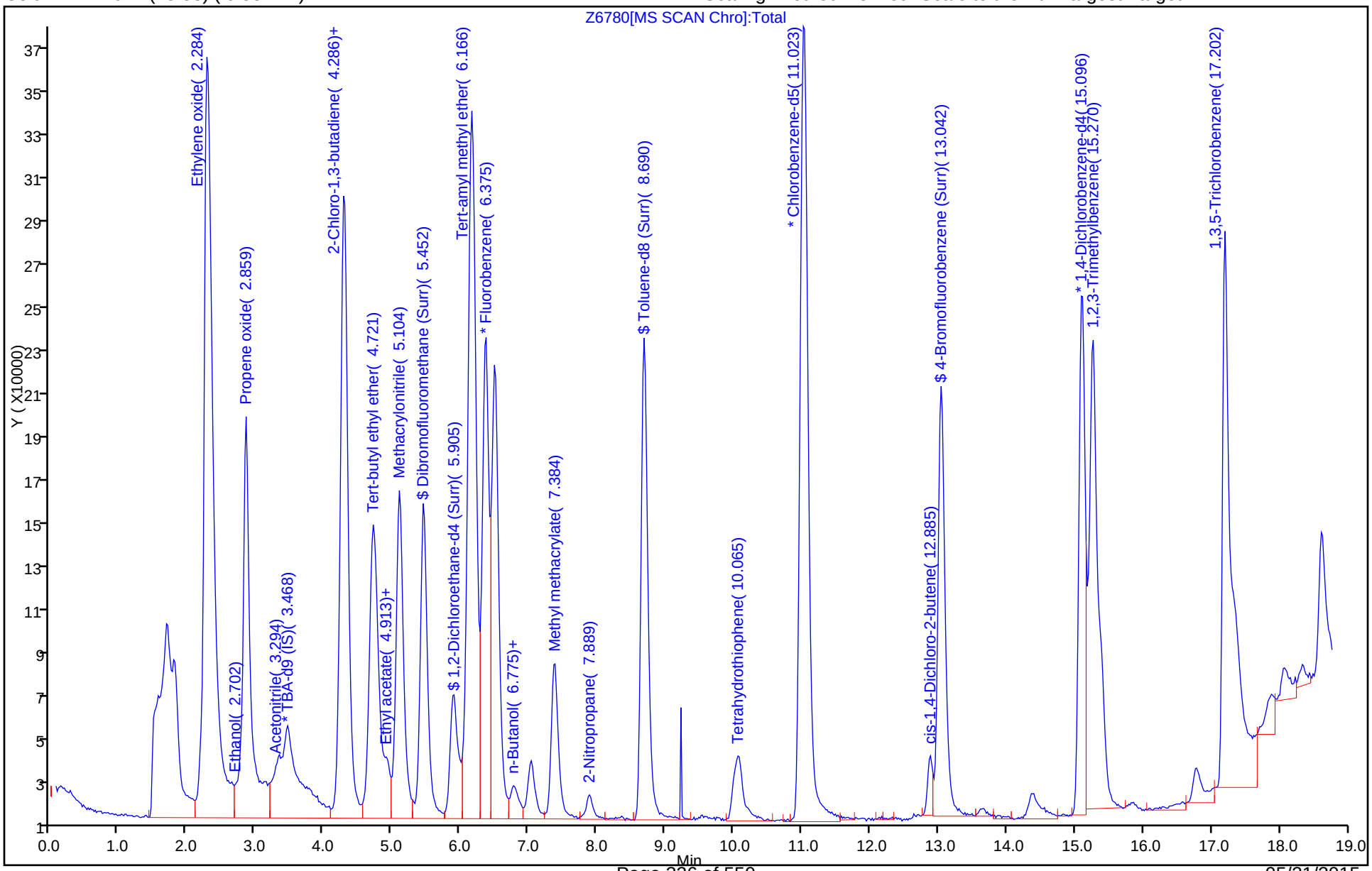
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

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.: 280-68518-1

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:

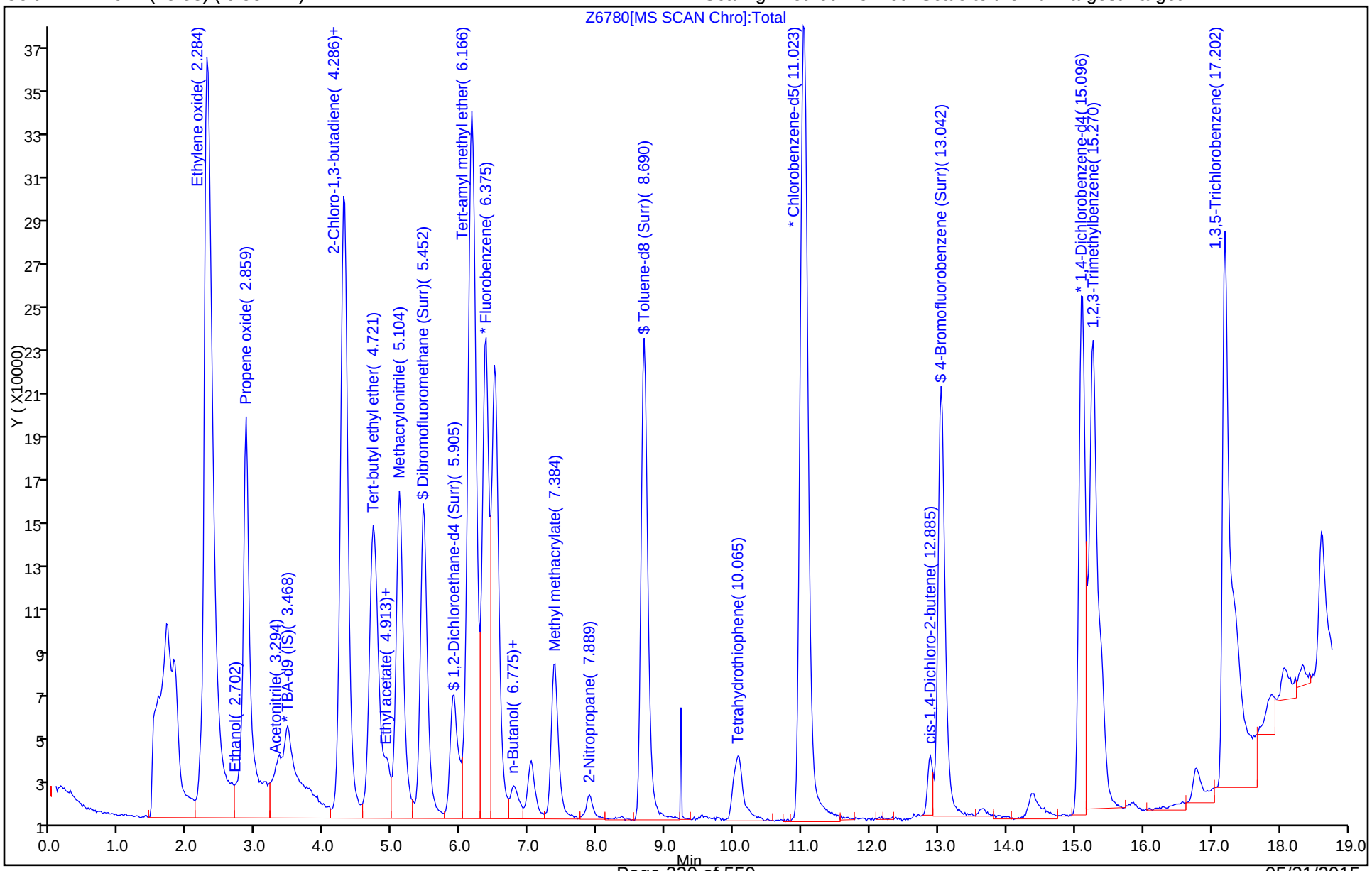
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

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

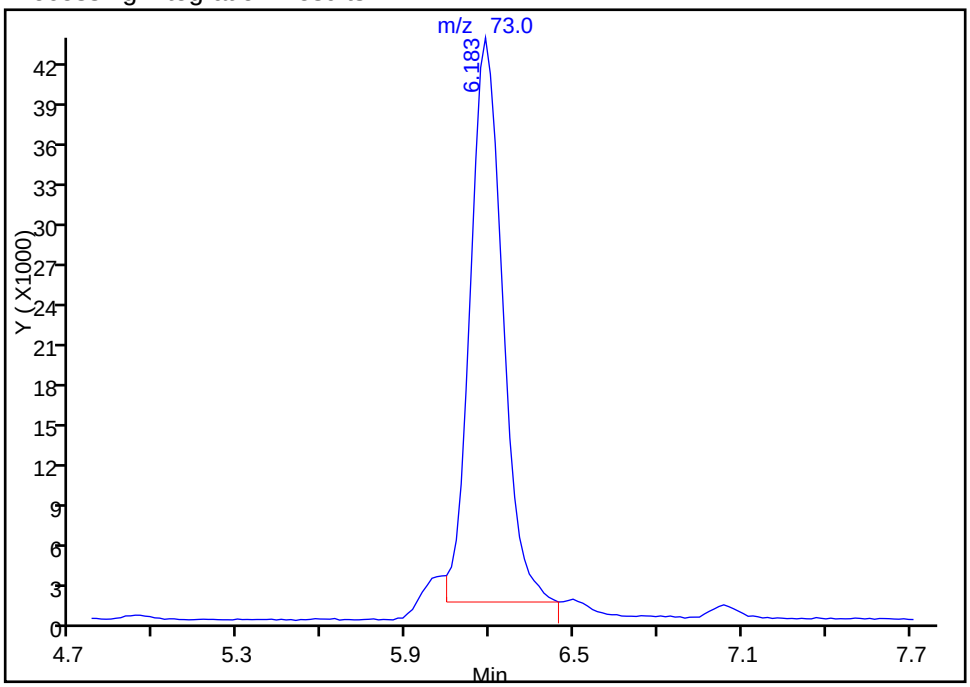
TestAmerica Denver

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

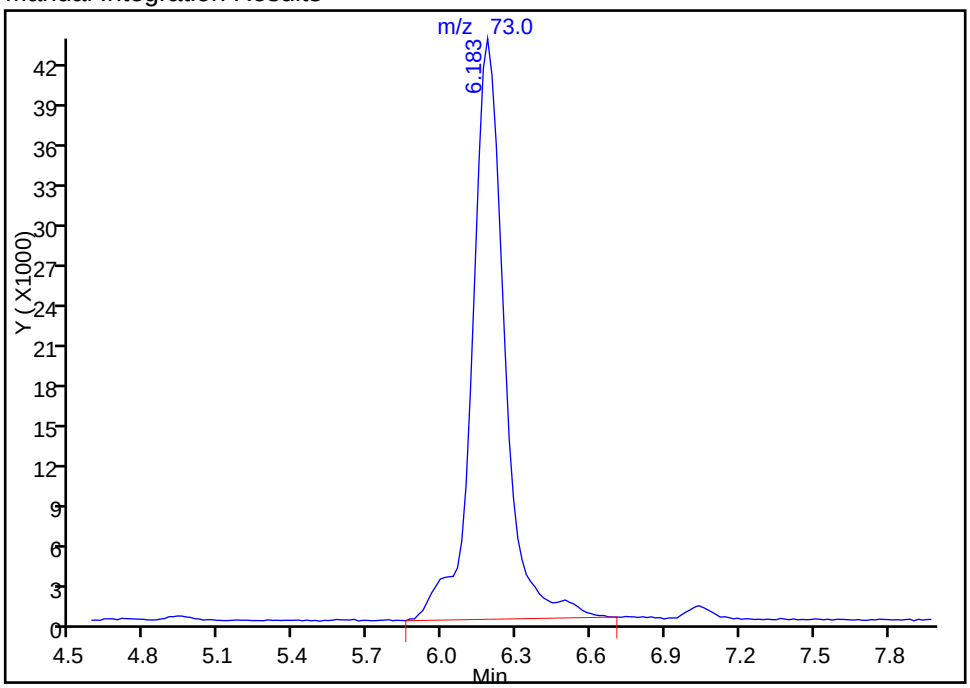
Processing Integration Results

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.: 280-68518-1

SDG No.:

Lab Sample ID: ICV 280-275227/4 Calibration Date: 04/30/2015 07:04

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: Z6922.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\20150430-34486.b\Z6922.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Apr-2015 07:04:30 ALS Bottle#: 3 Worklist Smp#: 4
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\20150430-34486.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-May-2015 07:06:51 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: XAWRK007

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	3.487	0.003	89	132244	250.0	250.0	
* 2 Fluorobenzene	96	6.380	6.377	0.003	98	800813	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.010	11.007	0.003	89	172427	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.118	15.115	0.003	94	319469	12.5	12.5	
27 Dichlorodifluoromethane	85	1.906	1.921	-0.015	98	366212	10.0	11.0	
30 Chloromethane	50	1.976	1.973	0.003	99	214588	10.0	10.2	
31 Butadiene	54	2.080	2.078	0.002	88	147581	NC	NC	
32 Vinyl chloride	62	2.098	2.112	-0.014	98	201555	10.0	10.1	
35 Bromomethane	94	2.324	2.339	-0.015	90	203772	10.0	9.93	
36 Chloroethane	64	2.376	2.391	-0.015	99	134409	10.0	9.56	
37 Dichlorofluoromethane	67	2.533	2.548	-0.015	99	498558	10.0	9.80	
38 Trichlorofluoromethane	101	2.603	2.600	0.002	99	454517	10.0	9.66	
40 Ethyl ether	59	2.794	2.809	-0.015	95	84511	10.0	9.28	
44 Acrolein	56	2.898	2.913	-0.015	100	45791	100.0	93.9	
45 1,1-Dichloroethene	96	3.038	3.035	0.003	97	197233	10.0	9.40	
48 Acetone	43	3.038	3.052	-0.014	87	42106	40.0	34.9	
46 1,1,2-Trichloro-1,2,2-trif	151	3.072	3.087	-0.015	98	305255	10.0	9.35	
49 Iodomethane	142	3.177	3.192	-0.015	98	513957	10.0	9.62	
50 Carbon disulfide	76	3.264	3.279	-0.015	99	705222	10.0	9.10	
52 3-Chloro-1-propene	41	3.351	3.348	0.003	84	306276	10.0	8.43	
51 Methyl acetate	43	3.351	3.348	0.003	70	210199	50.0	44.0	
54 Methylene Chloride	84	3.455	3.470	-0.015	95	174684	10.0	9.81	
55 2-Methyl-2-propanol	59	3.560	3.575	-0.015	92	55868	100.0	101.1	M
58 Acrylonitrile	53	3.682	3.679	0.003	98	135182	100.0	86.5	
57 trans-1,2-Dichloroethene	96	3.751	3.766	-0.015	98	216800	10.0	9.68	
56 Methyl tert-butyl ether	73	3.769	3.783	-0.014	97	283458	10.0	8.89	
59 Hexane	57	4.047	4.062	-0.015	95	311197	10.0	10.3	
62 1,1-Dichloroethane	63	4.187	4.201	-0.014	96	384214	10.0	9.15	
61 Vinyl acetate	43	4.221	4.219	0.002	96	380314	20.0	16.8	
67 2-Butanone (MEK)	43	4.865	4.863	0.002	46	95394	40.0	36.3	
65 cis-1,2-Dichloroethene	96	4.865	4.863	0.002	85	204025	10.0	9.46	
66 2,2-Dichloropropane	77	4.900	4.897	0.003	89	371421	10.0	9.29	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
70 sec-Butyl Alcohol	45	5.092	5.106	-0.014	96	129203	300.0	292.0	
71 Chlorobromomethane	128	5.161	5.159	0.002	96	95284	10.0	9.20	
74 Chloroform	83	5.248	5.263	-0.015	96	387901	10.0	9.40	
72 Tetrahydrofuran	42	5.248	5.263	-0.015	36	28466	20.0	18.2	
75 1,1,1-Trichloroethane	97	5.544	5.542	0.002	98	376673	10.0	9.24	
76 Cyclohexane	56	5.649	5.646	0.003	90	349837	10.0	9.50	
78 1,1-Dichloropropene	75	5.736	5.733	0.003	96	333821	10.0	9.57	
77 Carbon tetrachloride	117	5.771	5.785	-0.014	77	351748	10.0	9.67	a
80 Isobutyl alcohol	41	5.858	5.855	0.003	94	37407	250.0	237.5	
82 1,2-Dichloroethane	62	5.997	5.994	0.003	90	146119	10.0	9.17	
81 Benzene	78	6.014	6.011	0.003	96	599645	10.0	9.38	
84 n-Heptane	43	6.397	6.394	0.003	94	398515	10.0	9.38	
85 Trichloroethene	95	6.902	6.899	0.003	98	268643	10.0	9.59	
89 2-Pentanone	43	7.128	7.126	0.002	99	196688	40.0	37.3	
90 1,2-Dichloropropane	63	7.198	7.195	0.003	93	201596	10.0	9.01	
87 Methylcyclohexane	55	7.215	7.213	0.002	90	301214	10.0	9.44	
92 Dibromomethane	93	7.355	7.369	-0.014	96	113593	10.0	8.87	
94 Dichlorobromomethane	83	7.598	7.596	0.002	99	301490	10.0	9.54	
96 2-Chloroethyl vinyl ether	63	8.051	8.048	0.003	93	61657	10.0	8.29	
97 cis-1,3-Dichloropropene	75	8.260	8.257	0.003	95	273987	10.0	10.0	
98 4-Methyl-2-pentanone (MIBK	43	8.521	8.518	0.003	97	297631	40.0	36.4	
99 Toluene	91	8.799	8.797	0.002	99	662128	10.0	9.36	
100 trans-1,3-Dichloropropene	75	9.113	9.110	0.003	94	202725	10.0	9.90	
101 Ethyl methacrylate	69	9.322	9.319	0.003	91	138872	10.0	9.96	
102 1,1,2-Trichloroethane	97	9.409	9.406	0.003	90	115569	10.0	9.55	
104 1,3-Dichloropropane	76	9.670	9.667	0.003	92	188149	10.0	9.74	
103 Tetrachloroethene	164	9.687	9.684	0.003	98	245936	10.0	10.5	
105 2-Hexanone	43	9.844	9.841	0.003	98	196180	40.0	39.6	
107 Chlorodibromomethane	129	10.053	10.033	0.021	90	188711	10.0	10.3	
109 Ethylene Dibromide	107	10.227	10.224	0.003	99	146103	10.0	9.92	
111 Chlorobenzene	112	11.062	11.060	0.002	89	439157	10.0	10.0	
110 1-Chlorohexane	91	11.062	11.060	0.002	85	326458	10.0	9.86	
113 1,1,1,2-Tetrachloroethane	131	11.202	11.199	0.003	94	215085	10.0	10.2	
112 Ethylbenzene	106	11.271	11.268	0.003	99	218775	10.0	10.1	
114 m-Xylene & p-Xylene	106	11.480	11.460	0.020	99	294407	10.0	10.0	
115 o-Xylene	106	12.142	12.139	0.003	98	253415	10.0	10.1	
116 Styrene	104	12.159	12.156	0.003	94	414860	10.0	9.97	
117 Bromoform	173	12.455	12.452	0.003	96	91434	10.0	9.32	
118 Isopropylbenzene	105	12.803	12.800	0.003	96	839997	10.0	10.2	
119 Cyclohexanone	55	12.942	12.922	0.020	92	77260	400.0	413.3	
121 Bromobenzene	156	13.290	13.288	0.002	94	219051	10.0	10.2	
122 1,1,2,2-Tetrachloroethane	83	13.308	13.305	0.003	94	147598	10.0	9.81	
124 1,2,3-Trichloropropane	110	13.360	13.357	0.003	87	33641	10.0	10.0	
125 trans-1,4-Dichloro-2-buten	53	13.412	13.392	0.020	79	35290	10.0	10.2	
123 N-Propylbenzene	120	13.534	13.531	0.003	99	215702	10.0	10.2	
126 2-Chlorotoluene	126	13.656	13.653	0.003	83	178471	10.0	10.2	a
128 4-Chlorotoluene	126	13.847	13.845	0.002	98	205147	10.0	10.0	
127 1,3,5-Trimethylbenzene	105	13.865	13.862	0.003	95	633475	10.0	10.0	
129 tert-Butylbenzene	119	14.439	14.436	0.003	93	714382	10.0	9.91	
130 1,2,4-Trimethylbenzene	105	14.526	14.524	0.002	95	600553	10.0	9.67	
131 sec-Butylbenzene	134	14.840	14.837	0.003	94	205839	10.0	10.4	
132 1,3-Dichlorobenzene	146	14.996	14.976	0.020	97	370443	10.0	9.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
133 4-Isopropyltoluene	119	15.118	15.115	0.003	97	805254	10.0	9.89	
134 1,4-Dichlorobenzene	146	15.153	15.150	0.003	95	463633	10.0	10.3	
138 1,2-Dichlorobenzene	146	15.797	15.794	0.003	97	329280	10.0	10.1	
137 n-Butylbenzene	91	15.832	15.829	0.003	98	776848	10.0	10.0	
139 1,2-Dibromo-3-Chloropropan	157	16.928	16.908	0.020	89	22901	10.0	10.7	
141 1,2,4-Trichlorobenzene	180	17.868	17.848	0.020	95	219025	10.0	9.99	
142 Hexachlorobutadiene	225	18.060	18.057	0.003	97	228574	10.0	10.3	
143 Naphthalene	128	18.095	18.092	0.003	97	207977	10.0	9.63	
144 1,2,3-Trichlorobenzene	180	18.338	18.336	0.002	95	163794	10.0	9.62	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		20.0	19.1	
S 146 Xylenes, Total	106				0		20.0	20.1	
S 147 1,2-Dichloroethene, Total	96				0		20.0	19.1	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.9	
S 149 Trihalomethanes, Total	1				0		40.0	38.6	
S 150 Xylenes, Total (URS)	1				0		20.0	20.1	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

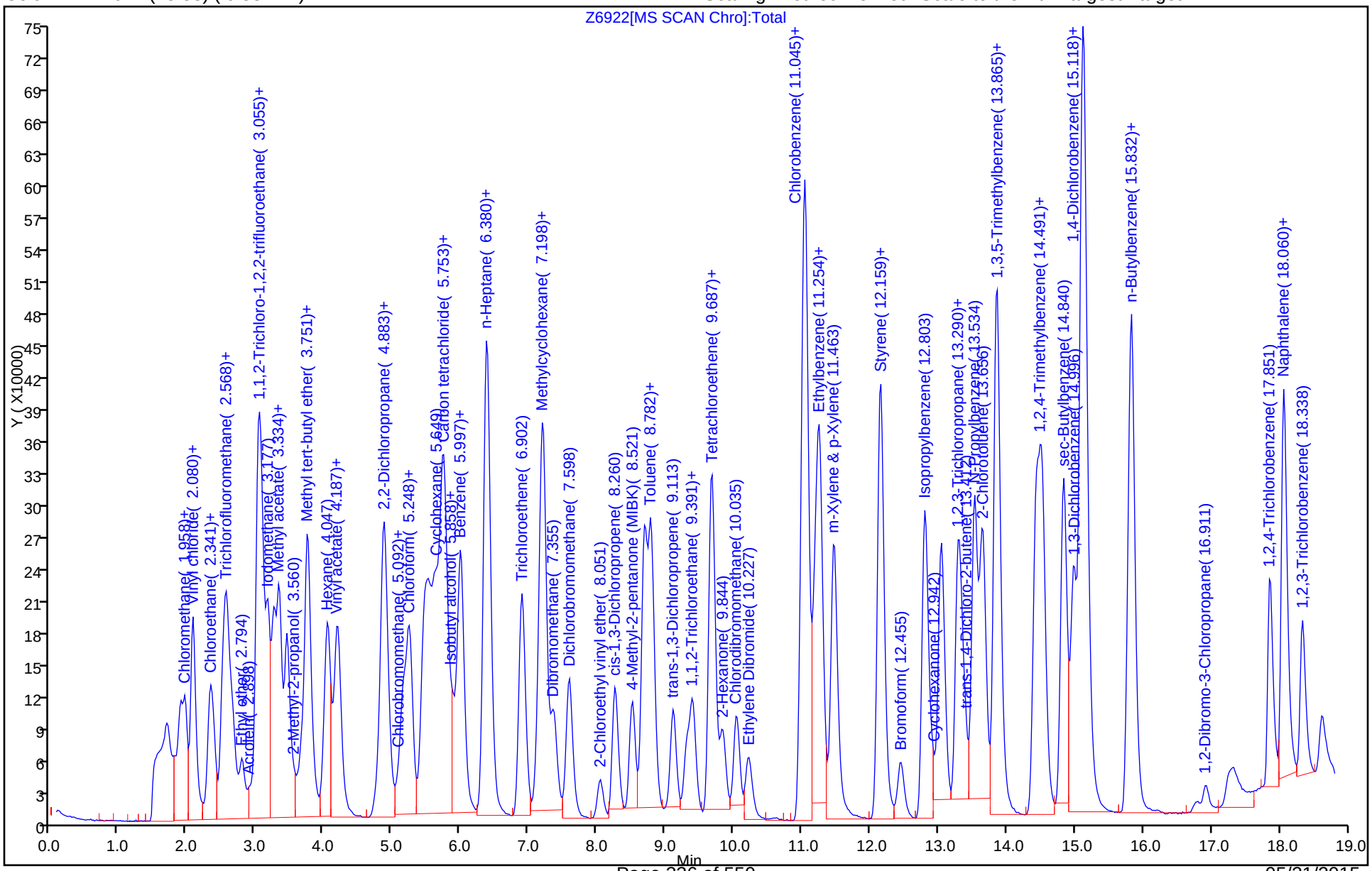
MV-Main B_00009	Amount Added:	5.00	Units: uL
MV-SS 2-Cleve_00020	Amount Added:	5.00	Units: uL
MV-Gas/Ket B_00019	Amount Added:	5.00	Units: uL
MV-567649-D_00001	Amount Added:	1.00	Units: uL

Report Date: 02-May-2015 07:06:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6922.D				
Injection Date:	30-Apr-2015 07:04:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ICV			Worklist Smp#:	4
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: ICV 280-275227/4 Calibration Date: 04/30/2015 07:04

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z6922.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	0.5208	0.5716		11.0	10.0	9.8	20.0
Chloromethane	Ave	0.3275	0.3350	0.1000	10.2	10.0	2.3	20.0
Vinyl chloride	Ave	0.3126	0.3146		10.1	10.0	0.6	20.0
Bromomethane	Ave	0.3202	0.3181		9.93	10.0	-0.7	20.0
Chloroethane	Ave	0.2194	0.2098		9.56	10.0	-4.4	20.0
Dichlorofluoromethane	Ave	0.7941	0.7782		9.80	10.0	-2.0	20.0
Trichlorofluoromethane	Ave	0.7348	0.7095		9.66	10.0	-3.4	20.0
Ethyl ether	Lin2		0.1319		9.28	10.0	-7.2	20.0
Acrolein	Ave	0.0076	0.0072		93.9	100	-6.1	20.0
1,1-Dichloroethene	Ave	0.3274	0.3079		9.40	10.0	-6.0	20.0
Acetone	Ave	0.0188	0.0164		34.9	40.0	-12.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5098	0.4765		9.35	10.0	-6.5	20.0
Iodomethane	Ave	0.8339	0.8022		9.62	10.0	-3.8	20.0
Carbon disulfide	Ave	1.210	1.101		9.10	10.0	-9.0	20.0
3-Chloro-1-propene	Ave	0.5668	0.4781		8.43	10.0	-15.7	20.0
Methyl acetate	Ave	0.0745	0.0656		44.0	50.0	-11.9	20.0
Methylene Chloride	Lin1		0.2727		9.81	10.0	-1.9	20.0
tert-Butyl alcohol	Lin2		1.056		101	100	1.1	20.0
Acrylonitrile	Ave	0.0244	0.0211		86.5	100	-13.5	20.0
trans-1,2-Dichloroethene	Ave	0.3497	0.3384		9.68	10.0	-3.2	20.0
Methyl tert-butyl ether	Ave	0.4977	0.4425		8.89	10.0	-11.1	20.0
Hexane	Ave	2.198	2.256		10.3	10.0	2.6	20.0
1,1-Dichloroethane	Ave	0.6555	0.5997	0.1000	9.15	10.0	-8.5	20.0
Vinyl acetate	Ave	0.3532	0.2968		16.8	20.0	-16.0	20.0
2-Butanone (MEK)	Ave	0.0410	0.0372		36.3	40.0	-9.2	20.0
cis-1,2-Dichloroethene	Ave	0.3368	0.3185		9.46	10.0	-5.4	20.0
2,2-Dichloropropane	Lin2		0.5798		9.29	10.0	-7.1	20.0
sec-Butyl Alcohol	Ave	0.8366	0.8142		292	300	-2.7	20.0
Bromochloromethane	Ave	0.1617	0.1487		9.20	10.0	-8.0	20.0
Chloroform	Ave	0.6444	0.6055		9.40	10.0	-6.0	20.0
Tetrahydrofuran	Ave	0.0244	0.0222		18.2	20.0	-9.1	20.0
1,1,1-Trichloroethane	Ave	0.6363	0.5880		9.24	10.0	-7.6	20.0
Cyclohexane	Ave	0.5749	0.5461		9.50	10.0	-5.0	20.0
1,1-Dichloropropene	Ave	0.5445	0.5211		9.57	10.0	-4.3	20.0
Carbon tetrachloride	Ave	0.5677	0.5491		9.67	10.0	-3.3	20.0
Isobutyl alcohol	Ave	0.2978	0.2829		237	250	-5.0	20.0
1,2-Dichloroethane	Ave	0.2487	0.2281		9.17	10.0	-8.3	20.0
Benzene	Ave	0.998	0.9360		9.38	10.0	-6.2	20.0
Trichloroethene	Ave	0.4375	0.4193		9.59	10.0	-4.1	20.0
2-Pentanone	Ave	0.0823	0.0768		37.3	40.0	-6.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: ICV 280-275227/4 Calibration Date: 04/30/2015 07:04

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z6922.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	0.3492	0.3147		9.01	10.0	-9.9	20.0
Methylcyclohexane	Ave	0.4983	0.4702		9.44	10.0	-5.6	20.0
Dibromomethane	Ave	0.1999	0.1773		8.87	10.0	-11.3	20.0
Bromodichloromethane	Ave	0.4932	0.4706		9.54	10.0	-4.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1161	0.0962		8.29	10.0	-17.1	20.0
cis-1,3-Dichloropropene	Ave	1.984	1.986		10.0	10.0	0.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1278	0.1161		36.4	40.0	-9.1	20.0
Toluene	Ave	1.104	1.034		9.36	10.0	-6.4	20.0
trans-1,3-Dichloropropene	Ave	0.3197	0.3164		9.90	10.0	-1.0	20.0
Ethyl methacrylate	Ave	1.011	1.007		9.96	10.0	-0.4	20.0
1,1,2-Trichloroethane	Lin2		0.1804		9.55	10.0	-4.5	20.0
1,3-Dichloropropane	Ave	1.400	1.364		9.74	10.0	-2.6	20.0
Tetrachloroethene	Ave	1.702	1.783		10.5	10.0	4.8	20.0
2-Hexanone	Ave	0.3594	0.3556		39.6	40.0	-1.1	20.0
Chlorodibromomethane	Ave	1.328	1.368		10.3	10.0	3.0	20.0
1,2-Dibromoethane	Ave	1.068	1.059		9.92	10.0	-0.8	20.0
1-Chlorohexane	Ave	2.400	2.367		9.86	10.0	-1.4	20.0
Chlorobenzene	Ave	3.168	3.184	0.3000	10.0	10.0	0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	1.527	1.559		10.2	10.0	2.1	20.0
Ethylbenzene	Ave	1.568	1.586		10.1	10.0	1.2	20.0
m-Xylene & p-Xylene	Ave	2.129	2.134		10.0	10.0	0.2	20.0
o-Xylene	Ave	1.817	1.837		10.1	10.0	1.1	20.0
Styrene	Ave	3.016	3.008		9.97	10.0	-0.3	20.0
Bromoform	Lin1		0.6629	0.1000	9.32	10.0	-6.8	20.0
Isopropylbenzene	Ave	3.220	3.287		10.2	10.0	2.1	20.0
Cyclohexanone	Ave	0.0136	0.0140		413	400	3.3	20.0
Bromobenzene	Ave	0.8391	0.8571		10.2	10.0	2.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5889	0.5775	0.3000	9.81	10.0	-1.9	20.0
1,2,3-Trichloropropane	Ave	0.1316	0.1316		10.0	10.0	0.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1353	0.1381		10.2	10.0	2.0	20.0
N-Propylbenzene	Ave	0.8267	0.8440		10.2	10.0	2.1	20.0
2-Chlorotoluene	Ave	0.6840	0.6983		10.2	10.0	2.1	20.0
4-Chlorotoluene	Ave	0.7988	0.8027		10.0	10.0	0.5	20.0
1,3,5-Trimethylbenzene	Ave	2.478	2.479		10.0	10.0	0.0	20.0
tert-Butylbenzene	Ave	2.819	2.795		9.91	10.0	-0.9	20.0
1,2,4-Trimethylbenzene	Ave	2.431	2.350		9.67	10.0	-3.3	20.0
sec-Butylbenzene	Ave	0.7779	0.8054		10.4	10.0	3.5	20.0
1,3-Dichlorobenzene	Ave	1.466	1.449		9.89	10.0	-1.1	20.0
p-Isopropyltoluene	Ave	3.185	3.151		9.89	10.0	-1.1	20.0
1,4-Dichlorobenzene	Ave	1.756	1.814		10.3	10.0	3.3	20.0
1,2-Dichlorobenzene	Ave	1.272	1.288		10.1	10.0	1.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: ICV 280-275227/4 Calibration Date: 04/30/2015 07:04

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z6922.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	3.039	3.040		10.0	10.0	0.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0837	0.0896		10.7	10.0	7.1	20.0
1,2,4-Trichlorobenzene	Ave	0.8579	0.8570		9.99	10.0	-0.1	20.0
Hexachlorobutadiene	Ave	0.8657	0.8944		10.3	10.0	3.3	20.0
Naphthalene	Ave	0.8451	0.8138		9.63	10.0	-3.7	20.0
1,2,3-Trichlorobenzene	Ave	0.6665	0.6409		9.62	10.0	-3.8	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6922.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Apr-2015 07:04:30 ALS Bottle#: 3 Worklist Smp#: 4
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\20150430-34486.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-May-2015 07:06:51 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: XAWRK007

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	3.487	0.003	89	132244	250.0	250.0	
* 2 Fluorobenzene	96	6.380	6.377	0.003	98	800813	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.010	11.007	0.003	89	172427	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.118	15.115	0.003	94	319469	12.5	12.5	
27 Dichlorodifluoromethane	85	1.906	1.921	-0.015	98	366212	10.0	11.0	
30 Chloromethane	50	1.976	1.973	0.003	99	214588	10.0	10.2	
31 Butadiene	54	2.080	2.078	0.002	88	147581	NC	NC	
32 Vinyl chloride	62	2.098	2.112	-0.014	98	201555	10.0	10.1	
35 Bromomethane	94	2.324	2.339	-0.015	90	203772	10.0	9.93	
36 Chloroethane	64	2.376	2.391	-0.015	99	134409	10.0	9.56	
37 Dichlorofluoromethane	67	2.533	2.548	-0.015	99	498558	10.0	9.80	
38 Trichlorofluoromethane	101	2.603	2.600	0.002	99	454517	10.0	9.66	
40 Ethyl ether	59	2.794	2.809	-0.015	95	84511	10.0	9.28	
44 Acrolein	56	2.898	2.913	-0.015	100	45791	100.0	93.9	
45 1,1-Dichloroethene	96	3.038	3.035	0.003	97	197233	10.0	9.40	
48 Acetone	43	3.038	3.052	-0.014	87	42106	40.0	34.9	
46 1,1,2-Trichloro-1,2,2-trif	151	3.072	3.087	-0.015	98	305255	10.0	9.35	
49 Iodomethane	142	3.177	3.192	-0.015	98	513957	10.0	9.62	
50 Carbon disulfide	76	3.264	3.279	-0.015	99	705222	10.0	9.10	
52 3-Chloro-1-propene	41	3.351	3.348	0.003	84	306276	10.0	8.43	
51 Methyl acetate	43	3.351	3.348	0.003	70	210199	50.0	44.0	
54 Methylene Chloride	84	3.455	3.470	-0.015	95	174684	10.0	9.81	
55 2-Methyl-2-propanol	59	3.560	3.575	-0.015	92	55868	100.0	101.1	M
58 Acrylonitrile	53	3.682	3.679	0.003	98	135182	100.0	86.5	
57 trans-1,2-Dichloroethene	96	3.751	3.766	-0.015	98	216800	10.0	9.68	
56 Methyl tert-butyl ether	73	3.769	3.783	-0.014	97	283458	10.0	8.89	
59 Hexane	57	4.047	4.062	-0.015	95	311197	10.0	10.3	
62 1,1-Dichloroethane	63	4.187	4.201	-0.014	96	384214	10.0	9.15	
61 Vinyl acetate	43	4.221	4.219	0.002	96	380314	20.0	16.8	
67 2-Butanone (MEK)	43	4.865	4.863	0.002	46	95394	40.0	36.3	
65 cis-1,2-Dichloroethene	96	4.865	4.863	0.002	85	204025	10.0	9.46	
66 2,2-Dichloropropane	77	4.900	4.897	0.003	89	371421	10.0	9.29	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
70 sec-Butyl Alcohol	45	5.092	5.106	-0.014	96	129203	300.0	292.0	
71 Chlorobromomethane	128	5.161	5.159	0.002	96	95284	10.0	9.20	
74 Chloroform	83	5.248	5.263	-0.015	96	387901	10.0	9.40	
72 Tetrahydrofuran	42	5.248	5.263	-0.015	36	28466	20.0	18.2	
75 1,1,1-Trichloroethane	97	5.544	5.542	0.002	98	376673	10.0	9.24	
76 Cyclohexane	56	5.649	5.646	0.003	90	349837	10.0	9.50	
78 1,1-Dichloropropene	75	5.736	5.733	0.003	96	333821	10.0	9.57	
77 Carbon tetrachloride	117	5.771	5.785	-0.014	77	351748	10.0	9.67	a
80 Isobutyl alcohol	41	5.858	5.855	0.003	94	37407	250.0	237.5	
82 1,2-Dichloroethane	62	5.997	5.994	0.003	90	146119	10.0	9.17	
81 Benzene	78	6.014	6.011	0.003	96	599645	10.0	9.38	
84 n-Heptane	43	6.397	6.394	0.003	94	398515	10.0	9.38	
85 Trichloroethene	95	6.902	6.899	0.003	98	268643	10.0	9.59	
89 2-Pentanone	43	7.128	7.126	0.002	99	196688	40.0	37.3	
90 1,2-Dichloropropane	63	7.198	7.195	0.003	93	201596	10.0	9.01	
87 Methylcyclohexane	55	7.215	7.213	0.002	90	301214	10.0	9.44	
92 Dibromomethane	93	7.355	7.369	-0.014	96	113593	10.0	8.87	
94 Dichlorobromomethane	83	7.598	7.596	0.002	99	301490	10.0	9.54	
96 2-Chloroethyl vinyl ether	63	8.051	8.048	0.003	93	61657	10.0	8.29	
97 cis-1,3-Dichloropropene	75	8.260	8.257	0.003	95	273987	10.0	10.0	
98 4-Methyl-2-pentanone (MIBK	43	8.521	8.518	0.003	97	297631	40.0	36.4	
99 Toluene	91	8.799	8.797	0.002	99	662128	10.0	9.36	
100 trans-1,3-Dichloropropene	75	9.113	9.110	0.003	94	202725	10.0	9.90	
101 Ethyl methacrylate	69	9.322	9.319	0.003	91	138872	10.0	9.96	
102 1,1,2-Trichloroethane	97	9.409	9.406	0.003	90	115569	10.0	9.55	
104 1,3-Dichloropropane	76	9.670	9.667	0.003	92	188149	10.0	9.74	
103 Tetrachloroethene	164	9.687	9.684	0.003	98	245936	10.0	10.5	
105 2-Hexanone	43	9.844	9.841	0.003	98	196180	40.0	39.6	
107 Chlorodibromomethane	129	10.053	10.033	0.021	90	188711	10.0	10.3	
109 Ethylene Dibromide	107	10.227	10.224	0.003	99	146103	10.0	9.92	
111 Chlorobenzene	112	11.062	11.060	0.002	89	439157	10.0	10.0	
110 1-Chlorohexane	91	11.062	11.060	0.002	85	326458	10.0	9.86	
113 1,1,1,2-Tetrachloroethane	131	11.202	11.199	0.003	94	215085	10.0	10.2	
112 Ethylbenzene	106	11.271	11.268	0.003	99	218775	10.0	10.1	
114 m-Xylene & p-Xylene	106	11.480	11.460	0.020	99	294407	10.0	10.0	
115 o-Xylene	106	12.142	12.139	0.003	98	253415	10.0	10.1	
116 Styrene	104	12.159	12.156	0.003	94	414860	10.0	9.97	
117 Bromoform	173	12.455	12.452	0.003	96	91434	10.0	9.32	
118 Isopropylbenzene	105	12.803	12.800	0.003	96	839997	10.0	10.2	
119 Cyclohexanone	55	12.942	12.922	0.020	92	77260	400.0	413.3	
121 Bromobenzene	156	13.290	13.288	0.002	94	219051	10.0	10.2	
122 1,1,2,2-Tetrachloroethane	83	13.308	13.305	0.003	94	147598	10.0	9.81	
124 1,2,3-Trichloropropane	110	13.360	13.357	0.003	87	33641	10.0	10.0	
125 trans-1,4-Dichloro-2-buten	53	13.412	13.392	0.020	79	35290	10.0	10.2	
123 N-Propylbenzene	120	13.534	13.531	0.003	99	215702	10.0	10.2	
126 2-Chlorotoluene	126	13.656	13.653	0.003	83	178471	10.0	10.2	a
128 4-Chlorotoluene	126	13.847	13.845	0.002	98	205147	10.0	10.0	
127 1,3,5-Trimethylbenzene	105	13.865	13.862	0.003	95	633475	10.0	10.0	
129 tert-Butylbenzene	119	14.439	14.436	0.003	93	714382	10.0	9.91	
130 1,2,4-Trimethylbenzene	105	14.526	14.524	0.002	95	600553	10.0	9.67	
131 sec-Butylbenzene	134	14.840	14.837	0.003	94	205839	10.0	10.4	
132 1,3-Dichlorobenzene	146	14.996	14.976	0.020	97	370443	10.0	9.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
133 4-Isopropyltoluene	119	15.118	15.115	0.003	97	805254	10.0	9.89	
134 1,4-Dichlorobenzene	146	15.153	15.150	0.003	95	463633	10.0	10.3	
138 1,2-Dichlorobenzene	146	15.797	15.794	0.003	97	329280	10.0	10.1	
137 n-Butylbenzene	91	15.832	15.829	0.003	98	776848	10.0	10.0	
139 1,2-Dibromo-3-Chloropropan	157	16.928	16.908	0.020	89	22901	10.0	10.7	
141 1,2,4-Trichlorobenzene	180	17.868	17.848	0.020	95	219025	10.0	9.99	
142 Hexachlorobutadiene	225	18.060	18.057	0.003	97	228574	10.0	10.3	
143 Naphthalene	128	18.095	18.092	0.003	97	207977	10.0	9.63	
144 1,2,3-Trichlorobenzene	180	18.338	18.336	0.002	95	163794	10.0	9.62	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		20.0	19.1	
S 146 Xylenes, Total	106				0		20.0	20.1	
S 147 1,2-Dichloroethene, Total	96				0		20.0	19.1	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.9	
S 149 Trihalomethanes, Total	1				0		40.0	38.6	
S 150 Xylenes, Total (URS)	1				0		20.0	20.1	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

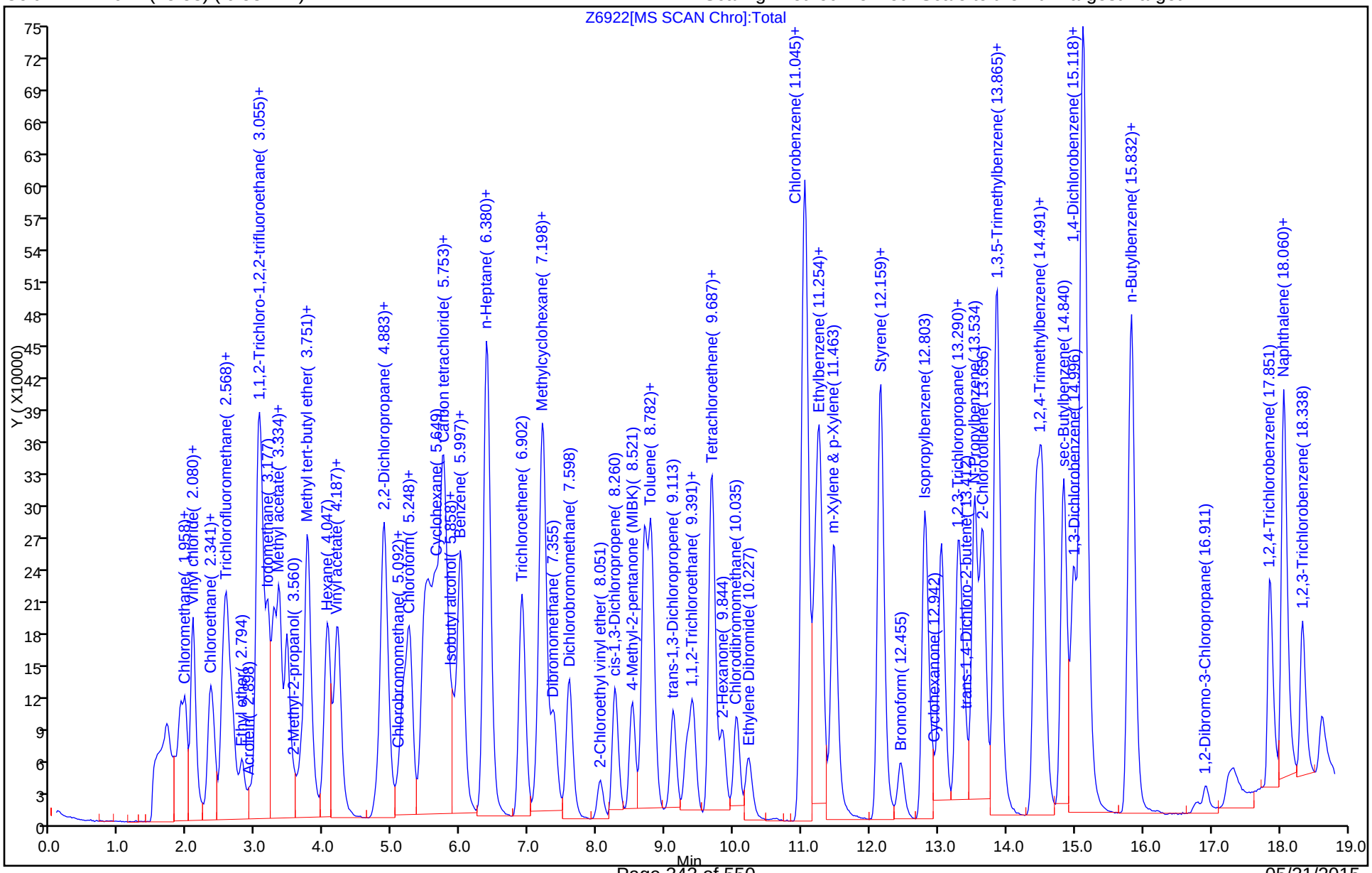
MV-Main B_00009	Amount Added:	5.00	Units: uL
MV-SS 2-Cleve_00020	Amount Added:	5.00	Units: uL
MV-Gas/Ket B_00019	Amount Added:	5.00	Units: uL
MV-567649-D_00001	Amount Added:	1.00	Units: uL

Report Date: 02-May-2015 07:06:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6922.D				
Injection Date:	30-Apr-2015 07:04:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	ICV			Worklist Smp#:	4
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

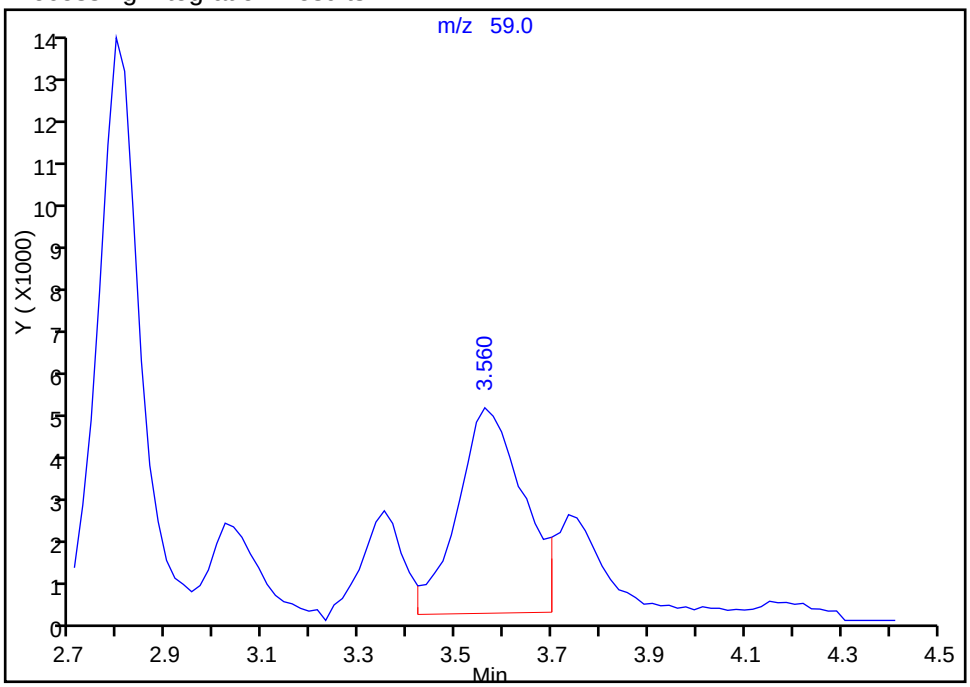
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6922.D				
Injection Date:	30-Apr-2015 07:04:30	Instrument ID:	VMS_Z		
Lims ID:	ICV				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	4
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

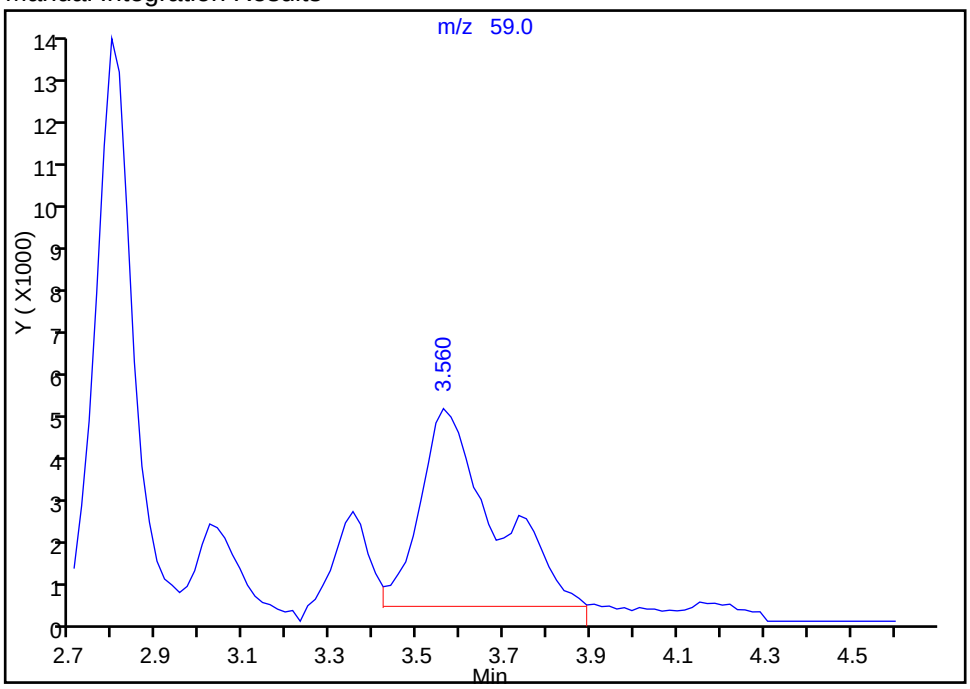
Processing Integration Results

RT: 3.56
Area: 47092
Amount: 82.591993
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 55868
Amount: 101.0949
Amount Units: ug/l



Reviewer: moanm, 30-Apr-2015 07:41:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

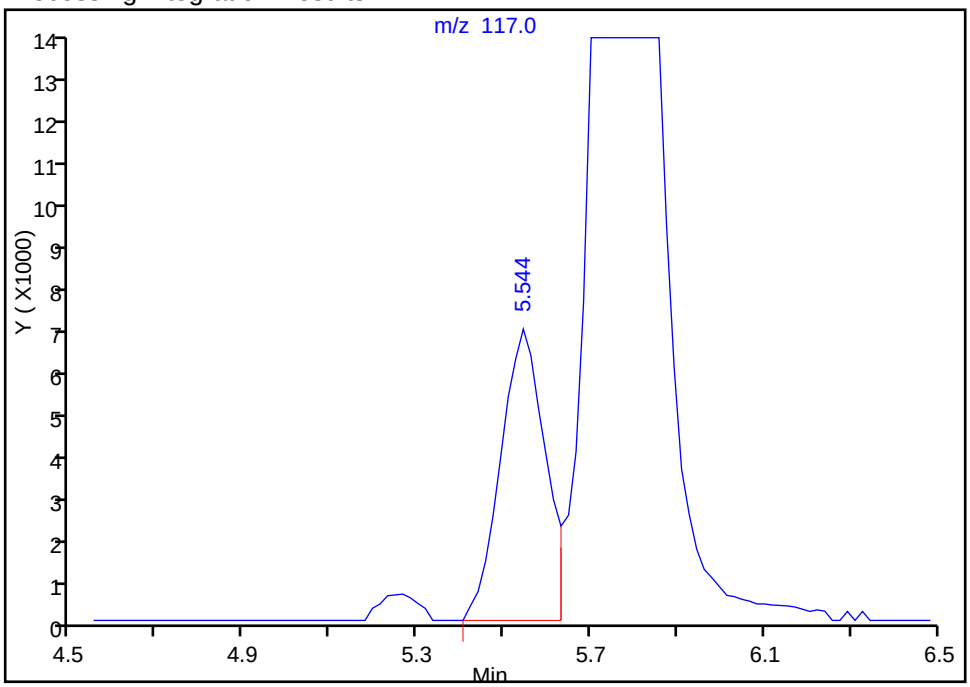
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6922.D				
Injection Date:	30-Apr-2015 07:04:30	Instrument ID:	VMS_Z		
Lims ID:	ICV				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	4
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		

77 Carbon tetrachloride, CAS: 56-23-5

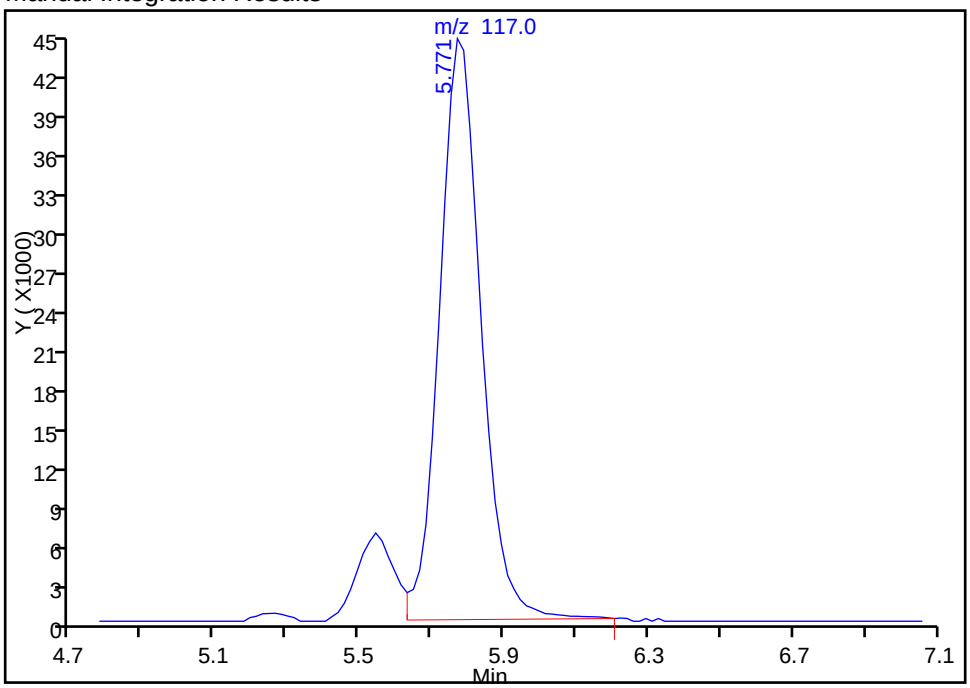
Processing Integration Results

RT: 5.54
Area: 47993
Amount: 1.319659
Amount Units: ug/l



Manual Integration Results

RT: 5.77
Area: 351748
Amount: 9.671984
Amount Units: ug/l



Reviewer: moanm, 02-May-2015 07:06:51
Audit Action: Assigned Compound ID
Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

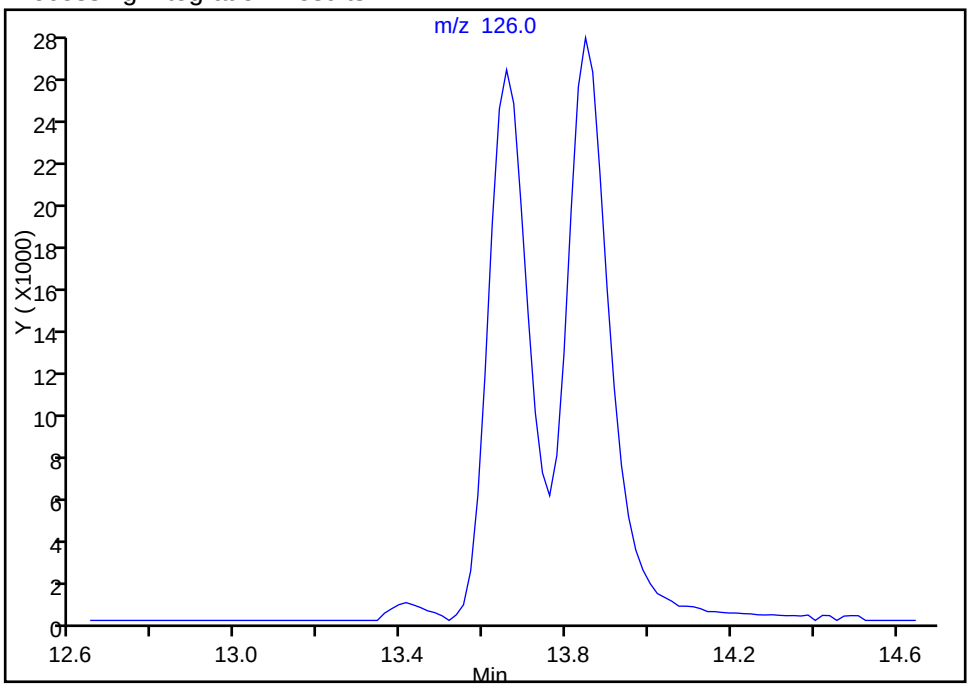
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6922.D				
Injection Date:	30-Apr-2015 07:04:30	Instrument ID:	VMS_Z		
Lims ID:	ICV				
Client ID:					
Operator ID:	moanm	ALS Bottle#:	3	Worklist Smp#:	4
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

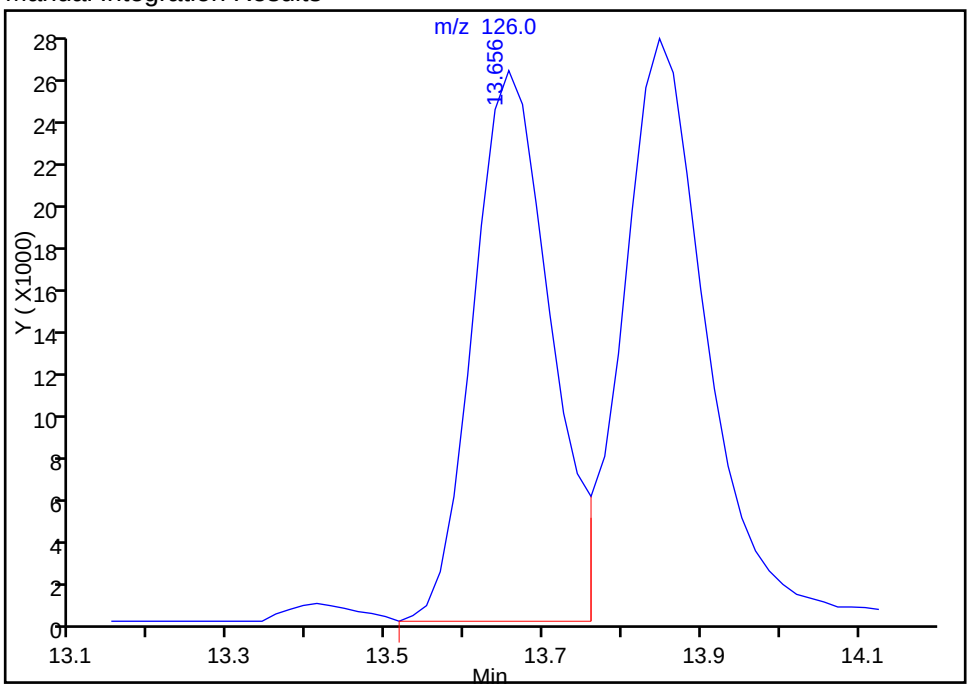
Not Detected
Expected RT: 13.65

Processing Integration Results



RT: 13.66
Area: 178471
Amount: 10.209142
Amount Units: ug/l

Manual Integration Results



Reviewer: moanm, 30-Apr-2015 07:41:36
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: ICV 280-275642/15 Calibration Date: 05/02/2015 09:50

Instrument ID: VMS_Z Calib Start Date: 05/02/2015 07:56

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/02/2015 09:27

Lab File ID: Z7044.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.5562	0.5288		9.51	10.0	-4.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2317	0.2211		9.54	10.0	-4.6	20.0
Toluene-d8 (Surr)	Ave	4.678	4.439		9.49	10.0	-5.1	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.376		10.0	10.0	0.2	20.0

FORM VII 8260B

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7044.D				
Lims ID:	icv				
Client ID:					
Sample Type:	ICV				
Inject. Date:	02-May-2015 09:50:30	ALS Bottle#:	11	Worklist Smp#:	15
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\20150502-34583.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-May-2015 10:26:33	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: moanm Date: 02-May-2015 10:40:02

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	3.488	3.490	-0.002	93	133867	250.0	250.0	
* 2 Fluorobenzene	96	6.377	6.379	-0.002	98	792688	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.008	11.010	-0.002	88	178206	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.098	15.100	-0.002	95	321158	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.455	5.457	-0.002	94	335326	10.0	9.51	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.890	5.892	-0.002	94	140227	10.0	9.54	
$ 10 Toluene-d8 (Surr)	98	8.693	8.695	-0.003	93	632783	10.0	9.49	
$ 11 4-Bromofluorobenzene (Surr	95	13.044	13.029	0.015	88	353440	10.0	10.0	

Reagents:

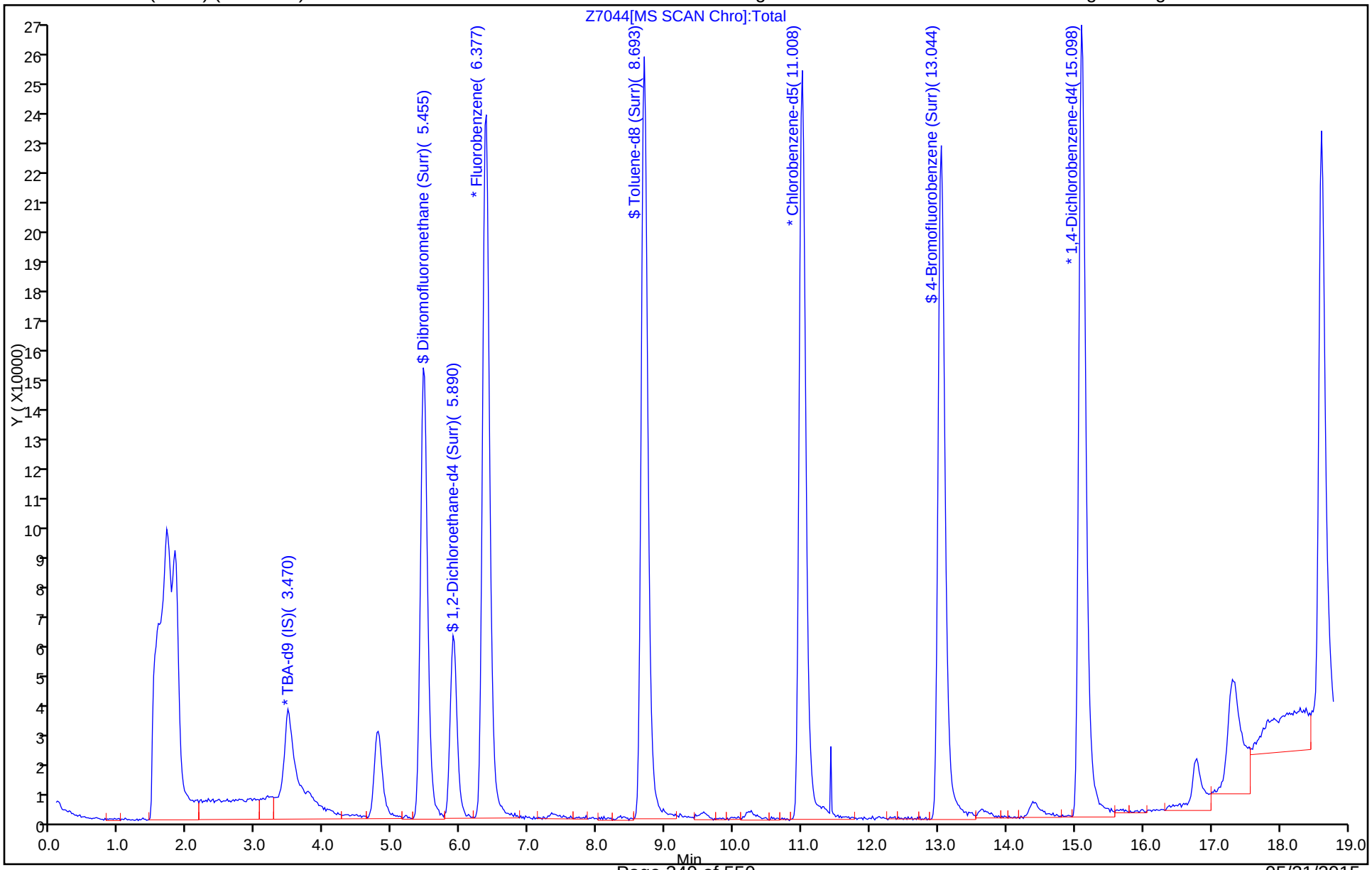
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00042	Amount Added:	0.80	Units: uL

Report Date: 02-May-2015 10:40:03 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7044.D				
Injection Date:	02-May-2015 09:50:30	Instrument ID:	VMS_Z	Operator ID:	moanm
Lims ID:	icv			Worklist Smp#:	15
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/2 Calibration Date: 05/05/2015 20:22

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: Z7159.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\20150505-34699.b\Z7159.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2015 20:22:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv m
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:45:04 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:31:00

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	88	132942	250.0	250.0	
* 2 Fluorobenzene	96	6.395	6.395	0.000	98	763335	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.041	11.041	0.000	89	168423	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.147	15.147	0.000	78	316417	12.5	12.5	
27 Dichlorodifluoromethane	85	1.905	1.905	0.000	98	326905	10.0	10.3	
30 Chloromethane	50	1.975	1.975	0.000	100	191927	10.0	9.60	M
31 Butadiene	54	2.079	2.079	0.000	87	136372	NC	NC	
32 Vinyl chloride	62	2.097	2.097	0.000	98	185080	10.0	9.69	
35 Bromomethane	94	2.340	2.340	0.000	91	188719	10.0	9.65	
36 Chloroethane	64	2.375	2.375	0.000	98	126498	10.0	9.44	
37 Dichlorofluoromethane	67	2.549	2.549	0.000	98	486893	10.0	10.0	
38 Trichlorofluoromethane	101	2.584	2.584	0.000	99	439876	10.0	9.80	
40 Ethyl ether	59	2.793	2.793	0.000	94	91746	10.0	10.6	
44 Acrolein	56	2.897	2.897	0.000	98	56475	100.0	121.5	
45 1,1-Dichloroethene	96	3.036	3.036	0.000	98	209228	10.0	10.5	
48 Acetone	43	3.036	3.036	0.000	95	36860	40.0	32.1	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.088	0.000	98	324157	10.0	10.4	
49 Iodomethane	142	3.193	3.193	0.000	98	530174	10.0	10.4	
50 Carbon disulfide	76	3.262	3.262	0.000	99	753930	10.0	10.2	
52 3-Chloro-1-propene	41	3.349	3.349	0.000	85	344155	10.0	9.94	
51 Methyl acetate	43	3.349	3.349	0.000	64	232060	50.0	51.0	
54 Methylene Chloride	84	3.454	3.454	0.000	96	191489	10.0	11.4	
55 2-Methyl-2-propanol	59	3.576	3.576	0.000	91	47527	100.0	83.0	M
58 Acrylonitrile	53	3.680	3.680	0.000	99	149465	100.0	100.4	
57 trans-1,2-Dichloroethene	96	3.767	3.767	0.000	98	223830	10.0	10.5	
56 Methyl tert-butyl ether	73	3.784	3.784	0.000	95	331431	10.0	10.9	
59 Hexane	57	4.063	4.063	0.000	95	330485	10.0	11.2	
62 1,1-Dichloroethane	63	4.202	4.202	0.000	96	407616	10.0	10.2	
61 Vinyl acetate	43	4.219	4.219	0.000	97	457164	20.0	21.2	
67 2-Butanone (MEK)	43	4.863	4.863	0.000	44	92285	40.0	36.9	M
65 cis-1,2-Dichloroethene	96	4.881	4.881	0.000	85	211482	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
66 2,2-Dichloropropane	77	4.915	4.915	0.000	88	409627	10.0	10.9	
70 sec-Butyl Alcohol	45	5.107	5.107	0.000	96	135807	300.0	305.3	
71 Chlorobromomethane	128	5.176	5.176	0.000	97	102149	10.0	10.3	
74 Chloroform	83	5.264	5.264	0.000	95	413757	10.0	10.5	
72 Tetrahydrofuran	42	5.264	5.264	0.000	52	30655	20.0	20.5	
75 1,1,1-Trichloroethane	97	5.559	5.559	0.000	97	394464	10.0	10.2	
76 Cyclohexane	56	5.664	5.664	0.000	90	368234	10.0	10.5	
78 1,1-Dichloropropene	75	5.751	5.751	0.000	95	330655	10.0	9.94	
77 Carbon tetrachloride	117	5.803	5.803	0.000	96	374817	10.0	10.8	
80 Isobutyl alcohol	41	5.873	5.873	0.000	9	43864	250.0	277.0	a
82 1,2-Dichloroethane	62	6.012	6.012	0.000	97	164678	10.0	10.8	
81 Benzene	78	6.029	6.029	0.000	97	634623	10.0	10.4	
84 n-Heptane	43	6.412	6.412	0.000	94	426640	10.0	10.5	
85 Trichloroethene	95	6.917	6.917	0.000	98	270623	10.0	10.1	
89 2-Pentanone	43	7.160	7.160	0.000	99	244947	40.0	48.8	
90 1,2-Dichloropropane	63	7.212	7.212	0.000	93	215677	10.0	10.1	
87 Methylcyclohexane	55	7.230	7.230	0.000	92	318638	10.0	10.5	
92 Dibromomethane	93	7.386	7.386	0.000	97	124897	10.0	10.2	
94 Dichlorobromomethane	83	7.613	7.613	0.000	99	347784	10.0	11.5	
96 2-Chloroethyl vinyl ether	63	8.065	8.065	0.000	92	69470	10.0	9.80	
97 cis-1,3-Dichloropropene	75	8.291	8.291	0.000	95	292416	10.0	10.9	
98 4-Methyl-2-pentanone (MIBK	43	8.552	8.552	0.000	97	321869	40.0	41.2	
99 Toluene	91	8.831	8.831	0.000	99	692579	10.0	10.3	
100 trans-1,3-Dichloropropene	75	9.144	9.144	0.000	94	200627	10.0	10.3	
101 Ethyl methacrylate	69	9.353	9.353	0.000	91	148188	10.0	10.9	
102 1,1,2-Trichloroethane	97	9.440	9.440	0.000	90	120399	10.0	10.5	
104 1,3-Dichloropropane	76	9.701	9.701	0.000	91	201835	10.0	10.7	
103 Tetrachloroethene	164	9.718	9.718	0.000	98	252269	10.0	11.0	
105 2-Hexanone	43	9.875	9.875	0.000	97	192748	40.0	39.8	
107 Chlorodibromomethane	129	10.083	10.083	0.000	90	203189	10.0	11.4	
109 Ethylene Dibromide	107	10.257	10.257	0.000	98	159190	10.0	11.1	
110 1-Chlorohexane	91	11.093	11.093	0.000	91	335341	10.0	10.4	
111 Chlorobenzene	112	11.093	11.093	0.000	92	461866	10.0	10.8	
113 1,1,1,2-Tetrachloroethane	131	11.232	11.232	0.000	94	229767	10.0	11.2	
112 Ethylbenzene	106	11.302	11.302	0.000	99	226094	10.0	10.7	
114 m-Xylene & p-Xylene	106	11.510	11.510	0.000	99	310532	10.0	10.8	
115 o-Xylene	106	12.172	12.172	0.000	97	267073	10.0	10.9	
116 Styrene	104	12.206	12.206	0.000	93	444285	10.0	10.9	
117 Bromoform	173	12.485	12.485	0.000	96	112879	10.0	11.6	
118 Isopropylbenzene	105	12.833	12.833	0.000	96	852721	10.0	10.5	
119 Cyclohexanone	55	12.972	12.972	0.000	90	73714	400.0	403.7	
121 Bromobenzene	156	13.320	13.320	0.000	95	233717	10.0	11.0	
122 1,1,2,2-Tetrachloroethane	83	13.337	13.337	0.000	94	164087	10.0	11.0	
124 1,2,3-Trichloropropane	110	13.390	13.390	0.000	83	34808	10.0	10.4	
125 trans-1,4-Dichloro-2-buten	53	13.442	13.442	0.000	84	35153	10.0	10.3	
123 N-Propylbenzene	120	13.564	13.564	0.000	99	218640	10.0	10.4	
126 2-Chlorotoluene	126	13.685	13.685	0.000	95	182131	10.0	10.5	
128 4-Chlorotoluene	126	13.877	13.877	0.000	99	212450	10.0	10.5	
127 1,3,5-Trimethylbenzene	105	13.894	13.894	0.000	95	643117	10.0	10.3	
129 tert-Butylbenzene	119	14.468	14.468	0.000	93	730100	10.0	10.2	
130 1,2,4-Trimethylbenzene	105	14.555	14.555	0.000	96	625716	10.0	10.2	
131 sec-Butylbenzene	134	14.869	14.869	0.000	94	205385	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
132 1,3-Dichlorobenzene	146	15.025	15.025	0.000	98	411105	10.0	11.1	
133 4-Isopropyltoluene	119	15.147	15.147	0.000	95	831231	10.0	10.3	
134 1,4-Dichlorobenzene	146	15.182	15.182	0.000	93	473492	10.0	10.7	
138 1,2-Dichlorobenzene	146	15.826	15.826	0.000	97	342397	10.0	10.6	
137 n-Butylbenzene	91	15.861	15.861	0.000	97	793306	10.0	10.3	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.939	0.000	89	24559	10.0	11.6	
141 1,2,4-Trichlorobenzene	180	17.879	17.879	0.000	95	224667	10.0	10.3	
142 Hexachlorobutadiene	225	18.088	18.088	0.000	96	230462	10.0	10.5	
143 Naphthalene	128	18.105	18.105	0.000	97	210991	10.0	9.86	
144 1,2,3-Trichlorobenzene	180	18.366	18.366	0.000	96	169300	10.0	10.0	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.0	
S 150 Xylenes, Total (URS)	1				0		20.0	21.7	
S 148 1,3-Dichloropropene, Total	1				0		20.0	21.2	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.8	
S 146 Xylenes, Total	106				0		20.0	21.7	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.8	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

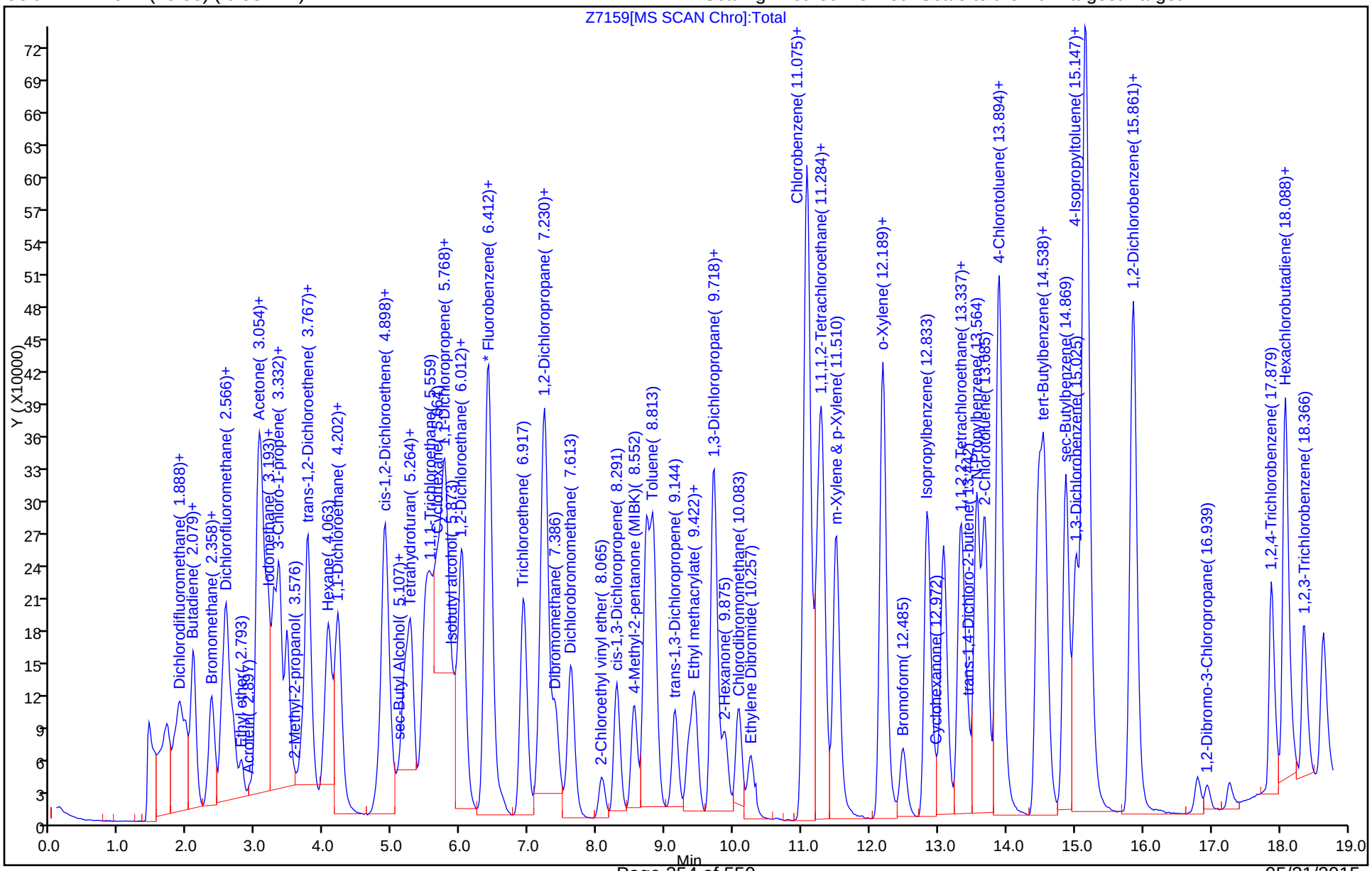
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL

Report Date: 06-May-2015 15:45:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7159.D				
Injection Date:	05-May-2015 20:22:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
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.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/2 Calibration Date: 05/05/2015 20:22

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7159.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	0.5208	0.5353		10.3	10.0	2.8	20.0
Chloromethane	Ave	0.3275	0.3143	0.1000	9.60	10.0	-4.0	20.0
Vinyl chloride	Ave	0.3126	0.3031		9.69	10.0	-3.1	20.0
Bromomethane	Ave	0.3202	0.3090		9.65	10.0	-3.5	20.0
Chloroethane	Ave	0.2194	0.2072		9.44	10.0	-5.6	20.0
Dichlorofluoromethane	Ave	0.7941	0.7973		10.0	10.0	0.4	20.0
Trichlorofluoromethane	Ave	0.7348	0.7203		9.80	10.0	-2.0	20.0
Ethyl ether	Lin2		0.1502		10.6	10.0	6.0	20.0
Acrolein	Ave	0.0076	0.0093		122	100	21.5*	20.0
1,1-Dichloroethene	Ave	0.3274	0.3426		10.5	10.0	4.7	20.0
Acetone	Ave	0.0188	0.0151		32.1	40.0	-19.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5098	0.5308		10.4	10.0	4.1	20.0
Iodomethane	Ave	0.8339	0.8682		10.4	10.0	4.1	20.0
Carbon disulfide	Ave	1.210	1.235		10.2	10.0	2.1	20.0
3-Chloro-1-propene	Ave	0.5668	0.5636		9.94	10.0	-0.6	20.0
Methyl acetate	Ave	0.0745	0.0760		51.0	50.0	2.0	20.0
Methylene Chloride	Lin1		0.3136		11.4	10.0	14.1	20.0
tert-Butyl alcohol	Lin2		0.8938		83.0	100	-17.0	20.0
Acrylonitrile	Ave	0.0244	0.0245		100	100	0.4	20.0
trans-1,2-Dichloroethene	Ave	0.3497	0.3665		10.5	10.0	4.8	20.0
Methyl tert-butyl ether	Ave	0.4977	0.5427		10.9	10.0	9.0	20.0
Hexane	Ave	2.198	2.453		11.2	10.0	11.6	20.0
1,1-Dichloroethane	Ave	0.6555	0.6675	0.1000	10.2	10.0	1.8	20.0
Vinyl acetate	Ave	0.3532	0.3743		21.2	20.0	6.0	20.0
2-Butanone (MEK)	Ave	0.0410	0.0378		36.9	40.0	-7.8	20.0
cis-1,2-Dichloroethene	Ave	0.3368	0.3463		10.3	10.0	2.8	20.0
2,2-Dichloropropane	Lin2		0.6708		10.9	10.0	9.1	20.0
sec-Butyl Alcohol	Ave	0.8366	0.8513		305	300	1.8	20.0
Bromochloromethane	Ave	0.1617	0.1673		10.3	10.0	3.5	20.0
Chloroform	Ave	0.6444	0.6776		10.5	10.0	5.1	20.0
Tetrahydrofuran	Ave	0.0244	0.0251		20.5	20.0	2.7	20.0
1,1,1-Trichloroethane	Ave	0.6363	0.6460		10.2	10.0	1.5	20.0
Cyclohexane	Ave	0.5749	0.6030		10.5	10.0	4.9	20.0
1,1-Dichloropropene	Ave	0.5445	0.5415		9.94	10.0	-0.6	20.0
Carbon tetrachloride	Ave	0.5677	0.6138		10.8	10.0	8.1	20.0
Isobutyl alcohol	Ave	0.2978	0.3300		277	250	10.8	20.0
1,2-Dichloroethane	Ave	0.2487	0.2697		10.8	10.0	8.4	20.0
Benzene	Ave	0.998	1.039		10.4	10.0	4.2	20.0
Trichloroethene	Ave	0.4375	0.4432		10.1	10.0	1.3	20.0
2-Pentanone	Ave	0.0823	0.1003		48.8	40.0	21.9*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/2 Calibration Date: 05/05/2015 20:22

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7159.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	0.3492	0.3532		10.1	10.0	1.1	20.0
Methylcyclohexane	Ave	0.4983	0.5218		10.5	10.0	4.7	20.0
Dibromomethane	Ave	0.1999	0.2045		10.2	10.0	2.3	20.0
Bromodichloromethane	Ave	0.4932	0.5695		11.5	10.0	15.5	20.0
2-Chloroethyl vinyl ether	Ave	0.1161	0.1138		9.80	10.0	-2.0	20.0
cis-1,3-Dichloropropene	Ave	1.984	2.170		10.9	10.0	9.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1278	0.1318		41.2	40.0	3.1	20.0
Toluene	Ave	1.104	1.134		10.3	10.0	2.7	20.0
trans-1,3-Dichloropropene	Ave	0.3197	0.3285		10.3	10.0	2.7	20.0
Ethyl methacrylate	Ave	1.011	1.100		10.9	10.0	8.8	20.0
1,1,2-Trichloroethane	Lin2		0.1972		10.5	10.0	4.6	20.0
1,3-Dichloropropane	Ave	1.400	1.498		10.7	10.0	7.0	20.0
Tetrachloroethene	Ave	1.702	1.872		11.0	10.0	10.0	20.0
2-Hexanone	Ave	0.3594	0.3576		39.8	40.0	-0.5	20.0
Chlorodibromomethane	Ave	1.328	1.508		11.4	10.0	13.5	20.0
1,2-Dibromoethane	Ave	1.068	1.181		11.1	10.0	10.6	20.0
1-Chlorohexane	Ave	2.400	2.489		10.4	10.0	3.7	20.0
Chlorobenzene	Ave	3.168	3.428	0.3000	10.8	10.0	8.2	20.0
1,1,1,2-Tetrachloroethane	Ave	1.527	1.705		11.2	10.0	11.7	20.0
Ethylbenzene	Ave	1.568	1.678		10.7	10.0	7.0	20.0
m-Xylene & p-Xylene	Ave	2.129	2.305		10.8	10.0	8.2	20.0
o-Xylene	Ave	1.817	1.982		10.9	10.0	9.1	20.0
Styrene	Ave	3.016	3.297		10.9	10.0	9.3	20.0
Bromoform	Lin1		0.8378	0.1000	11.6	10.0	15.8	20.0
Isopropylbenzene	Ave	3.220	3.369		10.5	10.0	4.6	20.0
Cyclohexanone	Ave	0.0136	0.0137		404	400	0.9	20.0
Bromobenzene	Ave	0.8391	0.9233		11.0	10.0	10.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5889	0.6482	0.3000	11.0	10.0	10.1	20.0
1,2,3-Trichloropropane	Ave	0.1316	0.1375		10.4	10.0	4.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1353	0.1389		10.3	10.0	2.6	20.0
N-Propylbenzene	Ave	0.8267	0.8637		10.4	10.0	4.5	20.0
2-Chlorotoluene	Ave	0.6840	0.7195		10.5	10.0	5.2	20.0
4-Chlorotoluene	Ave	0.7988	0.8393		10.5	10.0	5.1	20.0
1,3,5-Trimethylbenzene	Ave	2.478	2.541		10.3	10.0	2.5	20.0
tert-Butylbenzene	Ave	2.819	2.884		10.2	10.0	2.3	20.0
1,2,4-Trimethylbenzene	Ave	2.431	2.472		10.2	10.0	1.7	20.0
sec-Butylbenzene	Ave	0.7779	0.8114		10.4	10.0	4.3	20.0
1,3-Dichlorobenzene	Ave	1.466	1.624		11.1	10.0	10.8	20.0
p-Isopropyltoluene	Ave	3.185	3.284		10.3	10.0	3.1	20.0
1,4-Dichlorobenzene	Ave	1.756	1.871		10.7	10.0	6.6	20.0
1,2-Dichlorobenzene	Ave	1.272	1.353		10.6	10.0	6.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/2 Calibration Date: 05/05/2015 20:22

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7159.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	3.039	3.134		10.3	10.0	3.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0837	0.0970		11.6	10.0	16.0	20.0
1,2,4-Trichlorobenzene	Ave	0.8579	0.8875		10.3	10.0	3.5	20.0
Hexachlorobutadiene	Ave	0.8657	0.9104		10.5	10.0	5.2	20.0
Naphthalene	Ave	0.8451	0.8335		9.86	10.0	-1.4	20.0
1,2,3-Trichlorobenzene	Ave	0.6665	0.6688		10.0	10.0	0.4	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7159.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2015 20:22:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv m
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:45:04 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:31:00

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	88	132942	250.0	250.0	
* 2 Fluorobenzene	96	6.395	6.395	0.000	98	763335	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.041	11.041	0.000	89	168423	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.147	15.147	0.000	78	316417	12.5	12.5	
27 Dichlorodifluoromethane	85	1.905	1.905	0.000	98	326905	10.0	10.3	
30 Chloromethane	50	1.975	1.975	0.000	100	191927	10.0	9.60	M
31 Butadiene	54	2.079	2.079	0.000	87	136372	NC	NC	
32 Vinyl chloride	62	2.097	2.097	0.000	98	185080	10.0	9.69	
35 Bromomethane	94	2.340	2.340	0.000	91	188719	10.0	9.65	
36 Chloroethane	64	2.375	2.375	0.000	98	126498	10.0	9.44	
37 Dichlorofluoromethane	67	2.549	2.549	0.000	98	486893	10.0	10.0	
38 Trichlorofluoromethane	101	2.584	2.584	0.000	99	439876	10.0	9.80	
40 Ethyl ether	59	2.793	2.793	0.000	94	91746	10.0	10.6	
44 Acrolein	56	2.897	2.897	0.000	98	56475	100.0	121.5	
45 1,1-Dichloroethene	96	3.036	3.036	0.000	98	209228	10.0	10.5	
48 Acetone	43	3.036	3.036	0.000	95	36860	40.0	32.1	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.088	0.000	98	324157	10.0	10.4	
49 Iodomethane	142	3.193	3.193	0.000	98	530174	10.0	10.4	
50 Carbon disulfide	76	3.262	3.262	0.000	99	753930	10.0	10.2	
52 3-Chloro-1-propene	41	3.349	3.349	0.000	85	344155	10.0	9.94	
51 Methyl acetate	43	3.349	3.349	0.000	64	232060	50.0	51.0	
54 Methylene Chloride	84	3.454	3.454	0.000	96	191489	10.0	11.4	
55 2-Methyl-2-propanol	59	3.576	3.576	0.000	91	47527	100.0	83.0	M
58 Acrylonitrile	53	3.680	3.680	0.000	99	149465	100.0	100.4	
57 trans-1,2-Dichloroethene	96	3.767	3.767	0.000	98	223830	10.0	10.5	
56 Methyl tert-butyl ether	73	3.784	3.784	0.000	95	331431	10.0	10.9	
59 Hexane	57	4.063	4.063	0.000	95	330485	10.0	11.2	
62 1,1-Dichloroethane	63	4.202	4.202	0.000	96	407616	10.0	10.2	
61 Vinyl acetate	43	4.219	4.219	0.000	97	457164	20.0	21.2	
67 2-Butanone (MEK)	43	4.863	4.863	0.000	44	92285	40.0	36.9	M
65 cis-1,2-Dichloroethene	96	4.881	4.881	0.000	85	211482	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
66 2,2-Dichloropropane	77	4.915	4.915	0.000	88	409627	10.0	10.9	
70 sec-Butyl Alcohol	45	5.107	5.107	0.000	96	135807	300.0	305.3	
71 Chlorobromomethane	128	5.176	5.176	0.000	97	102149	10.0	10.3	
74 Chloroform	83	5.264	5.264	0.000	95	413757	10.0	10.5	
72 Tetrahydrofuran	42	5.264	5.264	0.000	52	30655	20.0	20.5	
75 1,1,1-Trichloroethane	97	5.559	5.559	0.000	97	394464	10.0	10.2	
76 Cyclohexane	56	5.664	5.664	0.000	90	368234	10.0	10.5	
78 1,1-Dichloropropene	75	5.751	5.751	0.000	95	330655	10.0	9.94	
77 Carbon tetrachloride	117	5.803	5.803	0.000	96	374817	10.0	10.8	
80 Isobutyl alcohol	41	5.873	5.873	0.000	9	43864	250.0	277.0	a
82 1,2-Dichloroethane	62	6.012	6.012	0.000	97	164678	10.0	10.8	
81 Benzene	78	6.029	6.029	0.000	97	634623	10.0	10.4	
84 n-Heptane	43	6.412	6.412	0.000	94	426640	10.0	10.5	
85 Trichloroethene	95	6.917	6.917	0.000	98	270623	10.0	10.1	
89 2-Pentanone	43	7.160	7.160	0.000	99	244947	40.0	48.8	
90 1,2-Dichloropropane	63	7.212	7.212	0.000	93	215677	10.0	10.1	
87 Methylcyclohexane	55	7.230	7.230	0.000	92	318638	10.0	10.5	
92 Dibromomethane	93	7.386	7.386	0.000	97	124897	10.0	10.2	
94 Dichlorobromomethane	83	7.613	7.613	0.000	99	347784	10.0	11.5	
96 2-Chloroethyl vinyl ether	63	8.065	8.065	0.000	92	69470	10.0	9.80	
97 cis-1,3-Dichloropropene	75	8.291	8.291	0.000	95	292416	10.0	10.9	
98 4-Methyl-2-pentanone (MIBK	43	8.552	8.552	0.000	97	321869	40.0	41.2	
99 Toluene	91	8.831	8.831	0.000	99	692579	10.0	10.3	
100 trans-1,3-Dichloropropene	75	9.144	9.144	0.000	94	200627	10.0	10.3	
101 Ethyl methacrylate	69	9.353	9.353	0.000	91	148188	10.0	10.9	
102 1,1,2-Trichloroethane	97	9.440	9.440	0.000	90	120399	10.0	10.5	
104 1,3-Dichloropropane	76	9.701	9.701	0.000	91	201835	10.0	10.7	
103 Tetrachloroethene	164	9.718	9.718	0.000	98	252269	10.0	11.0	
105 2-Hexanone	43	9.875	9.875	0.000	97	192748	40.0	39.8	
107 Chlorodibromomethane	129	10.083	10.083	0.000	90	203189	10.0	11.4	
109 Ethylene Dibromide	107	10.257	10.257	0.000	98	159190	10.0	11.1	
110 1-Chlorohexane	91	11.093	11.093	0.000	91	335341	10.0	10.4	
111 Chlorobenzene	112	11.093	11.093	0.000	92	461866	10.0	10.8	
113 1,1,1,2-Tetrachloroethane	131	11.232	11.232	0.000	94	229767	10.0	11.2	
112 Ethylbenzene	106	11.302	11.302	0.000	99	226094	10.0	10.7	
114 m-Xylene & p-Xylene	106	11.510	11.510	0.000	99	310532	10.0	10.8	
115 o-Xylene	106	12.172	12.172	0.000	97	267073	10.0	10.9	
116 Styrene	104	12.206	12.206	0.000	93	444285	10.0	10.9	
117 Bromoform	173	12.485	12.485	0.000	96	112879	10.0	11.6	
118 Isopropylbenzene	105	12.833	12.833	0.000	96	852721	10.0	10.5	
119 Cyclohexanone	55	12.972	12.972	0.000	90	73714	400.0	403.7	
121 Bromobenzene	156	13.320	13.320	0.000	95	233717	10.0	11.0	
122 1,1,2,2-Tetrachloroethane	83	13.337	13.337	0.000	94	164087	10.0	11.0	
124 1,2,3-Trichloropropane	110	13.390	13.390	0.000	83	34808	10.0	10.4	
125 trans-1,4-Dichloro-2-buten	53	13.442	13.442	0.000	84	35153	10.0	10.3	
123 N-Propylbenzene	120	13.564	13.564	0.000	99	218640	10.0	10.4	
126 2-Chlorotoluene	126	13.685	13.685	0.000	95	182131	10.0	10.5	
128 4-Chlorotoluene	126	13.877	13.877	0.000	99	212450	10.0	10.5	
127 1,3,5-Trimethylbenzene	105	13.894	13.894	0.000	95	643117	10.0	10.3	
129 tert-Butylbenzene	119	14.468	14.468	0.000	93	730100	10.0	10.2	
130 1,2,4-Trimethylbenzene	105	14.555	14.555	0.000	96	625716	10.0	10.2	
131 sec-Butylbenzene	134	14.869	14.869	0.000	94	205385	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
132 1,3-Dichlorobenzene	146	15.025	15.025	0.000	98	411105	10.0	11.1	
133 4-Isopropyltoluene	119	15.147	15.147	0.000	95	831231	10.0	10.3	
134 1,4-Dichlorobenzene	146	15.182	15.182	0.000	93	473492	10.0	10.7	
138 1,2-Dichlorobenzene	146	15.826	15.826	0.000	97	342397	10.0	10.6	
137 n-Butylbenzene	91	15.861	15.861	0.000	97	793306	10.0	10.3	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.939	0.000	89	24559	10.0	11.6	
141 1,2,4-Trichlorobenzene	180	17.879	17.879	0.000	95	224667	10.0	10.3	
142 Hexachlorobutadiene	225	18.088	18.088	0.000	96	230462	10.0	10.5	
143 Naphthalene	128	18.105	18.105	0.000	97	210991	10.0	9.86	
144 1,2,3-Trichlorobenzene	180	18.366	18.366	0.000	96	169300	10.0	10.0	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.0	
S 150 Xylenes, Total (URS)	1				0		20.0	21.7	
S 148 1,3-Dichloropropene, Total	1				0		20.0	21.2	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.8	
S 146 Xylenes, Total	106				0		20.0	21.7	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.8	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

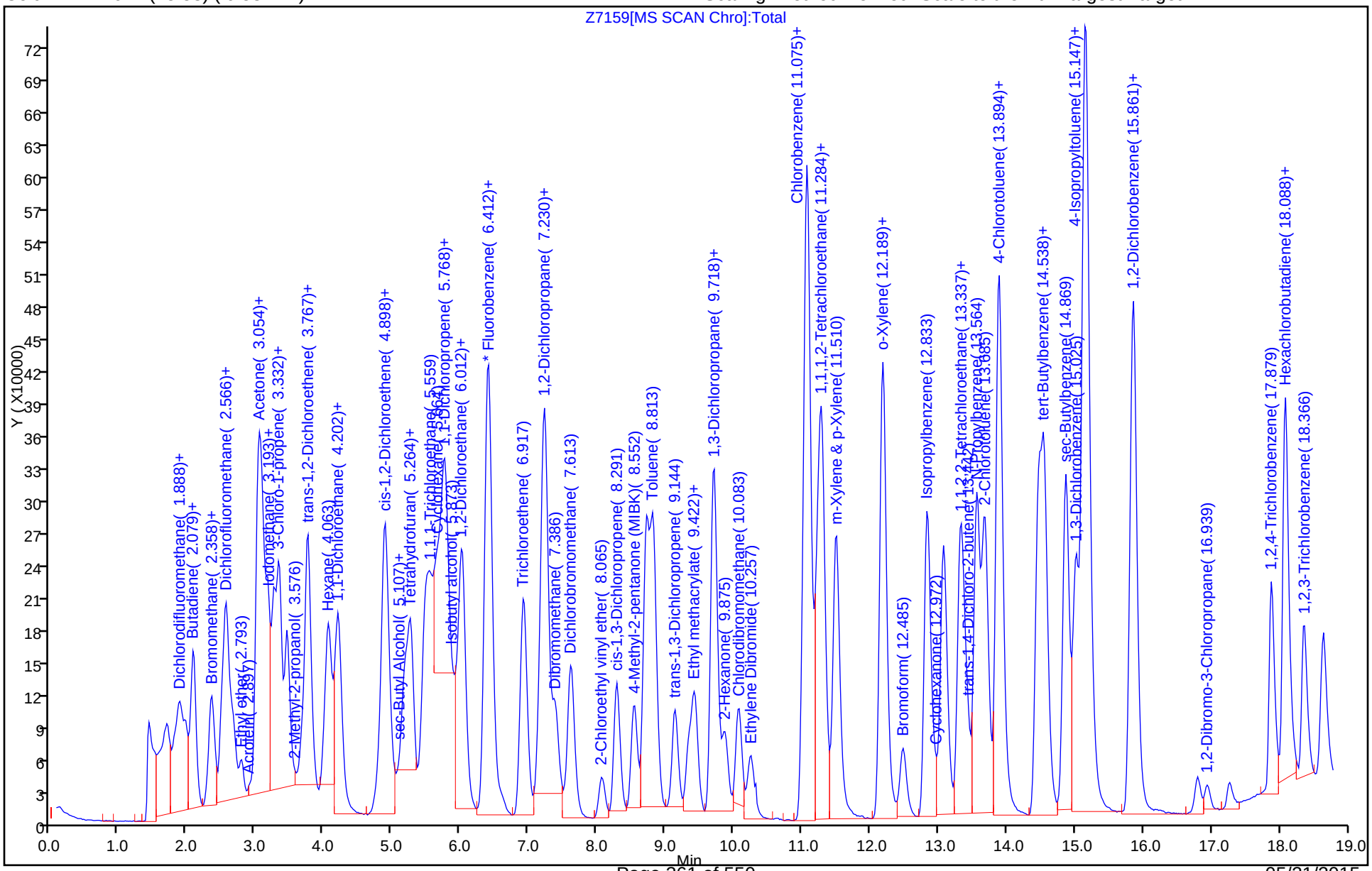
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL

Report Date: 06-May-2015 15:45:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7159.D				
Injection Date:	05-May-2015 20:22:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
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

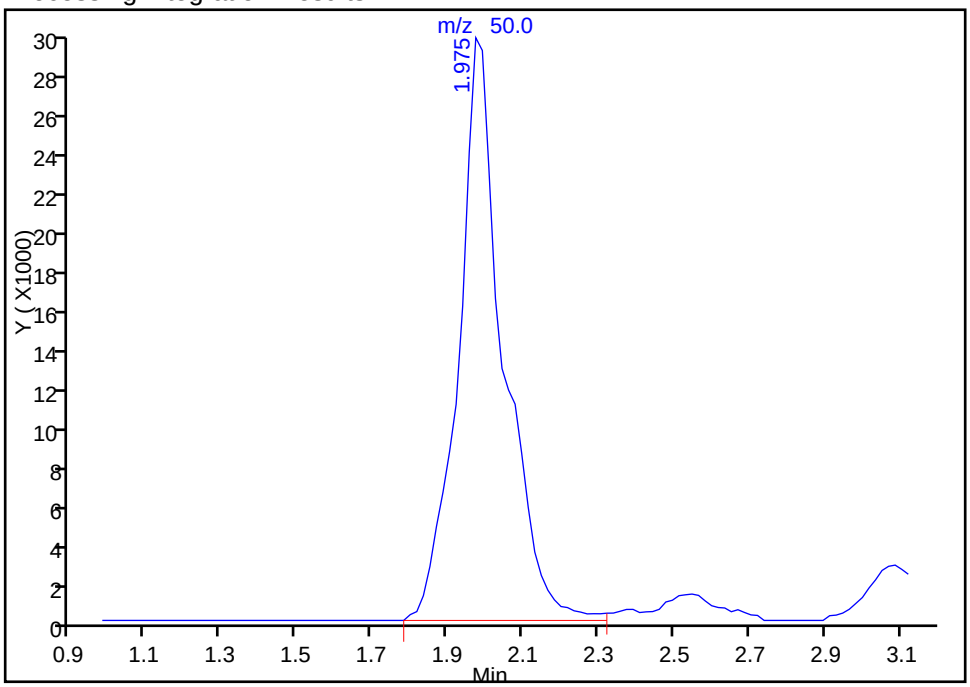
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7159.D				
Injection Date:	05-May-2015 20:22:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	1	Worklist Smp#:	2
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

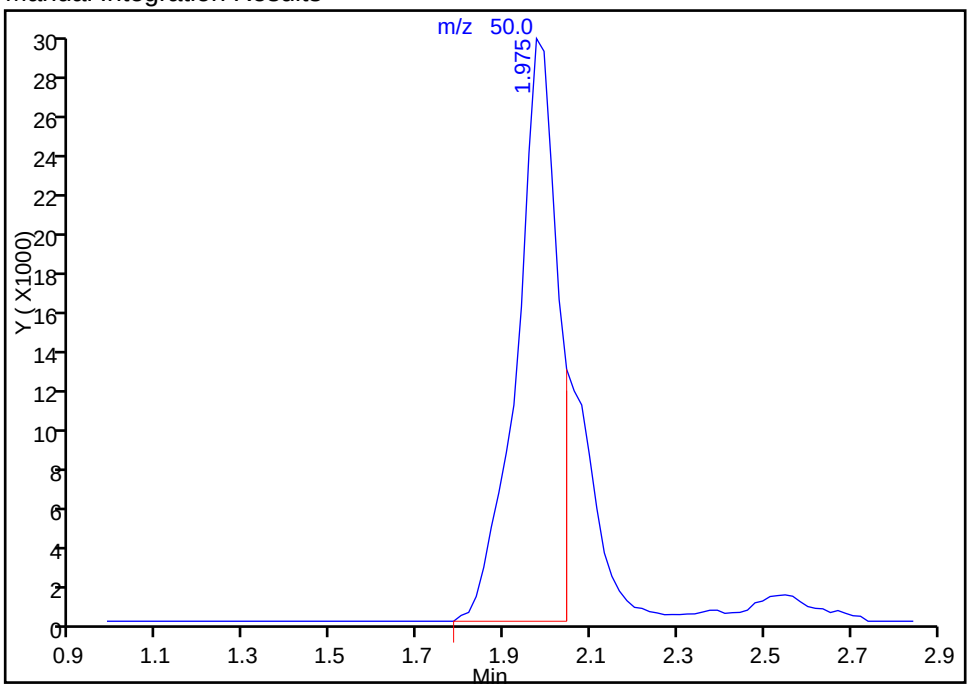
Processing Integration Results

RT: 1.97
Area: 242422
Amount: 12.121483
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 191927
Amount: 9.596653
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:18:27
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

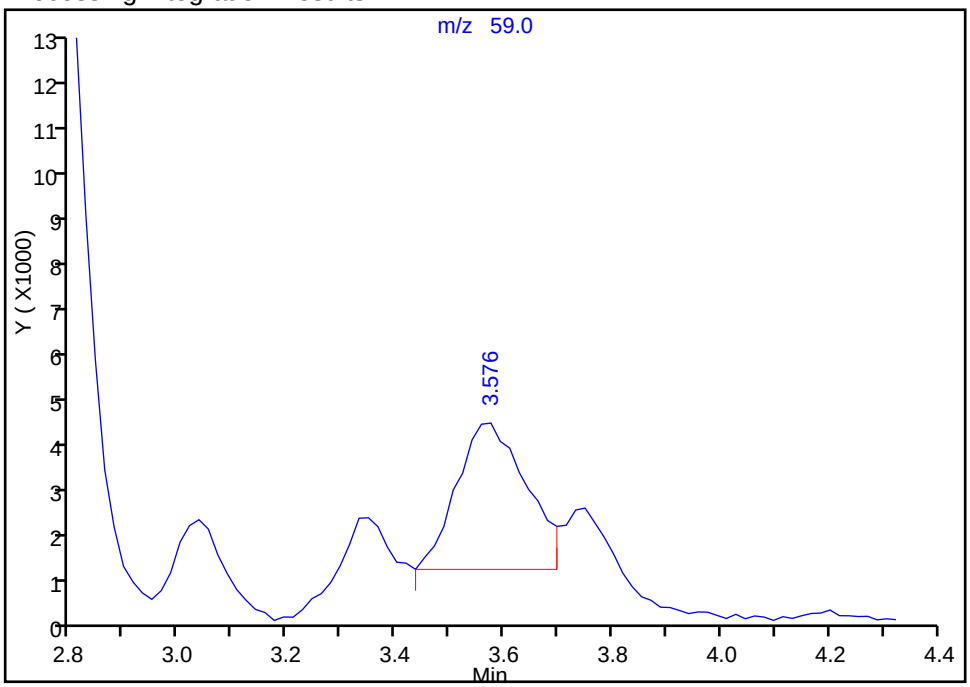
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7159.D				
Injection Date:	05-May-2015 20:22:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	1	Worklist Smp#:	2
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

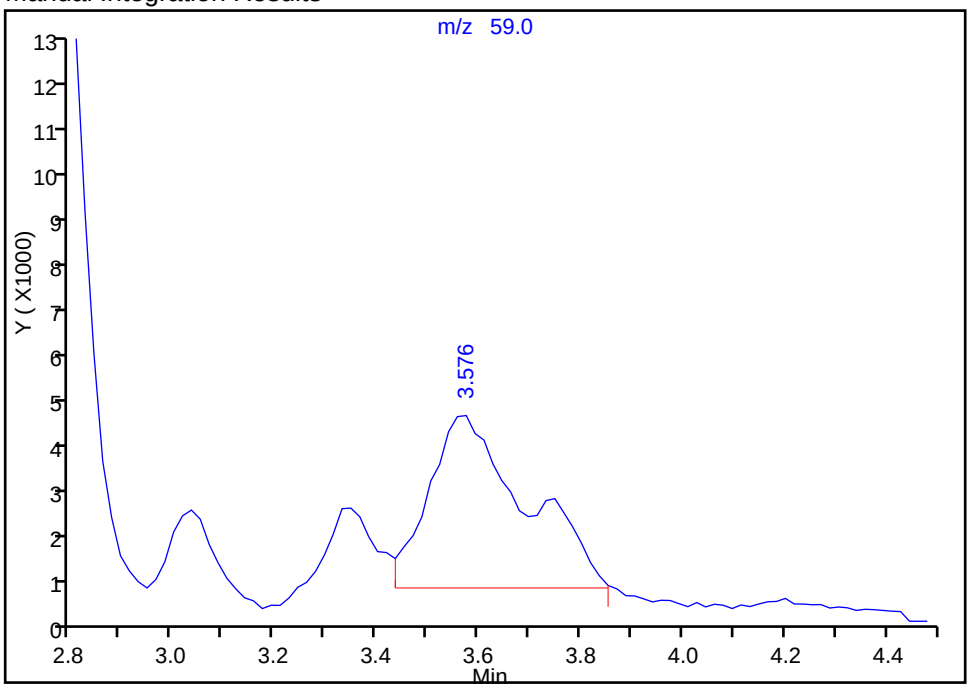
Processing Integration Results

RT: 3.58
Area: 26972
Amount: 39.873244
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 47527
Amount: 82.983017
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:18:27
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

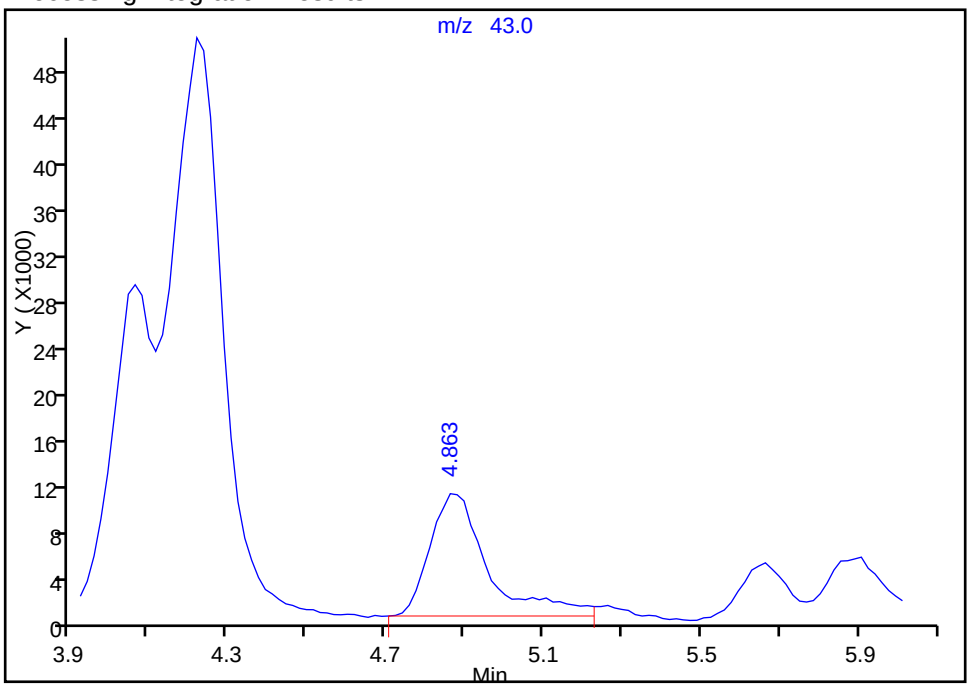
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7159.D				
Injection Date:	05-May-2015 20:22:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	1	Worklist Smp#:	2
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

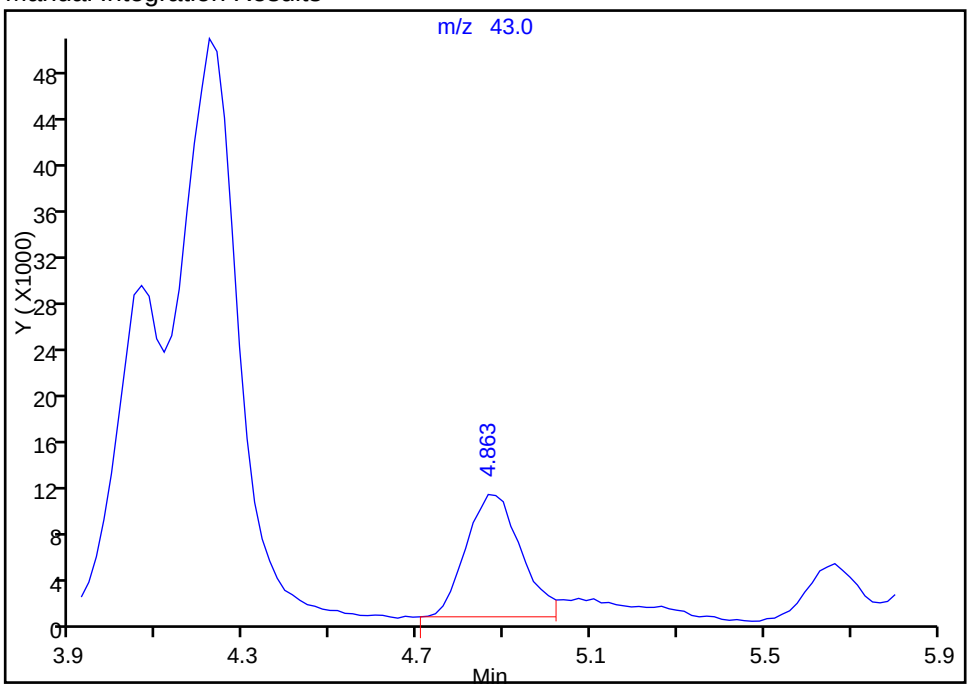
Processing Integration Results

RT: 4.86
Area: 107173
Amount: 42.811499
Amount Units: ug/l



Manual Integration Results

RT: 4.86
Area: 92285
Amount: 36.864315
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:18:27
Audit Action: Split an Integrated Peak
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

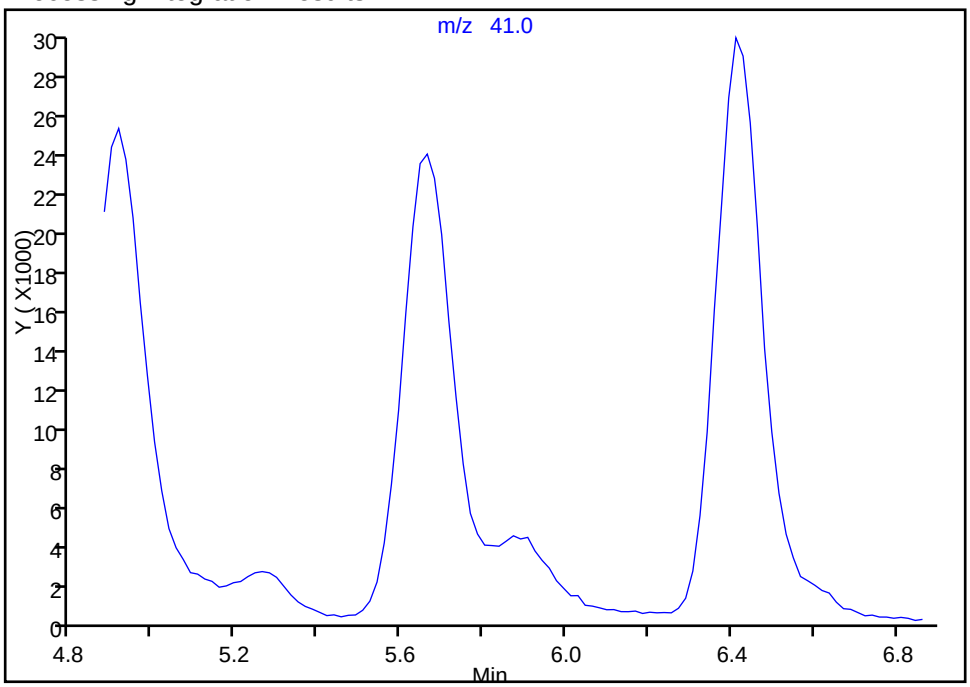
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7159.D				
Injection Date:	05-May-2015 20:22:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	1	Worklist Smp#:	2
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

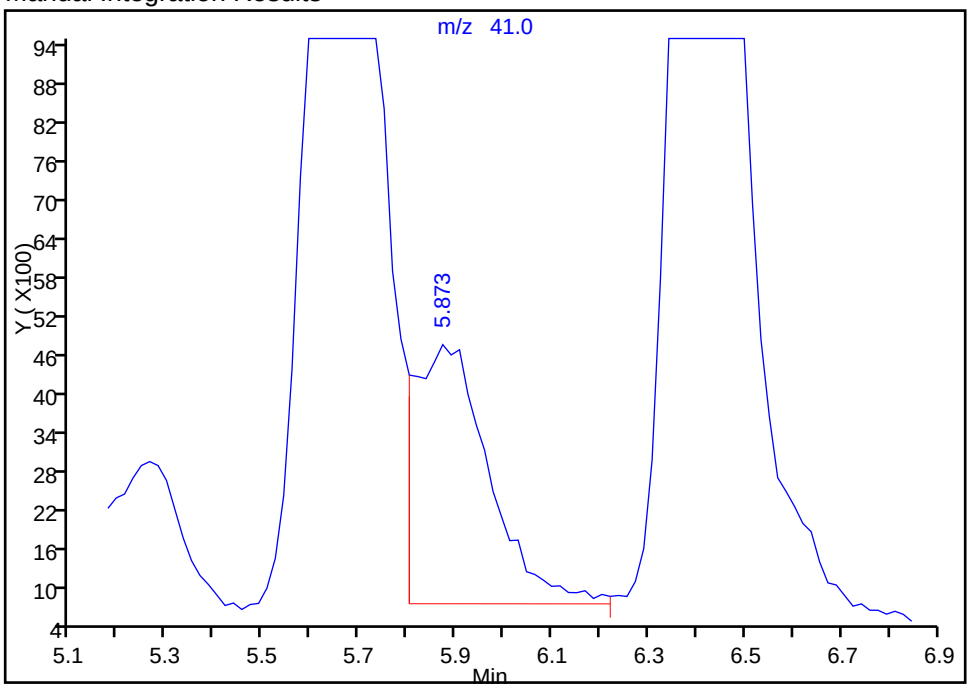
Not Detected
Expected RT: 5.87

Processing Integration Results



Manual Integration Results

RT: 5.87
Area: 43864
Amount: 277.0271
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:18:27
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/3 Calibration Date: 05/05/2015 20:45

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: Z7160.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	0.0004			500	7.0	20.0

FORM VII 8260B

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2015 20:45:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:30:54 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:30:54

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	92	122521	250.0	250.0	
* 2 Fluorobenzene	96	6.376	6.376	0.000	99	732389	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.022	11.022	0.000	88	167426	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.129	15.129	0.000	95	300314	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.471	5.471	0.000	94	349610	10.5	10.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.906	5.906	0.000	94	140622	10.5	10.4	
$ 10 Toluene-d8 (Surr)	98	8.708	8.708	0.000	93	665809	10.5	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.058	13.058	0.000	88	358295	10.5	10.9	
34 Ethylene oxide	43	2.287	2.287	0.000	99	482171	2000.0	1772.9	
39 Ethanol	45	2.739	2.739	0.000	87	10861	NC	NC	
42 Propene oxide	58	2.861	2.861	0.000	96	512019	500.0	457.9	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.314	3.314	0.000	98	31695	125.0	107.9	
60 Isopropyl ether	87	4.288	4.288	0.000	98	159244	12.5	11.3	
63 2-Chloro-1,3-butadiene	53	4.306	4.306	0.000	89	250571	10.0	9.13	
64 Tert-butyl ethyl ether	59	4.723	4.723	0.000	99	521332	12.5	11.2	
69 Propionitrile	54	4.915	4.915	0.000	97	51762	125.0	109.2	
68 Ethyl acetate	43	4.949	4.949	0.000	98	101135	20.0	19.7	
73 Methacrylonitrile	41	5.123	5.123	0.000	94	285534	100.0	94.3	
83 Tert-amyl methyl ether	73	6.202	6.202	0.000	98	442349	12.5	11.1	M
88 Ethyl acrylate	55	6.794	6.794	0.000	27	4171	NC	NC	
86 n-Butanol	56	6.811	6.811	0.000	88	24163	250.0	208.0	
91 Methyl methacrylate	100	7.385	7.385	0.000	94	42564	20.0	17.8	
95 2-Nitropropane	41	7.907	7.907	0.000	97	23334	20.0	18.2	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	94	40271	10.0	8.25	
120 cis-1,4-Dichloro-2-butene	53	12.901	12.901	0.000	0	23143	10.0	8.97	
135 1,2,3-Trimethylbenzene	105	15.285	15.285	0.000	96	479550	10.0	9.45	
140 1,3,5-Trichlorobenzene	180	17.217	17.217	0.000	97	270997	10.0	9.45	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

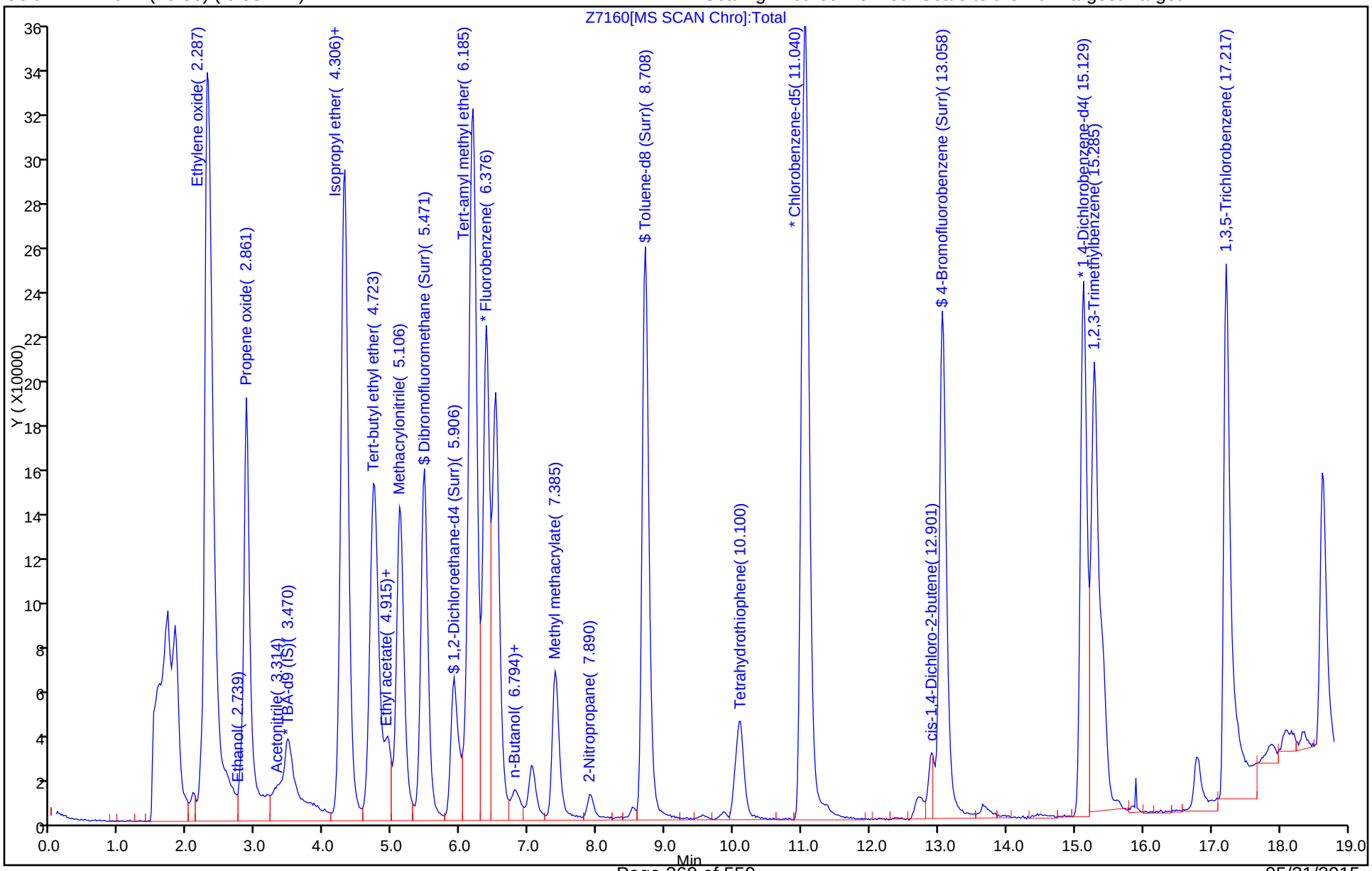
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:30:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D				
Injection Date:	05-May-2015 20:45:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/3 Calibration Date: 05/05/2015 20:45

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: Z7160.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

FORM VII 8260B

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2015 20:45:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:30:54 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:30:54

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	92	122521	250.0	250.0	
* 2 Fluorobenzene	96	6.376	6.376	0.000	99	732389	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.022	11.022	0.000	88	167426	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.129	15.129	0.000	95	300314	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.471	5.471	0.000	94	349610	10.5	10.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.906	5.906	0.000	94	140622	10.5	10.4	
$ 10 Toluene-d8 (Surr)	98	8.708	8.708	0.000	93	665809	10.5	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.058	13.058	0.000	88	358295	10.5	10.9	
34 Ethylene oxide	43	2.287	2.287	0.000	99	482171	2000.0	1772.9	
39 Ethanol	45	2.739	2.739	0.000	87	10861	NC	NC	
42 Propene oxide	58	2.861	2.861	0.000	96	512019	500.0	457.9	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.314	3.314	0.000	98	31695	125.0	107.9	
60 Isopropyl ether	87	4.288	4.288	0.000	98	159244	12.5	11.3	
63 2-Chloro-1,3-butadiene	53	4.306	4.306	0.000	89	250571	10.0	9.13	
64 Tert-butyl ethyl ether	59	4.723	4.723	0.000	99	521332	12.5	11.2	
69 Propionitrile	54	4.915	4.915	0.000	97	51762	125.0	109.2	
68 Ethyl acetate	43	4.949	4.949	0.000	98	101135	20.0	19.7	
73 Methacrylonitrile	41	5.123	5.123	0.000	94	285534	100.0	94.3	
83 Tert-amyl methyl ether	73	6.202	6.202	0.000	98	442349	12.5	11.1	M
88 Ethyl acrylate	55	6.794	6.794	0.000	27	4171	NC	NC	
86 n-Butanol	56	6.811	6.811	0.000	88	24163	250.0	208.0	
91 Methyl methacrylate	100	7.385	7.385	0.000	94	42564	20.0	17.8	
95 2-Nitropropane	41	7.907	7.907	0.000	97	23334	20.0	18.2	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	94	40271	10.0	8.25	
120 cis-1,4-Dichloro-2-butene	53	12.901	12.901	0.000	0	23143	10.0	8.97	
135 1,2,3-Trimethylbenzene	105	15.285	15.285	0.000	96	479550	10.0	9.45	
140 1,3,5-Trichlorobenzene	180	17.217	17.217	0.000	97	270997	10.0	9.45	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

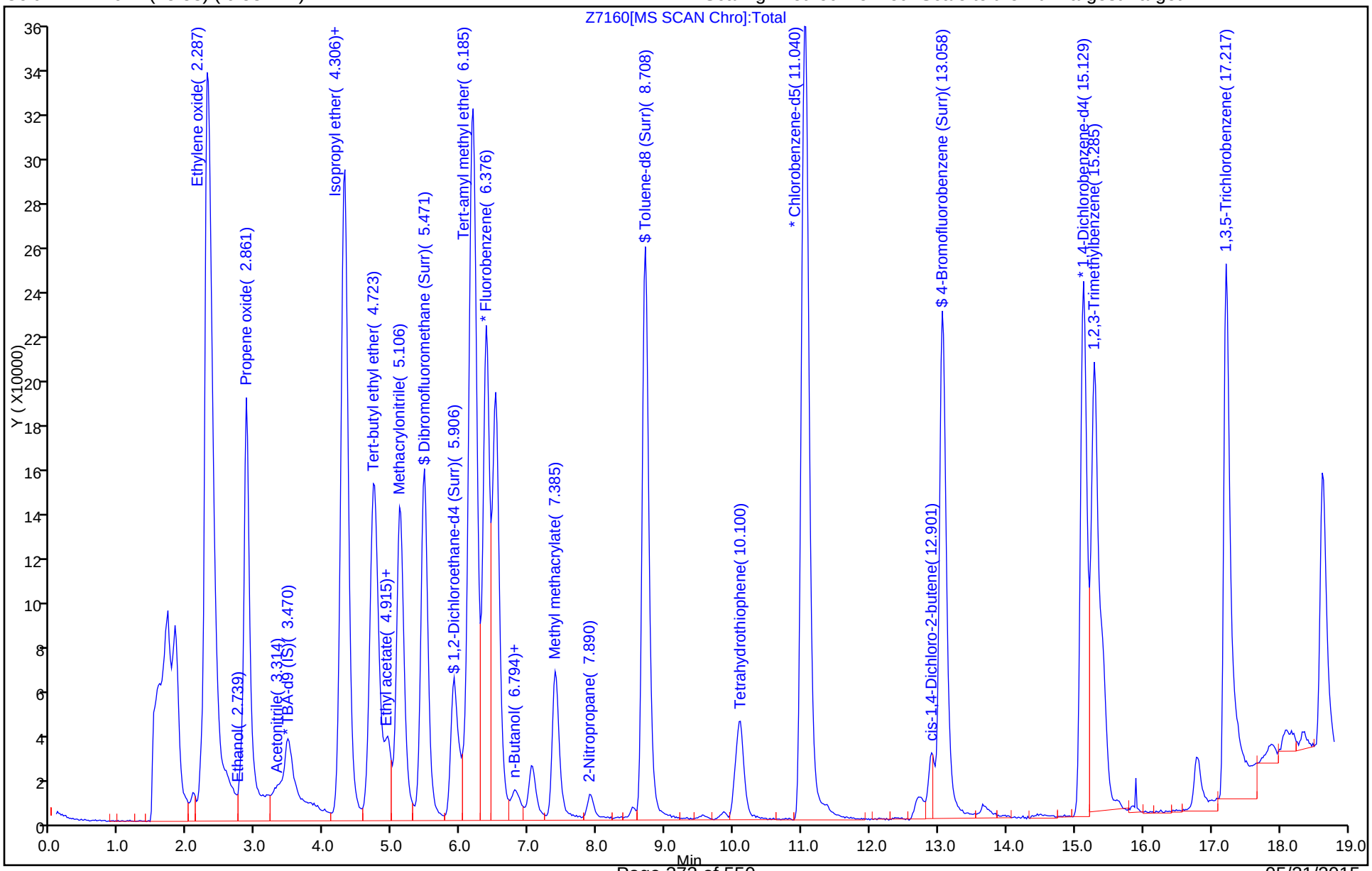
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:30:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D				
Injection Date:	05-May-2015 20:45:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/3 Calibration Date: 05/05/2015 20:45

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: Z7160.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	0.0043		108	125	-13.7	20.0
Isopropyl ether	Ave	0.2406	0.2174		11.3	12.5	-9.6	20.0
2-Chloro-1,3-butadiene	Ave	0.4684	0.4277		9.13	10.0	-8.7	20.0
Tert-butyl ethyl ether	Ave	0.7946	0.7118		11.2	12.5	-10.4	20.0
Propionitrile	Ave	0.0081	0.0071		109	125	-12.6	20.0
Ethyl acetate	Ave	0.0878	0.0863		19.7	20.0	-1.7	20.0
Methacrylonitrile	Ave	0.0517	0.0487		94.3	100	-5.7	20.0
Tert-amyl methyl ether	Ave	0.6822	0.6040		11.1	12.5	-11.5	20.0
n-Butanol	Ave	0.0020	0.0017		208	250	-16.8	20.0
Methyl methacrylate	Ave	0.0408	0.0363		17.8	20.0	-10.9	20.0
2-Nitropropane	Ave	0.0219	0.0199		18.2	20.0	-9.2	20.0
cis-1,4-Dichloro-2-butene	Ave	0.1074	0.0963		8.97	10.0	-10.3	20.0
1,2,3-Trimethylbenzene	Ave	2.113	1.996		9.45	10.0	-5.5	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2015 20:45:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:30:54 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:30:54

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	92	122521	250.0	250.0	
* 2 Fluorobenzene	96	6.376	6.376	0.000	99	732389	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.022	11.022	0.000	88	167426	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.129	15.129	0.000	95	300314	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.471	5.471	0.000	94	349610	10.5	10.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.906	5.906	0.000	94	140622	10.5	10.4	
$ 10 Toluene-d8 (Surr)	98	8.708	8.708	0.000	93	665809	10.5	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.058	13.058	0.000	88	358295	10.5	10.9	
34 Ethylene oxide	43	2.287	2.287	0.000	99	482171	2000.0	1772.9	
39 Ethanol	45	2.739	2.739	0.000	87	10861	NC	NC	
42 Propene oxide	58	2.861	2.861	0.000	96	512019	500.0	457.9	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.314	3.314	0.000	98	31695	125.0	107.9	
60 Isopropyl ether	87	4.288	4.288	0.000	98	159244	12.5	11.3	
63 2-Chloro-1,3-butadiene	53	4.306	4.306	0.000	89	250571	10.0	9.13	
64 Tert-butyl ethyl ether	59	4.723	4.723	0.000	99	521332	12.5	11.2	
69 Propionitrile	54	4.915	4.915	0.000	97	51762	125.0	109.2	
68 Ethyl acetate	43	4.949	4.949	0.000	98	101135	20.0	19.7	
73 Methacrylonitrile	41	5.123	5.123	0.000	94	285534	100.0	94.3	
83 Tert-amyl methyl ether	73	6.202	6.202	0.000	98	442349	12.5	11.1	M
88 Ethyl acrylate	55	6.794	6.794	0.000	27	4171	NC	NC	
86 n-Butanol	56	6.811	6.811	0.000	88	24163	250.0	208.0	
91 Methyl methacrylate	100	7.385	7.385	0.000	94	42564	20.0	17.8	
95 2-Nitropropane	41	7.907	7.907	0.000	97	23334	20.0	18.2	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	94	40271	10.0	8.25	
120 cis-1,4-Dichloro-2-butene	53	12.901	12.901	0.000	0	23143	10.0	8.97	
135 1,2,3-Trimethylbenzene	105	15.285	15.285	0.000	96	479550	10.0	9.45	
140 1,3,5-Trichlorobenzene	180	17.217	17.217	0.000	97	270997	10.0	9.45	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

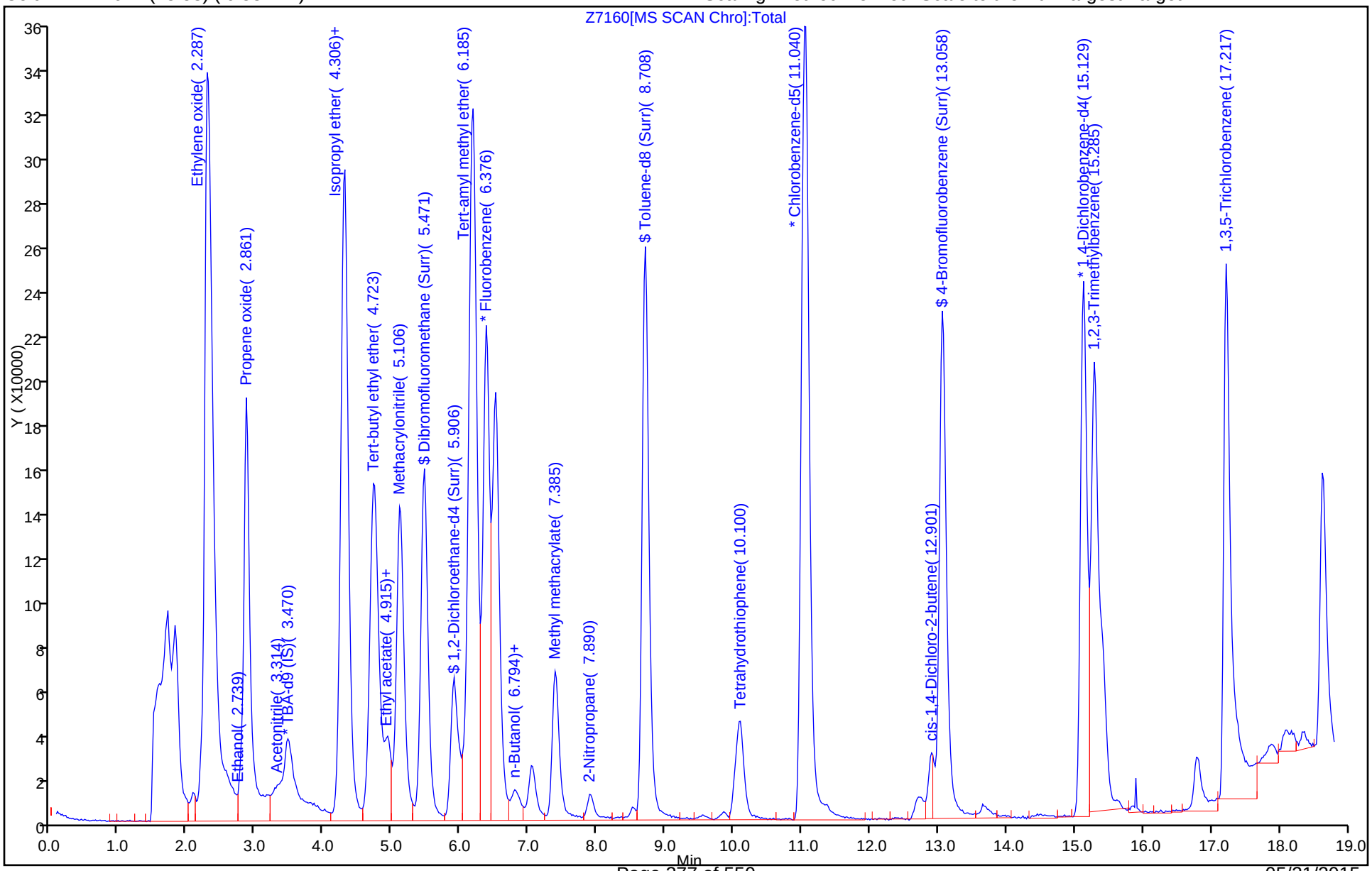
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:30:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D				
Injection Date:	05-May-2015 20:45:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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

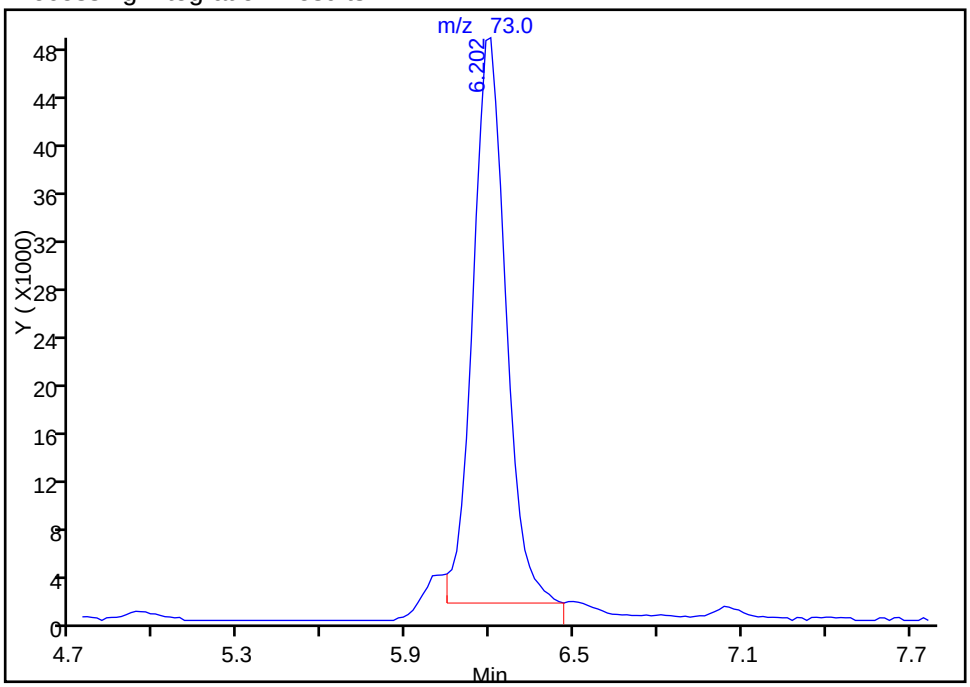
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D				
Injection Date:	05-May-2015 20:45:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	2	Worklist Smp#:	3
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

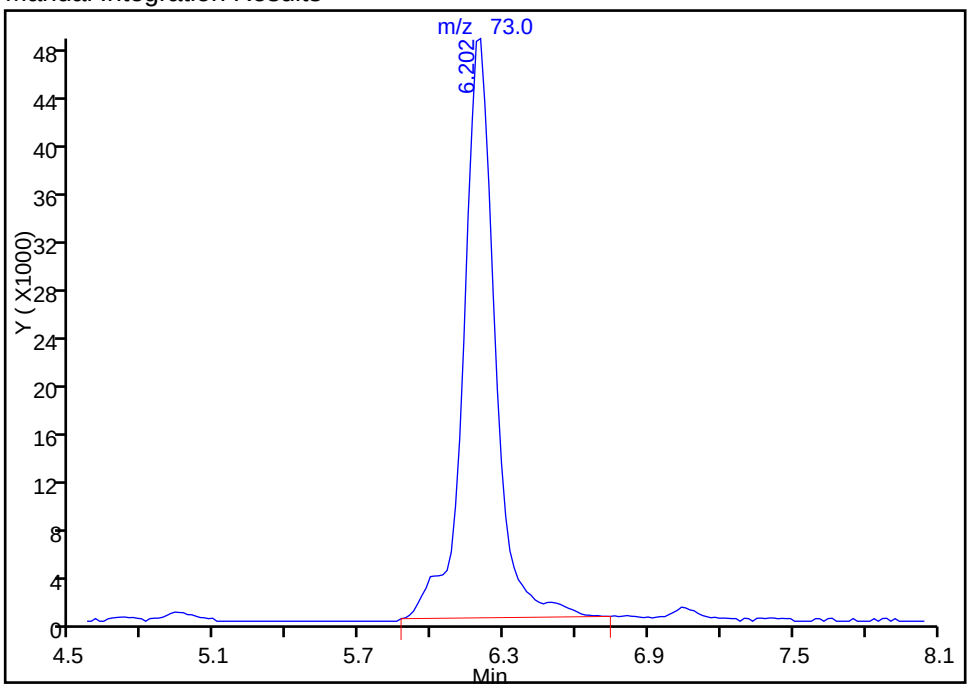
Processing Integration Results

RT: 6.20
Area: 386293
Amount: 9.663923
Amount Units: ug/l



Manual Integration Results

RT: 6.20
Area: 442349
Amount: 11.066280
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:19:54
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276091/3 Calibration Date: 05/05/2015 20:45

Instrument ID: VMS_Z Calib Start Date: 05/02/2015 07:56

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/02/2015 09:27

Lab File ID: Z7160.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.5562	0.5683		10.7	10.5	2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2317	0.2286		10.4	10.5	-1.4	20.0
Toluene-d8 (Surr)	Ave	4.678	4.734		10.6	10.5	1.2	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.420		10.9	10.5	4.2	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2015 20:45:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:30:54 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:30:54

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	92	122521	250.0	250.0	
* 2 Fluorobenzene	96	6.376	6.376	0.000	99	732389	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.022	11.022	0.000	88	167426	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.129	15.129	0.000	95	300314	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.471	5.471	0.000	94	349610	10.5	10.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.906	5.906	0.000	94	140622	10.5	10.4	
$ 10 Toluene-d8 (Surr)	98	8.708	8.708	0.000	93	665809	10.5	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.058	13.058	0.000	88	358295	10.5	10.9	
34 Ethylene oxide	43	2.287	2.287	0.000	99	482171	2000.0	1772.9	
39 Ethanol	45	2.739	2.739	0.000	87	10861	NC	NC	
42 Propene oxide	58	2.861	2.861	0.000	96	512019	500.0	457.9	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.314	3.314	0.000	98	31695	125.0	107.9	
60 Isopropyl ether	87	4.288	4.288	0.000	98	159244	12.5	11.3	
63 2-Chloro-1,3-butadiene	53	4.306	4.306	0.000	89	250571	10.0	9.13	
64 Tert-butyl ethyl ether	59	4.723	4.723	0.000	99	521332	12.5	11.2	
69 Propionitrile	54	4.915	4.915	0.000	97	51762	125.0	109.2	
68 Ethyl acetate	43	4.949	4.949	0.000	98	101135	20.0	19.7	
73 Methacrylonitrile	41	5.123	5.123	0.000	94	285534	100.0	94.3	
83 Tert-amyl methyl ether	73	6.202	6.202	0.000	98	442349	12.5	11.1	M
88 Ethyl acrylate	55	6.794	6.794	0.000	27	4171	NC	NC	
86 n-Butanol	56	6.811	6.811	0.000	88	24163	250.0	208.0	
91 Methyl methacrylate	100	7.385	7.385	0.000	94	42564	20.0	17.8	
95 2-Nitropropane	41	7.907	7.907	0.000	97	23334	20.0	18.2	
106 Tetrahydrothiophene	60	10.030	10.030	0.000	94	40271	10.0	8.25	
120 cis-1,4-Dichloro-2-butene	53	12.901	12.901	0.000	0	23143	10.0	8.97	
135 1,2,3-Trimethylbenzene	105	15.285	15.285	0.000	96	479550	10.0	9.45	
140 1,3,5-Trichlorobenzene	180	17.217	17.217	0.000	97	270997	10.0	9.45	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

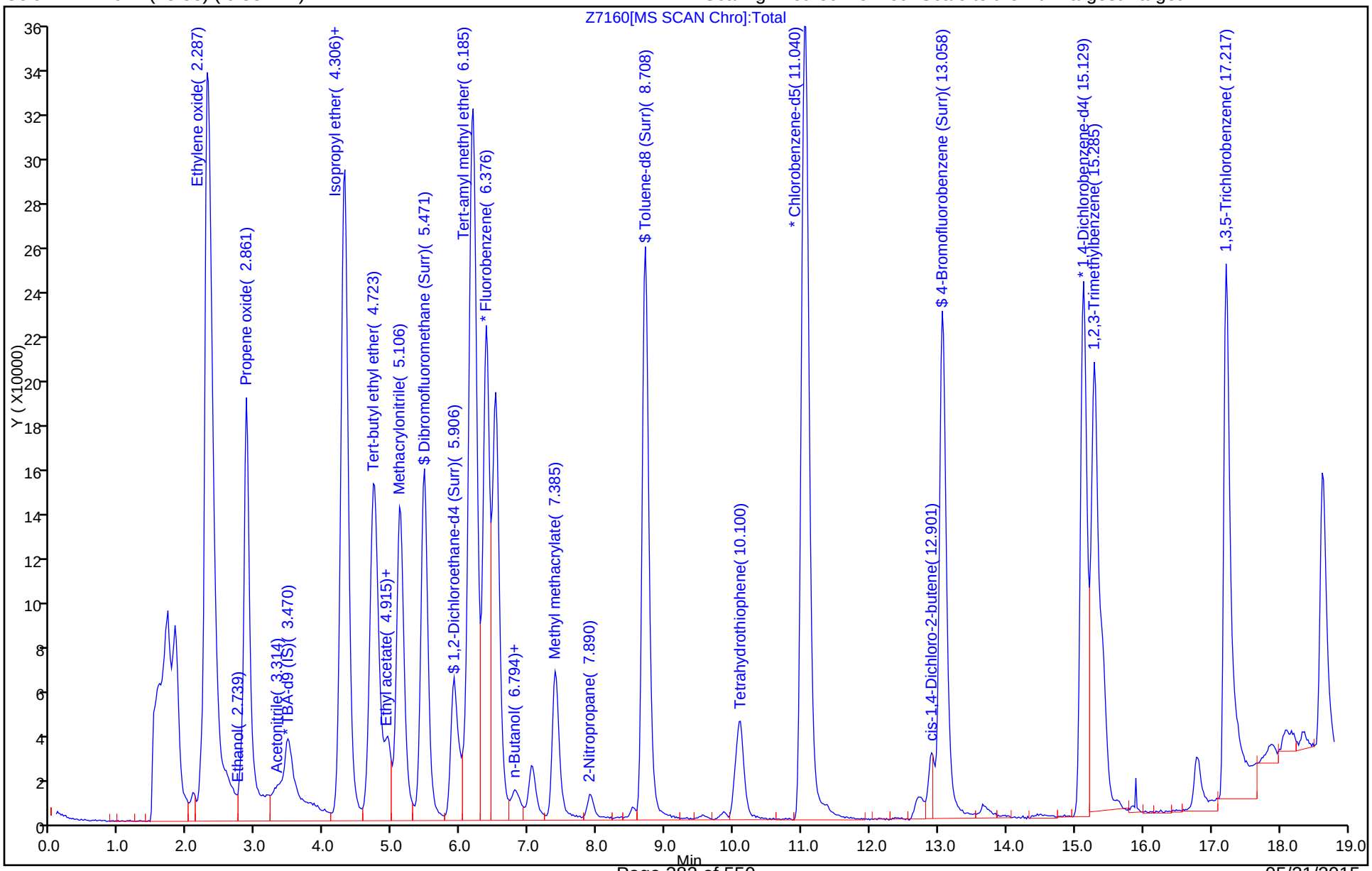
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:30:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7160.D				
Injection Date:	05-May-2015 20:45:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276091/33 Calibration Date: 05/06/2015 07:01

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: Z7187.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\20150505-34699.b\Z7187.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 06-May-2015 07:01:30 ALS Bottle#: 30 Worklist Smp#: 33
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:19:19 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:19:19

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	3.483	3.483	0.000	89	145158	250.0	250.0	
* 2 Fluorobenzene	96	6.389	6.389	0.000	98	764985	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.017	11.017	0.000	89	172674	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.124	15.124	0.000	84	332657	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.466	5.466	0.000	93	356922	10.5	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.901	5.901	0.000	95	165296	10.5	11.7	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	686556	10.5	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.053	13.053	0.000	87	375879	10.5	10.3	
27 Dichlorodifluoromethane	85	1.917	1.917	0.000	98	278606	10.0	8.74	
30 Chloromethane	50	2.004	2.004	0.000	100	171831	10.0	8.57	
31 Butadiene	54	2.091	2.091	0.000	93	110031	NC	NC	
32 Vinyl chloride	62	2.108	2.108	0.000	98	155660	10.0	8.14	
35 Bromomethane	94	2.352	2.352	0.000	91	168346	10.0	8.59	
36 Chloroethane	64	2.404	2.404	0.000	99	109016	10.0	8.12	
37 Dichlorofluoromethane	67	2.560	2.560	0.000	98	413619	10.0	8.51	
38 Trichlorofluoromethane	101	2.613	2.613	0.000	100	351854	10.0	7.82	
40 Ethyl ether	59	2.804	2.804	0.000	95	92502	10.0	10.7	
44 Acrolein	56	2.908	2.908	0.000	100	46245	100.0	99.3	
45 1,1-Dichloroethene	96	3.048	3.048	0.000	97	195442	10.0	9.76	
48 Acetone	43	3.065	3.065	0.000	98	42244	40.0	36.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.082	3.082	0.000	97	304478	10.0	9.76	
49 Iodomethane	142	3.187	3.187	0.000	99	510761	10.0	10.0	
50 Carbon disulfide	76	3.274	3.274	0.000	99	711973	10.0	9.62	
52 3-Chloro-1-propene	41	3.361	3.361	0.000	84	330248	10.0	9.52	
51 Methyl acetate	43	3.361	3.361	0.000	73	244777	50.0	53.7	
54 Methylene Chloride	84	3.465	3.465	0.000	95	186483	10.0	11.1	
55 2-Methyl-2-propanol	59	3.570	3.570	0.000	91	58901	100.0	96.4	M
58 Acrylonitrile	53	3.691	3.691	0.000	98	151259	100.0	101.3	
57 trans-1,2-Dichloroethene	96	3.761	3.761	0.000	97	211831	10.0	9.90	
56 Methyl tert-butyl ether	73	3.778	3.778	0.000	96	332211	10.0	10.9	
59 Hexane	57	4.057	4.057	0.000	95	295617	10.0	9.74	

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	4.196	4.196	0.000	96	385377	10.0	9.61	
61 Vinyl acetate	43	4.231	4.231	0.000	96	372709	20.0	17.2	
67 2-Butanone (MEK)	43	4.875	4.875	0.000	44	93367	40.0	37.2	
65 cis-1,2-Dichloroethene	96	4.875	4.875	0.000	85	217725	10.0	10.6	
66 2,2-Dichloropropane	77	4.909	4.909	0.000	89	357426	10.0	9.36	
70 sec-Butyl Alcohol	45	5.101	5.101	0.000	96	153145	300.0	315.3	
71 Chlorobromomethane	128	5.171	5.171	0.000	96	102771	10.0	10.4	
74 Chloroform	83	5.257	5.257	0.000	96	403521	10.0	10.2	
72 Tetrahydrofuran	42	5.275	5.275	0.000	37	33032	20.0	22.1	
75 1,1,1-Trichloroethane	97	5.553	5.553	0.000	98	375002	10.0	9.63	
76 Cyclohexane	56	5.640	5.640	0.000	93	342680	10.0	9.74	
78 1,1-Dichloropropene	75	5.745	5.745	0.000	96	309048	10.0	9.27	
77 Carbon tetrachloride	117	5.780	5.780	0.000	97	352044	10.0	10.1	
80 Isobutyl alcohol	41	5.867	5.867	0.000	94	43413	250.0	251.1	
82 1,2-Dichloroethane	62	6.006	6.006	0.000	93	164139	10.0	10.8	
81 Benzene	78	6.023	6.023	0.000	95	612234	10.0	10.0	
84 n-Heptane	43	6.406	6.406	0.000	94	390136	10.0	9.61	
85 Trichloroethene	95	6.911	6.911	0.000	97	270297	10.0	10.1	
89 2-Pentanone	43	7.137	7.137	0.000	97	235988	40.0	46.9	
90 1,2-Dichloropropane	63	7.206	7.206	0.000	92	216266	10.0	10.1	
87 Methylcyclohexane	55	7.224	7.224	0.000	90	290006	10.0	9.51	
92 Dibromomethane	93	7.363	7.363	0.000	97	127049	10.0	10.4	
94 Dichlorobromomethane	83	7.607	7.607	0.000	99	348389	10.0	11.5	
96 2-Chloroethyl vinyl ether	63	8.059	8.059	0.000	92	72178	10.0	10.2	
97 cis-1,3-Dichloropropene	75	8.268	8.268	0.000	95	285071	10.0	10.4	
98 4-Methyl-2-pentanone (MIBK	43	8.529	8.529	0.000	97	304422	40.0	38.9	
99 Toluene	91	8.807	8.807	0.000	99	657902	10.0	9.73	
100 trans-1,3-Dichloropropene	75	9.120	9.120	0.000	94	199169	10.0	10.2	
101 Ethyl methacrylate	69	9.329	9.329	0.000	91	156660	10.0	11.2	
102 1,1,2-Trichloroethane	97	9.416	9.416	0.000	90	126034	10.0	10.9	
104 1,3-Dichloropropane	76	9.677	9.677	0.000	92	211474	10.0	10.9	
103 Tetrachloroethene	164	9.695	9.695	0.000	98	237946	10.0	10.1	
105 2-Hexanone	43	9.851	9.851	0.000	98	195621	40.0	39.4	
107 Chlorodibromomethane	129	10.060	10.060	0.000	90	226133	10.0	12.3	
109 Ethylene Dibromide	107	10.234	10.234	0.000	99	161087	10.0	10.9	
110 1-Chlorohexane	91	11.069	11.069	0.000	81	309256	10.0	9.33	
111 Chlorobenzene	112	11.069	11.069	0.000	88	457996	10.0	10.5	
113 1,1,1,2-Tetrachloroethane	131	11.209	11.209	0.000	94	233932	10.0	11.1	
112 Ethylbenzene	106	11.278	11.278	0.000	99	218594	10.0	10.1	
114 m-Xylene & p-Xylene	106	11.487	11.487	0.000	99	290752	10.0	9.88	
115 o-Xylene	106	12.148	12.148	0.000	98	264913	10.0	10.6	
116 Styrene	104	12.166	12.166	0.000	94	436964	10.0	10.5	
117 Bromoform	173	12.461	12.461	0.000	96	114425	10.0	11.5	
118 Isopropylbenzene	105	12.809	12.809	0.000	96	810871	10.0	9.46	
119 Cyclohexanone	55	12.931	12.931	0.000	92	80413	400.0	429.6	
121 Bromobenzene	156	13.297	13.297	0.000	95	231036	10.0	10.3	
122 1,1,2,2-Tetrachloroethane	83	13.314	13.314	0.000	95	165865	10.0	10.6	
124 1,2,3-Trichloropropane	110	13.366	13.366	0.000	82	37123	10.0	10.6	
125 trans-1,4-Dichloro-2-buten	53	13.418	13.418	0.000	88	34406	10.0	9.55	
123 N-Propylbenzene	120	13.540	13.540	0.000	99	210455	10.0	9.57	
126 2-Chlorotoluene	126	13.662	13.662	0.000	87	182862	10.0	10.0	a
128 4-Chlorotoluene	126	13.853	13.853	0.000	98	214408	10.0	10.1	

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	13.871	13.871	0.000	95	623032	10.0	9.45	
129 tert-Butylbenzene	119	14.445	14.445	0.000	93	707828	10.0	9.43	
130 1,2,4-Trimethylbenzene	105	14.532	14.532	0.000	96	615807	10.0	9.52	
131 sec-Butylbenzene	134	14.845	14.845	0.000	94	202070	10.0	9.76	
132 1,3-Dichlorobenzene	146	15.002	15.002	0.000	97	411186	10.0	10.5	
133 4-Isopropyltoluene	119	15.124	15.124	0.000	95	812677	10.0	9.59	
134 1,4-Dichlorobenzene	146	15.158	15.158	0.000	93	464030	10.0	9.93	
138 1,2-Dichlorobenzene	146	15.802	15.802	0.000	97	354045	10.0	10.5	
137 n-Butylbenzene	91	15.855	15.855	0.000	97	759223	10.0	9.39	
139 1,2-Dibromo-3-Chloropropan	157	16.933	16.933	0.000	87	26400	10.0	11.9	
141 1,2,4-Trichlorobenzene	180	17.873	17.873	0.000	95	224312	10.0	9.83	
142 Hexachlorobutadiene	225	18.064	18.064	0.000	97	219557	10.0	9.53	
143 Naphthalene	128	18.099	18.099	0.000	97	227753	10.0	10.1	
144 1,2,3-Trichlorobenzene	180	18.343	18.343	0.000	96	176228	10.0	9.94	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.6	
S 150 Xylenes, Total (URS)	1				0		20.0	20.4	
S 151 Total BTEX	1				0			50.3	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.6	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 146 Xylenes, Total	106				0		20.0	20.4	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.5	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

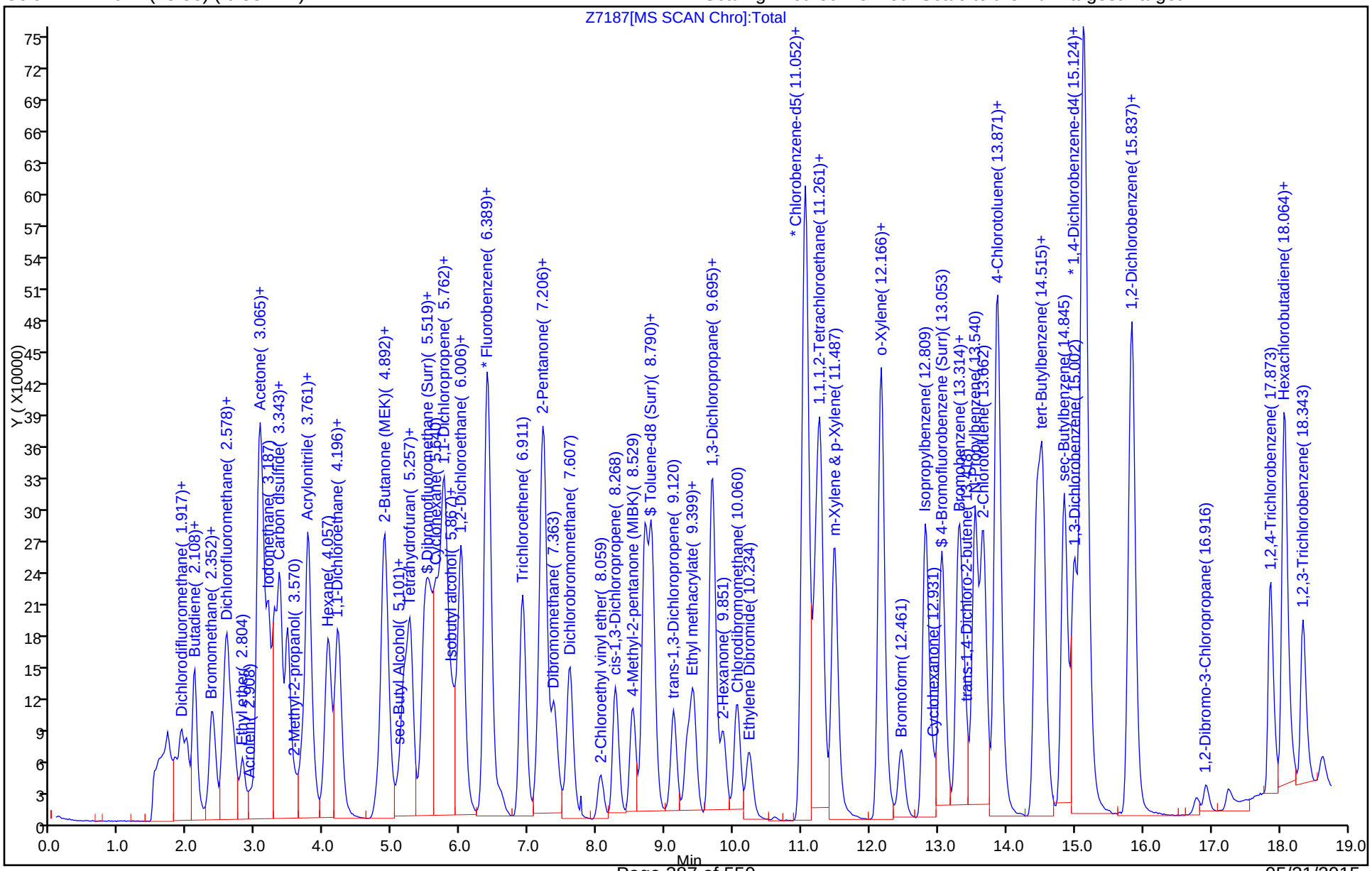
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:19:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7187.D				
Injection Date:	06-May-2015 07:01:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	ccvc			Worklist Smp#:	33
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
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.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276091/33 Calibration Date: 05/06/2015 07:01

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7187.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	0.5208	0.4553		8.74	10.0	-12.6	50.0
Chloromethane	Ave	0.3275	0.2808	0.1000	8.57	10.0	-14.3	50.0
Vinyl chloride	Ave	0.3126	0.2544		8.14	10.0	-18.6	50.0
Bromomethane	Ave	0.3202	0.2751		8.59	10.0	-14.1	50.0
Chloroethane	Ave	0.2194	0.1781		8.12	10.0	-18.8	50.0
Dichlorofluoromethane	Ave	0.7941	0.6759		8.51	10.0	-14.9	50.0
Trichlorofluoromethane	Ave	0.7348	0.5749		7.82	10.0	-21.8	50.0
Ethyl ether	Lin2		0.1512		10.7	10.0	6.6	50.0
Acrolein	Ave	0.0076	0.0076		99.3	100	-0.7	50.0
1,1-Dichloroethene	Ave	0.3274	0.3194		9.76	10.0	-2.4	50.0
Acetone	Ave	0.0188	0.0173		36.7	40.0	-8.4	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5098	0.4975		9.76	10.0	-2.4	50.0
Iodomethane	Ave	0.8339	0.8346		10.0	10.0	0.0	50.0
Carbon disulfide	Ave	1.210	1.163		9.62	10.0	-3.8	50.0
3-Chloro-1-propene	Ave	0.5668	0.5396		9.52	10.0	-4.8	50.0
Methyl acetate	Ave	0.0745	0.0800		53.7	50.0	7.4	50.0
Methylene Chloride	Lin1		0.3047		11.1	10.0	10.7	50.0
tert-Butyl alcohol	Lin2		1.014		96.4	100	-3.6	50.0
Acrylonitrile	Ave	0.0244	0.0247		101	100	1.3	50.0
trans-1,2-Dichloroethene	Ave	0.3497	0.3461		9.90	10.0	-1.0	50.0
Methyl tert-butyl ether	Ave	0.4977	0.5428		10.9	10.0	9.1	50.0
Hexane	Ave	2.198	2.140		9.74	10.0	-2.6	50.0
1,1-Dichloroethane	Ave	0.6555	0.6297	0.1000	9.61	10.0	-3.9	50.0
Vinyl acetate	Ave	0.3532	0.3045		17.2	20.0	-13.8	50.0
2-Butanone (MEK)	Ave	0.0410	0.0381		37.2	40.0	-7.0	50.0
cis-1,2-Dichloroethene	Ave	0.3368	0.3558		10.6	10.0	5.6	50.0
2,2-Dichloropropane	Lin2		0.5840		9.36	10.0	-6.4	50.0
sec-Butyl Alcohol	Ave	0.8366	0.8792		315	300	5.1	50.0
Bromochloromethane	Ave	0.1617	0.1679		10.4	10.0	3.9	50.0
Chloroform	Ave	0.6444	0.6594		10.2	10.0	2.3	50.0
Tetrahydrofuran	Ave	0.0244	0.0270		22.1	20.0	10.5	50.0
1,1,1-Trichloroethane	Ave	0.6363	0.6128		9.63	10.0	-3.7	50.0
Cyclohexane	Ave	0.5749	0.5600		9.74	10.0	-2.6	50.0
1,1-Dichloropropene	Ave	0.5445	0.5050		9.27	10.0	-7.3	50.0
Carbon tetrachloride	Ave	0.5677	0.5753		10.1	10.0	1.3	50.0
Isobutyl alcohol	Ave	0.2978	0.2991		251	250	0.4	50.0
1,2-Dichloroethane	Ave	0.2487	0.2682		10.8	10.0	7.8	50.0
Benzene	Ave	0.998	1.000		10.0	10.0	0.3	50.0
Trichloroethene	Ave	0.4375	0.4417		10.1	10.0	1.0	50.0
2-Pentanone	Ave	0.0823	0.0964		46.9	40.0	17.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276091/33 Calibration Date: 05/06/2015 07:01

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7187.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	0.3492	0.3534		10.1	10.0	1.2	50.0
Methylcyclohexane	Ave	0.4983	0.4739		9.51	10.0	-4.9	50.0
Dibromomethane	Ave	0.1999	0.2076		10.4	10.0	3.8	50.0
Bromodichloromethane	Ave	0.4932	0.5693		11.5	10.0	15.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1161	0.1179		10.2	10.0	1.6	50.0
cis-1,3-Dichloropropene	Ave	1.984	2.064		10.4	10.0	4.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1278	0.1244		38.9	40.0	-2.7	50.0
Toluene	Ave	1.104	1.075		9.73	10.0	-2.7	50.0
trans-1,3-Dichloropropene	Ave	0.3197	0.3255		10.2	10.0	1.8	50.0
Ethyl methacrylate	Ave	1.011	1.134		11.2	10.0	12.1	50.0
1,1,2-Trichloroethane	Lin2		0.2059		10.9	10.0	9.4	50.0
1,3-Dichloropropane	Ave	1.400	1.531		10.9	10.0	9.3	50.0
Tetrachloroethene	Ave	1.702	1.723		10.1	10.0	1.2	50.0
2-Hexanone	Ave	0.3594	0.3540		39.4	40.0	-1.5	50.0
Chlorodibromomethane	Ave	1.328	1.637		12.3	10.0	23.3	50.0
1,2-Dibromoethane	Ave	1.068	1.166		10.9	10.0	9.2	50.0
1-Chlorohexane	Ave	2.400	2.239		9.33	10.0	-6.7	50.0
Chlorobenzene	Ave	3.168	3.315	0.3000	10.5	10.0	4.6	50.0
1,1,1,2-Tetrachloroethane	Ave	1.527	1.693		11.1	10.0	10.9	50.0
Ethylbenzene	Ave	1.568	1.582		10.1	10.0	0.9	50.0
m-Xylene & p-Xylene	Ave	2.129	2.105		9.88	10.0	-1.2	50.0
o-Xylene	Ave	1.817	1.918		10.6	10.0	5.6	50.0
Styrene	Ave	3.016	3.163		10.5	10.0	4.9	50.0
Bromoform	Lin1		0.8283	0.1000	11.5	10.0	14.6	50.0
Isopropylbenzene	Ave	3.220	3.047		9.46	10.0	-5.4	50.0
Cyclohexanone	Ave	0.0136	0.0146		430	400	7.4	50.0
Bromobenzene	Ave	0.8391	0.8682		10.3	10.0	3.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5889	0.6233	0.3000	10.6	10.0	5.8	50.0
1,2,3-Trichloropropane	Ave	0.1316	0.1395		10.6	10.0	6.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1353	0.1293		9.55	10.0	-4.5	50.0
N-Propylbenzene	Ave	0.8267	0.7908		9.57	10.0	-4.3	50.0
2-Chlorotoluene	Ave	0.6840	0.6871		10.0	10.0	0.5	50.0
4-Chlorotoluene	Ave	0.7988	0.8057		10.1	10.0	0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.478	2.341		9.45	10.0	-5.5	50.0
tert-Butylbenzene	Ave	2.819	2.660		9.43	10.0	-5.7	50.0
1,2,4-Trimethylbenzene	Ave	2.431	2.314		9.52	10.0	-4.8	50.0
sec-Butylbenzene	Ave	0.7779	0.7593		9.76	10.0	-2.4	50.0
1,3-Dichlorobenzene	Ave	1.466	1.545		10.5	10.0	5.4	50.0
p-Isopropyltoluene	Ave	3.185	3.054		9.59	10.0	-4.1	50.0
1,4-Dichlorobenzene	Ave	1.756	1.744		9.93	10.0	-0.7	50.0
1,2-Dichlorobenzene	Ave	1.272	1.330		10.5	10.0	4.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276091/33 Calibration Date: 05/06/2015 07:01

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7187.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	3.039	2.853		9.39	10.0	-6.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0837	0.0992		11.9	10.0	18.6	50.0
1,2,4-Trichlorobenzene	Ave	0.8579	0.8429		9.83	10.0	-1.7	50.0
Hexachlorobutadiene	Ave	0.8657	0.8250		9.53	10.0	-4.7	50.0
Naphthalene	Ave	0.8451	0.8558		10.1	10.0	1.3	50.0
1,2,3-Trichlorobenzene	Ave	0.6665	0.6622		9.94	10.0	-0.6	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7187.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 06-May-2015 07:01:30 ALS Bottle#: 30 Worklist Smp#: 33
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:19:19 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:19:19

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	3.483	3.483	0.000	89	145158	250.0	250.0	
* 2 Fluorobenzene	96	6.389	6.389	0.000	98	764985	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.017	11.017	0.000	89	172674	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.124	15.124	0.000	84	332657	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.466	5.466	0.000	93	356922	10.5	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.901	5.901	0.000	95	165296	10.5	11.7	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	686556	10.5	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.053	13.053	0.000	87	375879	10.5	10.3	
27 Dichlorodifluoromethane	85	1.917	1.917	0.000	98	278606	10.0	8.74	
30 Chloromethane	50	2.004	2.004	0.000	100	171831	10.0	8.57	
31 Butadiene	54	2.091	2.091	0.000	93	110031	NC	NC	
32 Vinyl chloride	62	2.108	2.108	0.000	98	155660	10.0	8.14	
35 Bromomethane	94	2.352	2.352	0.000	91	168346	10.0	8.59	
36 Chloroethane	64	2.404	2.404	0.000	99	109016	10.0	8.12	
37 Dichlorofluoromethane	67	2.560	2.560	0.000	98	413619	10.0	8.51	
38 Trichlorofluoromethane	101	2.613	2.613	0.000	100	351854	10.0	7.82	
40 Ethyl ether	59	2.804	2.804	0.000	95	92502	10.0	10.7	
44 Acrolein	56	2.908	2.908	0.000	100	46245	100.0	99.3	
45 1,1-Dichloroethene	96	3.048	3.048	0.000	97	195442	10.0	9.76	
48 Acetone	43	3.065	3.065	0.000	98	42244	40.0	36.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.082	3.082	0.000	97	304478	10.0	9.76	
49 Iodomethane	142	3.187	3.187	0.000	99	510761	10.0	10.0	
50 Carbon disulfide	76	3.274	3.274	0.000	99	711973	10.0	9.62	
52 3-Chloro-1-propene	41	3.361	3.361	0.000	84	330248	10.0	9.52	
51 Methyl acetate	43	3.361	3.361	0.000	73	244777	50.0	53.7	
54 Methylene Chloride	84	3.465	3.465	0.000	95	186483	10.0	11.1	
55 2-Methyl-2-propanol	59	3.570	3.570	0.000	91	58901	100.0	96.4	M
58 Acrylonitrile	53	3.691	3.691	0.000	98	151259	100.0	101.3	
57 trans-1,2-Dichloroethene	96	3.761	3.761	0.000	97	211831	10.0	9.90	
56 Methyl tert-butyl ether	73	3.778	3.778	0.000	96	332211	10.0	10.9	
59 Hexane	57	4.057	4.057	0.000	95	295617	10.0	9.74	

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	4.196	4.196	0.000	96	385377	10.0	9.61	
61 Vinyl acetate	43	4.231	4.231	0.000	96	372709	20.0	17.2	
67 2-Butanone (MEK)	43	4.875	4.875	0.000	44	93367	40.0	37.2	
65 cis-1,2-Dichloroethene	96	4.875	4.875	0.000	85	217725	10.0	10.6	
66 2,2-Dichloropropane	77	4.909	4.909	0.000	89	357426	10.0	9.36	
70 sec-Butyl Alcohol	45	5.101	5.101	0.000	96	153145	300.0	315.3	
71 Chlorobromomethane	128	5.171	5.171	0.000	96	102771	10.0	10.4	
74 Chloroform	83	5.257	5.257	0.000	96	403521	10.0	10.2	
72 Tetrahydrofuran	42	5.275	5.275	0.000	37	33032	20.0	22.1	
75 1,1,1-Trichloroethane	97	5.553	5.553	0.000	98	375002	10.0	9.63	
76 Cyclohexane	56	5.640	5.640	0.000	93	342680	10.0	9.74	
78 1,1-Dichloropropene	75	5.745	5.745	0.000	96	309048	10.0	9.27	
77 Carbon tetrachloride	117	5.780	5.780	0.000	97	352044	10.0	10.1	
80 Isobutyl alcohol	41	5.867	5.867	0.000	94	43413	250.0	251.1	
82 1,2-Dichloroethane	62	6.006	6.006	0.000	93	164139	10.0	10.8	
81 Benzene	78	6.023	6.023	0.000	95	612234	10.0	10.0	
84 n-Heptane	43	6.406	6.406	0.000	94	390136	10.0	9.61	
85 Trichloroethene	95	6.911	6.911	0.000	97	270297	10.0	10.1	
89 2-Pentanone	43	7.137	7.137	0.000	97	235988	40.0	46.9	
90 1,2-Dichloropropane	63	7.206	7.206	0.000	92	216266	10.0	10.1	
87 Methylcyclohexane	55	7.224	7.224	0.000	90	290006	10.0	9.51	
92 Dibromomethane	93	7.363	7.363	0.000	97	127049	10.0	10.4	
94 Dichlorobromomethane	83	7.607	7.607	0.000	99	348389	10.0	11.5	
96 2-Chloroethyl vinyl ether	63	8.059	8.059	0.000	92	72178	10.0	10.2	
97 cis-1,3-Dichloropropene	75	8.268	8.268	0.000	95	285071	10.0	10.4	
98 4-Methyl-2-pentanone (MIBK	43	8.529	8.529	0.000	97	304422	40.0	38.9	
99 Toluene	91	8.807	8.807	0.000	99	657902	10.0	9.73	
100 trans-1,3-Dichloropropene	75	9.120	9.120	0.000	94	199169	10.0	10.2	
101 Ethyl methacrylate	69	9.329	9.329	0.000	91	156660	10.0	11.2	
102 1,1,2-Trichloroethane	97	9.416	9.416	0.000	90	126034	10.0	10.9	
104 1,3-Dichloropropane	76	9.677	9.677	0.000	92	211474	10.0	10.9	
103 Tetrachloroethene	164	9.695	9.695	0.000	98	237946	10.0	10.1	
105 2-Hexanone	43	9.851	9.851	0.000	98	195621	40.0	39.4	
107 Chlorodibromomethane	129	10.060	10.060	0.000	90	226133	10.0	12.3	
109 Ethylene Dibromide	107	10.234	10.234	0.000	99	161087	10.0	10.9	
110 1-Chlorohexane	91	11.069	11.069	0.000	81	309256	10.0	9.33	
111 Chlorobenzene	112	11.069	11.069	0.000	88	457996	10.0	10.5	
113 1,1,1,2-Tetrachloroethane	131	11.209	11.209	0.000	94	233932	10.0	11.1	
112 Ethylbenzene	106	11.278	11.278	0.000	99	218594	10.0	10.1	
114 m-Xylene & p-Xylene	106	11.487	11.487	0.000	99	290752	10.0	9.88	
115 o-Xylene	106	12.148	12.148	0.000	98	264913	10.0	10.6	
116 Styrene	104	12.166	12.166	0.000	94	436964	10.0	10.5	
117 Bromoform	173	12.461	12.461	0.000	96	114425	10.0	11.5	
118 Isopropylbenzene	105	12.809	12.809	0.000	96	810871	10.0	9.46	
119 Cyclohexanone	55	12.931	12.931	0.000	92	80413	400.0	429.6	
121 Bromobenzene	156	13.297	13.297	0.000	95	231036	10.0	10.3	
122 1,1,2,2-Tetrachloroethane	83	13.314	13.314	0.000	95	165865	10.0	10.6	
124 1,2,3-Trichloropropane	110	13.366	13.366	0.000	82	37123	10.0	10.6	
125 trans-1,4-Dichloro-2-buten	53	13.418	13.418	0.000	88	34406	10.0	9.55	
123 N-Propylbenzene	120	13.540	13.540	0.000	99	210455	10.0	9.57	
126 2-Chlorotoluene	126	13.662	13.662	0.000	87	182862	10.0	10.0	a
128 4-Chlorotoluene	126	13.853	13.853	0.000	98	214408	10.0	10.1	

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	13.871	13.871	0.000	95	623032	10.0	9.45	
129 tert-Butylbenzene	119	14.445	14.445	0.000	93	707828	10.0	9.43	
130 1,2,4-Trimethylbenzene	105	14.532	14.532	0.000	96	615807	10.0	9.52	
131 sec-Butylbenzene	134	14.845	14.845	0.000	94	202070	10.0	9.76	
132 1,3-Dichlorobenzene	146	15.002	15.002	0.000	97	411186	10.0	10.5	
133 4-Isopropyltoluene	119	15.124	15.124	0.000	95	812677	10.0	9.59	
134 1,4-Dichlorobenzene	146	15.158	15.158	0.000	93	464030	10.0	9.93	
138 1,2-Dichlorobenzene	146	15.802	15.802	0.000	97	354045	10.0	10.5	
137 n-Butylbenzene	91	15.855	15.855	0.000	97	759223	10.0	9.39	
139 1,2-Dibromo-3-Chloropropan	157	16.933	16.933	0.000	87	26400	10.0	11.9	
141 1,2,4-Trichlorobenzene	180	17.873	17.873	0.000	95	224312	10.0	9.83	
142 Hexachlorobutadiene	225	18.064	18.064	0.000	97	219557	10.0	9.53	
143 Naphthalene	128	18.099	18.099	0.000	97	227753	10.0	10.1	
144 1,2,3-Trichlorobenzene	180	18.343	18.343	0.000	96	176228	10.0	9.94	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.6	
S 150 Xylenes, Total (URS)	1				0		20.0	20.4	
S 151 Total BTEX	1				0			50.3	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.6	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 146 Xylenes, Total	106				0		20.0	20.4	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.5	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

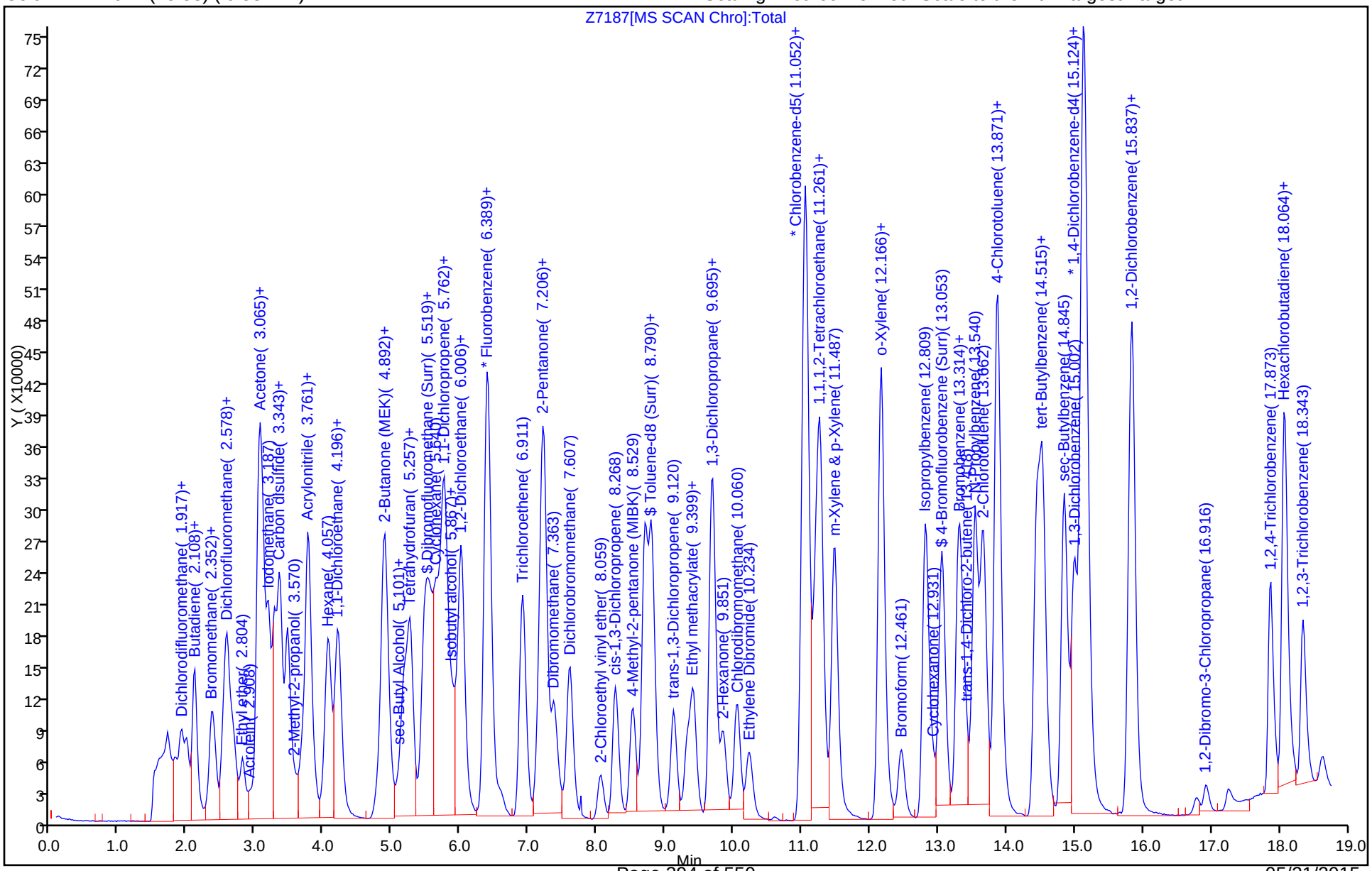
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:19:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7187.D				
Injection Date:	06-May-2015 07:01:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	ccvc			Worklist Smp#:	33
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
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

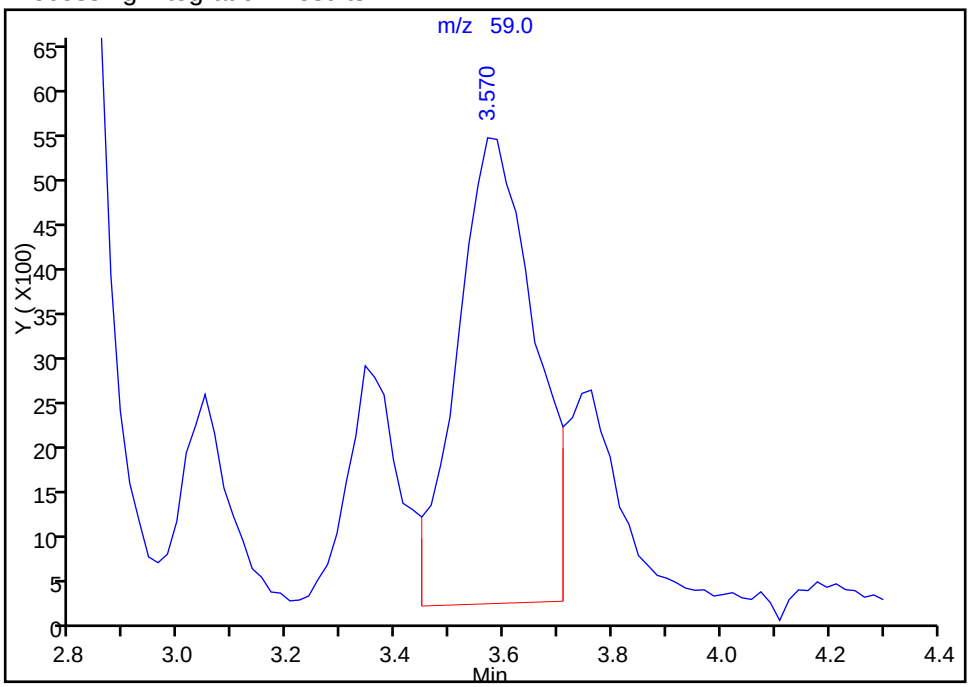
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7187.D				
Injection Date:	06-May-2015 07:01:30	Instrument ID:	VMS_Z		
Lims ID:	ccvc				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	30	Worklist Smp#:	33
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

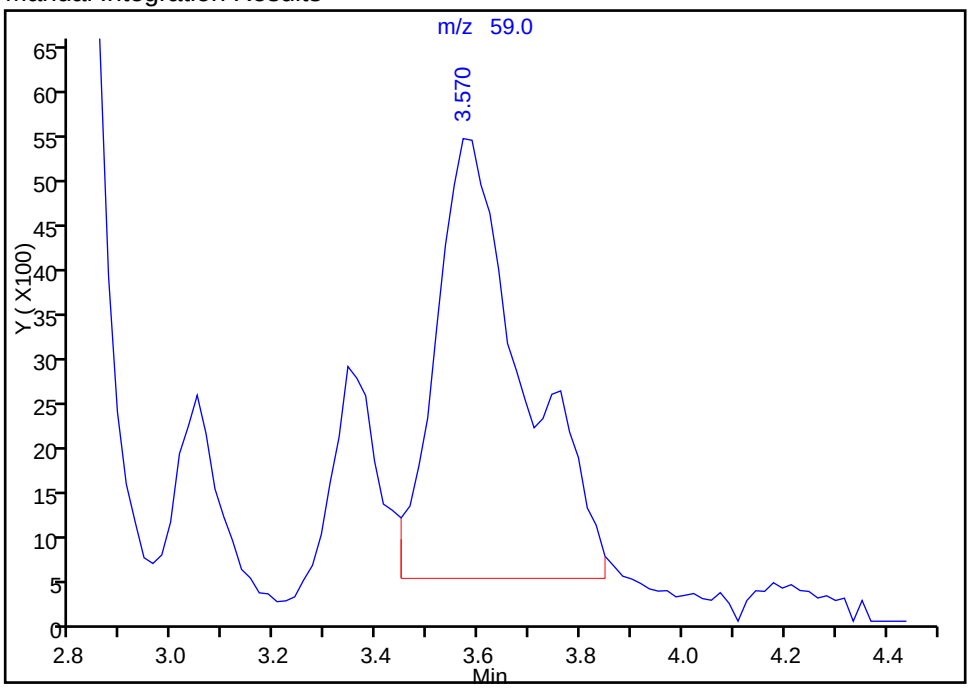
Processing Integration Results

RT: 3.57
Area: 52751
Amount: 84.628669
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 58901
Amount: 96.441516
Amount Units: ug/l



Reviewer: bergerb, 06-May-2015 15:19:19
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

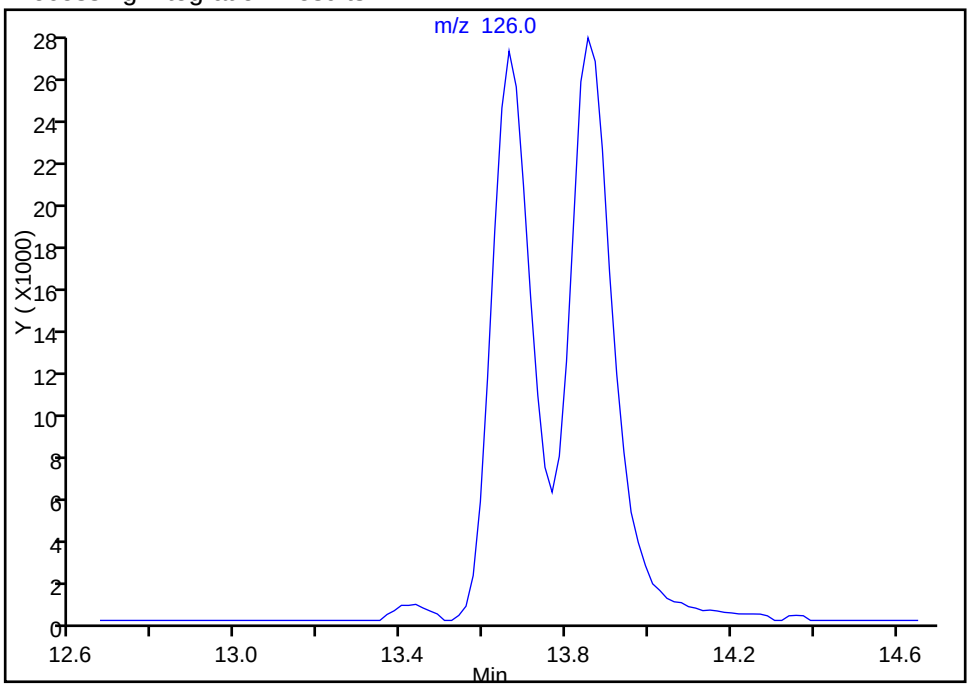
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7187.D				
Injection Date:	06-May-2015 07:01:30	Instrument ID:	VMS_Z		
Lims ID:	ccvc				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	30	Worklist Smp#:	33
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

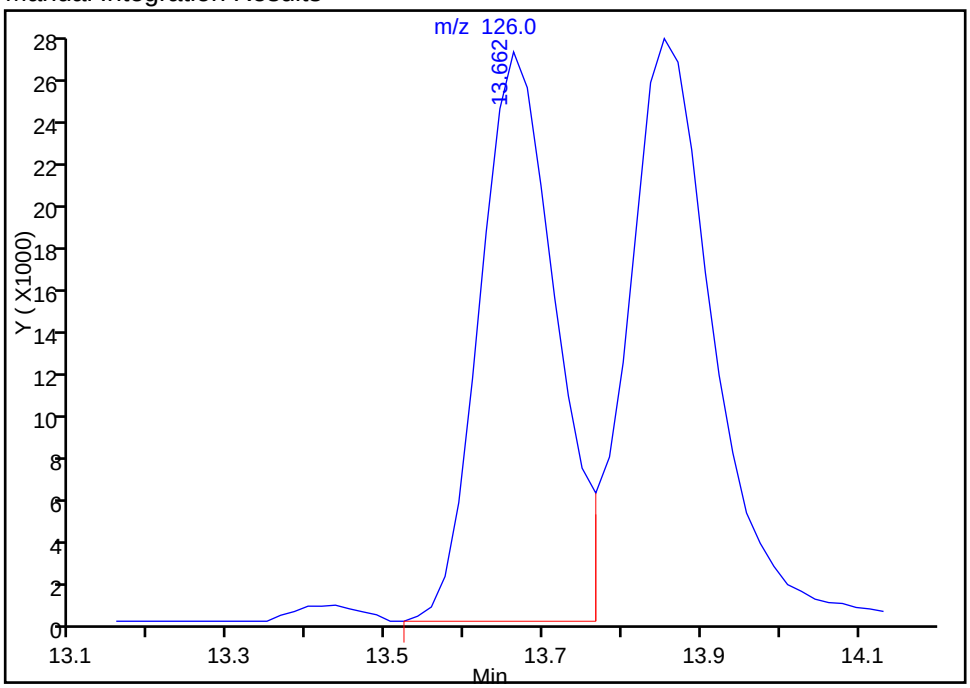
Processing Integration Results

Not Detected
Expected RT: 13.66



Manual Integration Results

RT: 13.66
Area: 182862
Amount: 10.045629
Amount Units: ug/l



Reviewer: moanm, 06-May-2015 07:53:48
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276091/33 Calibration Date: 05/06/2015 07:01

Instrument ID: VMS_Z Calib Start Date: 05/02/2015 07:56

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/02/2015 09:27

Lab File ID: Z7187.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.5562	0.5555		10.5	10.5	-0.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2317	0.2572		11.7	10.5	11.0	50.0
Toluene-d8 (Surr)	Ave	4.678	4.733		10.6	10.5	1.2	50.0
4-Bromofluorobenzene (Surr)	Lin2		1.345		10.3	10.5	-1.8	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7187.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 06-May-2015 07:01:30 ALS Bottle#: 30 Worklist Smp#: 33
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:19:19 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:19:19

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	3.483	3.483	0.000	89	145158	250.0	250.0	
* 2 Fluorobenzene	96	6.389	6.389	0.000	98	764985	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.017	11.017	0.000	89	172674	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.124	15.124	0.000	84	332657	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.466	5.466	0.000	93	356922	10.5	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.901	5.901	0.000	95	165296	10.5	11.7	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	686556	10.5	10.6	
$ 11 4-Bromofluorobenzene (Surr	95	13.053	13.053	0.000	87	375879	10.5	10.3	
27 Dichlorodifluoromethane	85	1.917	1.917	0.000	98	278606	10.0	8.74	
30 Chloromethane	50	2.004	2.004	0.000	100	171831	10.0	8.57	
31 Butadiene	54	2.091	2.091	0.000	93	110031	NC	NC	
32 Vinyl chloride	62	2.108	2.108	0.000	98	155660	10.0	8.14	
35 Bromomethane	94	2.352	2.352	0.000	91	168346	10.0	8.59	
36 Chloroethane	64	2.404	2.404	0.000	99	109016	10.0	8.12	
37 Dichlorofluoromethane	67	2.560	2.560	0.000	98	413619	10.0	8.51	
38 Trichlorofluoromethane	101	2.613	2.613	0.000	100	351854	10.0	7.82	
40 Ethyl ether	59	2.804	2.804	0.000	95	92502	10.0	10.7	
44 Acrolein	56	2.908	2.908	0.000	100	46245	100.0	99.3	
45 1,1-Dichloroethene	96	3.048	3.048	0.000	97	195442	10.0	9.76	
48 Acetone	43	3.065	3.065	0.000	98	42244	40.0	36.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.082	3.082	0.000	97	304478	10.0	9.76	
49 Iodomethane	142	3.187	3.187	0.000	99	510761	10.0	10.0	
50 Carbon disulfide	76	3.274	3.274	0.000	99	711973	10.0	9.62	
52 3-Chloro-1-propene	41	3.361	3.361	0.000	84	330248	10.0	9.52	
51 Methyl acetate	43	3.361	3.361	0.000	73	244777	50.0	53.7	
54 Methylene Chloride	84	3.465	3.465	0.000	95	186483	10.0	11.1	
55 2-Methyl-2-propanol	59	3.570	3.570	0.000	91	58901	100.0	96.4	M
58 Acrylonitrile	53	3.691	3.691	0.000	98	151259	100.0	101.3	
57 trans-1,2-Dichloroethene	96	3.761	3.761	0.000	97	211831	10.0	9.90	
56 Methyl tert-butyl ether	73	3.778	3.778	0.000	96	332211	10.0	10.9	
59 Hexane	57	4.057	4.057	0.000	95	295617	10.0	9.74	

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	4.196	4.196	0.000	96	385377	10.0	9.61	
61 Vinyl acetate	43	4.231	4.231	0.000	96	372709	20.0	17.2	
67 2-Butanone (MEK)	43	4.875	4.875	0.000	44	93367	40.0	37.2	
65 cis-1,2-Dichloroethene	96	4.875	4.875	0.000	85	217725	10.0	10.6	
66 2,2-Dichloropropane	77	4.909	4.909	0.000	89	357426	10.0	9.36	
70 sec-Butyl Alcohol	45	5.101	5.101	0.000	96	153145	300.0	315.3	
71 Chlorobromomethane	128	5.171	5.171	0.000	96	102771	10.0	10.4	
74 Chloroform	83	5.257	5.257	0.000	96	403521	10.0	10.2	
72 Tetrahydrofuran	42	5.275	5.275	0.000	37	33032	20.0	22.1	
75 1,1,1-Trichloroethane	97	5.553	5.553	0.000	98	375002	10.0	9.63	
76 Cyclohexane	56	5.640	5.640	0.000	93	342680	10.0	9.74	
78 1,1-Dichloropropene	75	5.745	5.745	0.000	96	309048	10.0	9.27	
77 Carbon tetrachloride	117	5.780	5.780	0.000	97	352044	10.0	10.1	
80 Isobutyl alcohol	41	5.867	5.867	0.000	94	43413	250.0	251.1	
82 1,2-Dichloroethane	62	6.006	6.006	0.000	93	164139	10.0	10.8	
81 Benzene	78	6.023	6.023	0.000	95	612234	10.0	10.0	
84 n-Heptane	43	6.406	6.406	0.000	94	390136	10.0	9.61	
85 Trichloroethene	95	6.911	6.911	0.000	97	270297	10.0	10.1	
89 2-Pentanone	43	7.137	7.137	0.000	97	235988	40.0	46.9	
90 1,2-Dichloropropane	63	7.206	7.206	0.000	92	216266	10.0	10.1	
87 Methylcyclohexane	55	7.224	7.224	0.000	90	290006	10.0	9.51	
92 Dibromomethane	93	7.363	7.363	0.000	97	127049	10.0	10.4	
94 Dichlorobromomethane	83	7.607	7.607	0.000	99	348389	10.0	11.5	
96 2-Chloroethyl vinyl ether	63	8.059	8.059	0.000	92	72178	10.0	10.2	
97 cis-1,3-Dichloropropene	75	8.268	8.268	0.000	95	285071	10.0	10.4	
98 4-Methyl-2-pentanone (MIBK	43	8.529	8.529	0.000	97	304422	40.0	38.9	
99 Toluene	91	8.807	8.807	0.000	99	657902	10.0	9.73	
100 trans-1,3-Dichloropropene	75	9.120	9.120	0.000	94	199169	10.0	10.2	
101 Ethyl methacrylate	69	9.329	9.329	0.000	91	156660	10.0	11.2	
102 1,1,2-Trichloroethane	97	9.416	9.416	0.000	90	126034	10.0	10.9	
104 1,3-Dichloropropane	76	9.677	9.677	0.000	92	211474	10.0	10.9	
103 Tetrachloroethene	164	9.695	9.695	0.000	98	237946	10.0	10.1	
105 2-Hexanone	43	9.851	9.851	0.000	98	195621	40.0	39.4	
107 Chlorodibromomethane	129	10.060	10.060	0.000	90	226133	10.0	12.3	
109 Ethylene Dibromide	107	10.234	10.234	0.000	99	161087	10.0	10.9	
110 1-Chlorohexane	91	11.069	11.069	0.000	81	309256	10.0	9.33	
111 Chlorobenzene	112	11.069	11.069	0.000	88	457996	10.0	10.5	
113 1,1,1,2-Tetrachloroethane	131	11.209	11.209	0.000	94	233932	10.0	11.1	
112 Ethylbenzene	106	11.278	11.278	0.000	99	218594	10.0	10.1	
114 m-Xylene & p-Xylene	106	11.487	11.487	0.000	99	290752	10.0	9.88	
115 o-Xylene	106	12.148	12.148	0.000	98	264913	10.0	10.6	
116 Styrene	104	12.166	12.166	0.000	94	436964	10.0	10.5	
117 Bromoform	173	12.461	12.461	0.000	96	114425	10.0	11.5	
118 Isopropylbenzene	105	12.809	12.809	0.000	96	810871	10.0	9.46	
119 Cyclohexanone	55	12.931	12.931	0.000	92	80413	400.0	429.6	
121 Bromobenzene	156	13.297	13.297	0.000	95	231036	10.0	10.3	
122 1,1,2,2-Tetrachloroethane	83	13.314	13.314	0.000	95	165865	10.0	10.6	
124 1,2,3-Trichloropropane	110	13.366	13.366	0.000	82	37123	10.0	10.6	
125 trans-1,4-Dichloro-2-buten	53	13.418	13.418	0.000	88	34406	10.0	9.55	
123 N-Propylbenzene	120	13.540	13.540	0.000	99	210455	10.0	9.57	
126 2-Chlorotoluene	126	13.662	13.662	0.000	87	182862	10.0	10.0	a
128 4-Chlorotoluene	126	13.853	13.853	0.000	98	214408	10.0	10.1	

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	13.871	13.871	0.000	95	623032	10.0	9.45	
129 tert-Butylbenzene	119	14.445	14.445	0.000	93	707828	10.0	9.43	
130 1,2,4-Trimethylbenzene	105	14.532	14.532	0.000	96	615807	10.0	9.52	
131 sec-Butylbenzene	134	14.845	14.845	0.000	94	202070	10.0	9.76	
132 1,3-Dichlorobenzene	146	15.002	15.002	0.000	97	411186	10.0	10.5	
133 4-Isopropyltoluene	119	15.124	15.124	0.000	95	812677	10.0	9.59	
134 1,4-Dichlorobenzene	146	15.158	15.158	0.000	93	464030	10.0	9.93	
138 1,2-Dichlorobenzene	146	15.802	15.802	0.000	97	354045	10.0	10.5	
137 n-Butylbenzene	91	15.855	15.855	0.000	97	759223	10.0	9.39	
139 1,2-Dibromo-3-Chloropropan	157	16.933	16.933	0.000	87	26400	10.0	11.9	
141 1,2,4-Trichlorobenzene	180	17.873	17.873	0.000	95	224312	10.0	9.83	
142 Hexachlorobutadiene	225	18.064	18.064	0.000	97	219557	10.0	9.53	
143 Naphthalene	128	18.099	18.099	0.000	97	227753	10.0	10.1	
144 1,2,3-Trichlorobenzene	180	18.343	18.343	0.000	96	176228	10.0	9.94	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.6	
S 150 Xylenes, Total (URS)	1				0		20.0	20.4	
S 151 Total BTEX	1				0			50.3	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.6	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 146 Xylenes, Total	106				0		20.0	20.4	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.5	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

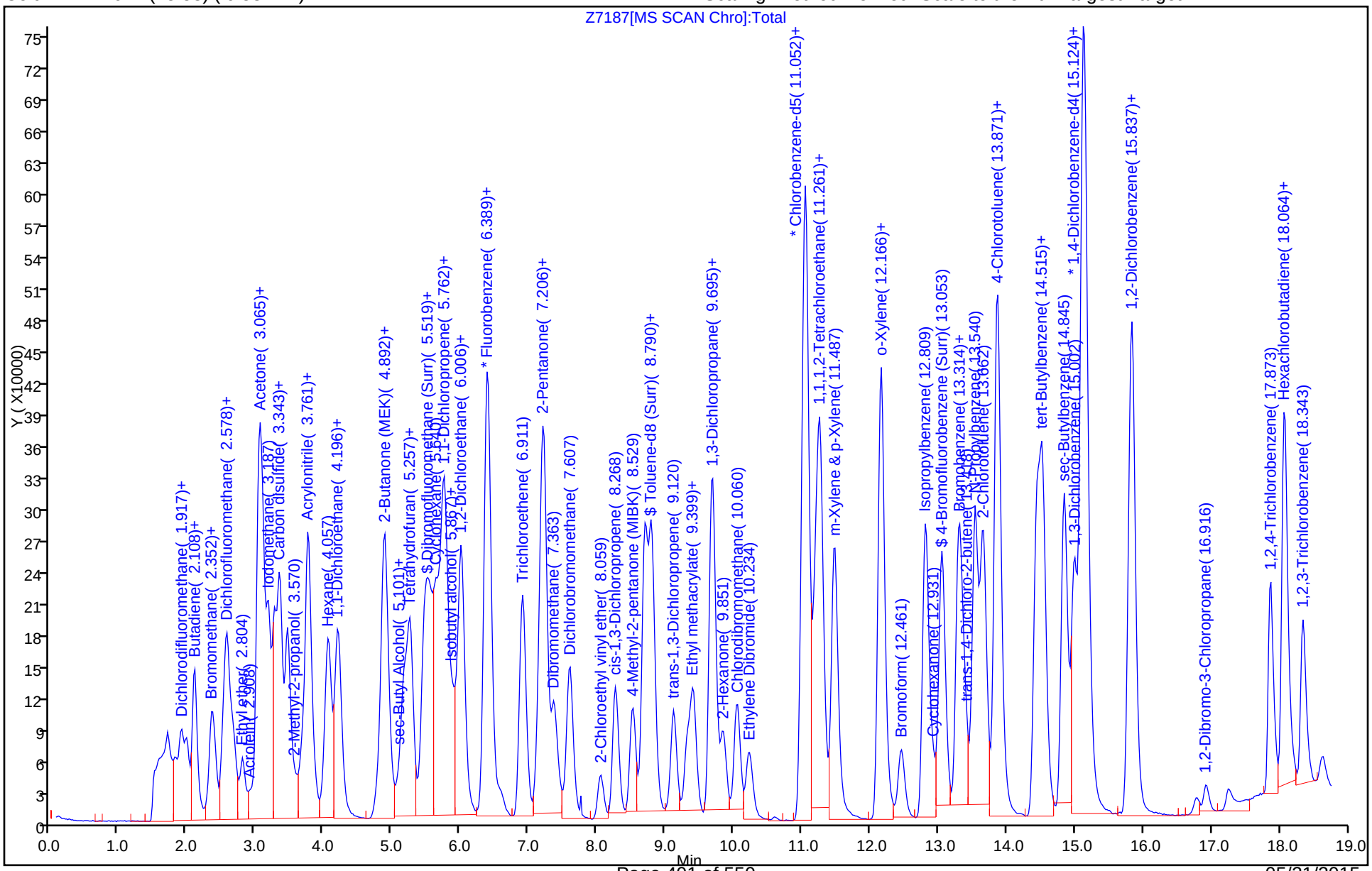
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:19:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7187.D				
Injection Date:	06-May-2015 07:01:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	ccvc			Worklist Smp#:	33
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
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.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/2 Calibration Date: 05/07/2015 20:29

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: Z7283.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\20150507-34807.b\Z7283.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-May-2015 20:29:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv m
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:53 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:53

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	89	150683	250.0	250.0	
* 2 Fluorobenzene	96	6.394	6.394	0.000	98	816105	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.040	11.040	0.000	88	183849	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.146	15.146	0.000	95	348127	12.5	12.5	
27 Dichlorodifluoromethane	85	1.904	1.904	0.000	98	344456	10.0	10.1	
30 Chloromethane	50	1.974	1.974	0.000	100	207196	10.0	9.69	M
31 Butadiene	54	2.061	2.061	0.000	94	139503	NC	NC	
32 Vinyl chloride	62	2.096	2.096	0.000	98	190472	10.0	9.33	
35 Bromomethane	94	2.322	2.322	0.000	91	201576	10.0	9.64	
36 Chloroethane	64	2.374	2.374	0.000	98	132369	10.0	9.24	
37 Dichlorofluoromethane	67	2.531	2.531	0.000	98	529683	10.0	10.2	
38 Trichlorofluoromethane	101	2.583	2.583	0.000	100	466785	10.0	9.73	
40 Ethyl ether	59	2.792	2.792	0.000	93	100461	10.0	10.9	
44 Acrolein	56	2.896	2.896	0.000	99	52479	100.0	105.6	
45 1,1-Dichloroethene	96	3.018	3.018	0.000	98	230361	10.0	10.8	
48 Acetone	43	3.035	3.035	0.000	90	45146	40.0	36.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.088	0.000	98	359877	10.0	10.8	
49 Iodomethane	142	3.175	3.175	0.000	98	591681	10.0	10.9	
50 Carbon disulfide	76	3.262	3.262	0.000	99	819630	10.0	10.4	
52 3-Chloro-1-propene	41	3.331	3.331	0.000	86	370466	10.0	10.0	
51 Methyl acetate	43	3.349	3.349	0.000	67	245709	50.0	50.5	
54 Methylene Chloride	84	3.453	3.453	0.000	96	208567	10.0	11.6	
55 2-Methyl-2-propanol	59	3.557	3.557	0.000	91	64707	100.0	103.0	M
58 Acrylonitrile	53	3.679	3.679	0.000	99	160904	100.0	101.1	
57 trans-1,2-Dichloroethene	96	3.749	3.749	0.000	99	246020	10.0	10.8	
56 Methyl tert-butyl ether	73	3.766	3.766	0.000	95	349680	10.0	10.8	
59 Hexane	57	4.062	4.062	0.000	95	347639	10.0	10.8	
62 1,1-Dichloroethane	63	4.184	4.184	0.000	96	429335	10.0	10.0	
61 Vinyl acetate	43	4.219	4.219	0.000	96	470953	20.0	20.4	
67 2-Butanone (MEK)	43	4.862	4.862	0.000	42	105788	40.0	39.5	
65 cis-1,2-Dichloroethene	96	4.880	4.880	0.000	85	233357	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	4.915	4.915	0.000	88	418654	10.0	10.4	
70 sec-Butyl Alcohol	45	5.106	5.106	0.000	97	150902	300.0	299.3	
71 Chlorobromomethane	128	5.176	5.176	0.000	96	110636	10.0	10.5	
74 Chloroform	83	5.263	5.263	0.000	95	438496	10.0	10.4	
72 Tetrahydrofuran	42	5.263	5.263	0.000	36	32876	20.0	20.6	
75 1,1,1-Trichloroethane	97	5.559	5.559	0.000	98	416741	10.0	10.0	
76 Cyclohexane	56	5.646	5.646	0.000	93	387090	10.0	10.3	
78 1,1-Dichloropropene	75	5.750	5.750	0.000	96	351576	10.0	9.89	
77 Carbon tetrachloride	117	5.785	5.785	0.000	97	386005	10.0	10.4	
80 Isobutyl alcohol	41	5.854	5.854	0.000	40	48132	250.0	268.2	
82 1,2-Dichloroethane	62	6.011	6.011	0.000	92	165268	10.0	10.2	
81 Benzene	78	6.011	6.011	0.000	95	679230	10.0	10.4	
84 n-Heptane	43	6.411	6.411	0.000	93	438413	10.0	10.1	
85 Trichloroethene	95	6.916	6.916	0.000	97	287564	10.0	10.1	
89 2-Pentanone	43	7.159	7.159	0.000	99	234171	40.0	43.6	
90 1,2-Dichloropropane	63	7.212	7.212	0.000	92	225932	10.0	9.91	
87 Methylcyclohexane	55	7.229	7.229	0.000	90	321414	10.0	9.88	
92 Dibromomethane	93	7.386	7.386	0.000	96	130449	10.0	10.0	
94 Dichlorobromomethane	83	7.612	7.612	0.000	99	365528	10.0	11.4	
96 2-Chloroethyl vinyl ether	63	8.064	8.064	0.000	92	70729	10.0	9.33	
97 cis-1,3-Dichloropropene	75	8.290	8.290	0.000	96	304298	10.0	10.4	
98 4-Methyl-2-pentanone (MIBK	43	8.534	8.534	0.000	97	333966	40.0	40.0	
99 Toluene	91	8.812	8.812	0.000	99	738163	10.0	10.2	
100 trans-1,3-Dichloropropene	75	9.143	9.143	0.000	94	209758	10.0	10.0	
101 Ethyl methacrylate	69	9.334	9.334	0.000	90	156296	10.0	10.5	
102 1,1,2-Trichloroethane	97	9.439	9.439	0.000	90	129750	10.0	10.5	
104 1,3-Dichloropropane	76	9.700	9.700	0.000	92	213448	10.0	10.4	
103 Tetrachloroethene	164	9.717	9.717	0.000	99	278299	10.0	11.1	
105 2-Hexanone	43	9.874	9.874	0.000	96	197511	40.0	37.4	
107 Chlorodibromomethane	129	10.083	10.083	0.000	90	233149	10.0	11.9	
109 Ethylene Dibromide	107	10.239	10.239	0.000	98	166260	10.0	10.6	
110 1-Chlorohexane	91	11.092	11.092	0.000	83	357742	10.0	10.1	
111 Chlorobenzene	112	11.092	11.092	0.000	92	491445	10.0	10.5	
113 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	94	244241	10.0	10.9	
112 Ethylbenzene	106	11.301	11.301	0.000	99	244154	10.0	10.6	
114 m-Xylene & p-Xylene	106	11.510	11.510	0.000	99	333566	10.0	10.7	
115 o-Xylene	106	12.171	12.171	0.000	97	284505	10.0	10.6	
116 Styrene	104	12.206	12.206	0.000	95	473711	10.0	10.7	
117 Bromoform	173	12.484	12.484	0.000	96	118968	10.0	11.2	
118 Isopropylbenzene	105	12.832	12.832	0.000	96	910283	10.0	10.2	
119 Cyclohexanone	55	12.971	12.971	0.000	91	80246	400.0	402.6	
121 Bromobenzene	156	13.319	13.319	0.000	94	256656	10.0	11.0	
122 1,1,2,2-Tetrachloroethane	83	13.337	13.337	0.000	95	173358	10.0	10.6	
124 1,2,3-Trichloropropane	110	13.389	13.389	0.000	80	36405	10.0	9.93	
125 trans-1,4-Dichloro-2-buten	53	13.441	13.441	0.000	67	35435	10.0	9.40	
123 N-Propylbenzene	120	13.563	13.563	0.000	99	236400	10.0	10.3	
126 2-Chlorotoluene	126	13.685	13.685	0.000	88	196136	10.0	10.3	a
128 4-Chlorotoluene	126	13.876	13.876	0.000	98	226571	10.0	10.2	
127 1,3,5-Trimethylbenzene	105	13.893	13.893	0.000	95	703560	10.0	10.2	
129 tert-Butylbenzene	119	14.468	14.468	0.000	93	786995	10.0	10.0	
130 1,2,4-Trimethylbenzene	105	14.555	14.555	0.000	96	677024	10.0	10.0	
131 sec-Butylbenzene	134	14.868	14.868	0.000	94	225094	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
132 1,3-Dichlorobenzene	146	15.024	15.024	0.000	97	445057	10.0	10.9	
133 4-Isopropyltoluene	119	15.146	15.146	0.000	96	880532	10.0	9.93	
134 1,4-Dichlorobenzene	146	15.181	15.181	0.000	95	519673	10.0	10.6	
138 1,2-Dichlorobenzene	146	15.825	15.825	0.000	98	373763	10.0	10.6	
137 n-Butylbenzene	91	15.860	15.860	0.000	97	845673	10.0	10.0	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.939	0.000	90	27340	10.0	11.7	
141 1,2,4-Trichlorobenzene	180	17.878	17.878	0.000	95	247213	10.0	10.3	
142 Hexachlorobutadiene	225	18.087	18.087	0.000	96	260763	10.0	10.8	
143 Naphthalene	128	18.122	18.122	0.000	97	222884	10.0	9.47	
144 1,2,3-Trichlorobenzene	180	18.365	18.365	0.000	96	181416	10.0	9.77	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		20.0	21.4	
S 146 Xylenes, Total	106				0		20.0	21.3	
S 147 1,2-Dichloroethene, Total	96				0		20.0	21.4	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.5	
S 149 Trihalomethanes, Total	1				0		40.0	44.9	
S 150 Xylenes, Total (URS)	1				0		20.0	21.3	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

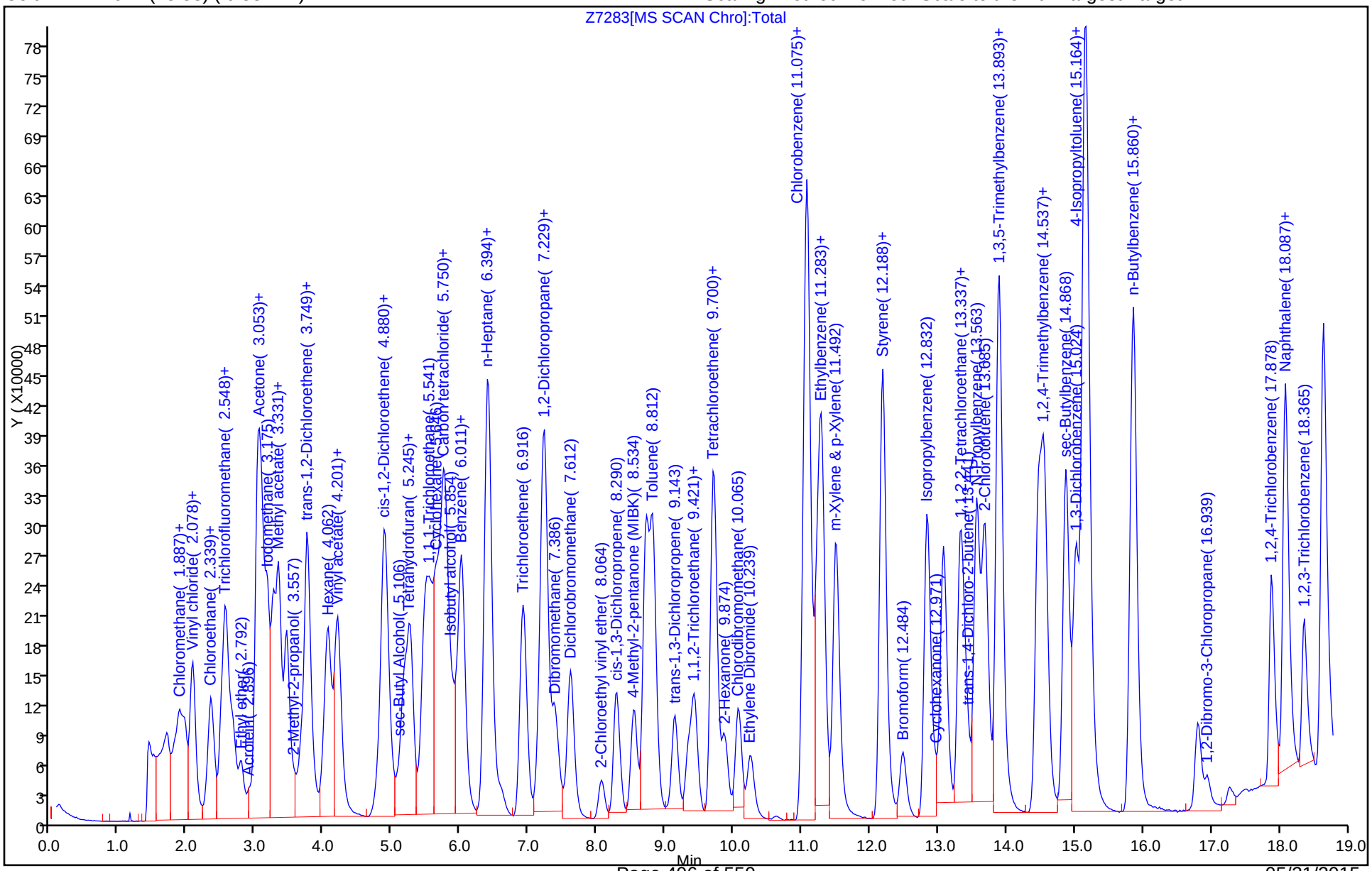
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL

Report Date: 08-May-2015 16:29:53 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7283.D				
Injection Date:	07-May-2015 20:29:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
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.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/2 Calibration Date: 05/07/2015 20:29

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7283.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	0.5208	0.5276		10.1	10.0	1.3	20.0
Chloromethane	Ave	0.3275	0.3174	0.1000	9.69	10.0	-3.1	20.0
Vinyl chloride	Ave	0.3126	0.2917		9.33	10.0	-6.7	20.0
Bromomethane	Ave	0.3202	0.3088		9.64	10.0	-3.6	20.0
Chloroethane	Ave	0.2194	0.2028		9.24	10.0	-7.6	20.0
Dichlorofluoromethane	Ave	0.7941	0.8113		10.2	10.0	2.2	20.0
Trichlorofluoromethane	Ave	0.7348	0.7150		9.73	10.0	-2.7	20.0
Ethyl ether	Lin2		0.1539		10.9	10.0	8.6	20.0
Acrolein	Ave	0.0076	0.0080		106	100	5.6	20.0
1,1-Dichloroethene	Ave	0.3274	0.3528		10.8	10.0	7.8	20.0
Acetone	Ave	0.0188	0.0173		36.7	40.0	-8.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5098	0.5512		10.8	10.0	8.1	20.0
Iodomethane	Ave	0.8339	0.9063		10.9	10.0	8.7	20.0
Carbon disulfide	Ave	1.210	1.255		10.4	10.0	3.8	20.0
3-Chloro-1-propene	Ave	0.5668	0.5674		10.0	10.0	0.1	20.0
Methyl acetate	Ave	0.0745	0.0753		50.5	50.0	1.0	20.0
Methylene Chloride	Lin1		0.3195		11.6	10.0	16.4	20.0
tert-Butyl alcohol	Lin2		1.074		103	100	3.0	20.0
Acrylonitrile	Ave	0.0244	0.0247		101	100	1.1	20.0
trans-1,2-Dichloroethene	Ave	0.3497	0.3768		10.8	10.0	7.8	20.0
Methyl tert-butyl ether	Ave	0.4977	0.5356		10.8	10.0	7.6	20.0
Hexane	Ave	2.198	2.364		10.8	10.0	7.5	20.0
1,1-Dichloroethane	Ave	0.6555	0.6576	0.1000	10.0	10.0	0.3	20.0
Vinyl acetate	Ave	0.3532	0.3607		20.4	20.0	2.1	20.0
2-Butanone (MEK)	Ave	0.0410	0.0405		39.5	40.0	-1.2	20.0
cis-1,2-Dichloroethene	Ave	0.3368	0.3574		10.6	10.0	6.1	20.0
2,2-Dichloropropane	Lin2		0.6412		10.4	10.0	3.8	20.0
sec-Butyl Alcohol	Ave	0.8366	0.8345		299	300	-0.2	20.0
Bromochloromethane	Ave	0.1617	0.1695		10.5	10.0	4.8	20.0
Chloroform	Ave	0.6444	0.6716		10.4	10.0	4.2	20.0
Tetrahydrofuran	Ave	0.0244	0.0252		20.6	20.0	3.0	20.0
1,1,1-Trichloroethane	Ave	0.6363	0.6383		10.0	10.0	0.3	20.0
Cyclohexane	Ave	0.5749	0.5929		10.3	10.0	3.1	20.0
1,1-Dichloropropene	Ave	0.5445	0.5385		9.89	10.0	-1.1	20.0
Carbon tetrachloride	Ave	0.5677	0.5912		10.4	10.0	4.2	20.0
Isobutyl alcohol	Ave	0.2978	0.3194		268	250	7.3	20.0
1,2-Dichloroethane	Ave	0.2487	0.2531		10.2	10.0	1.8	20.0
Benzene	Ave	0.998	1.040		10.4	10.0	4.3	20.0
Trichloroethene	Ave	0.4375	0.4405		10.1	10.0	0.7	20.0
2-Pentanone	Ave	0.0823	0.0897		43.6	40.0	9.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/2 Calibration Date: 05/07/2015 20:29

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7283.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	0.3492	0.3461		9.91	10.0	-0.9	20.0
Methylcyclohexane	Ave	0.4983	0.4923		9.88	10.0	-1.2	20.0
Dibromomethane	Ave	0.1999	0.1998		9.99	10.0	-0.0	20.0
Bromodichloromethane	Ave	0.4932	0.5599		11.4	10.0	13.5	20.0
2-Chloroethyl vinyl ether	Ave	0.1161	0.1083		9.33	10.0	-6.7	20.0
cis-1,3-Dichloropropene	Ave	1.984	2.069		10.4	10.0	4.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1278	0.1279		40.0	40.0	0.0	20.0
Toluene	Ave	1.104	1.131		10.2	10.0	2.4	20.0
trans-1,3-Dichloropropene	Ave	0.3197	0.3213		10.0	10.0	0.5	20.0
Ethyl methacrylate	Ave	1.011	1.063		10.5	10.0	5.1	20.0
1,1,2-Trichloroethane	Lin2		0.1987		10.5	10.0	5.5	20.0
1,3-Dichloropropane	Ave	1.400	1.451		10.4	10.0	3.6	20.0
Tetrachloroethene	Ave	1.702	1.892		11.1	10.0	11.2	20.0
2-Hexanone	Ave	0.3594	0.3357		37.4	40.0	-6.6	20.0
Chlorodibromomethane	Ave	1.328	1.585		11.9	10.0	19.4	20.0
1,2-Dibromoethane	Ave	1.068	1.130		10.6	10.0	5.8	20.0
1-Chlorohexane	Ave	2.400	2.432		10.1	10.0	1.3	20.0
Chlorobenzene	Ave	3.168	3.341	0.3000	10.5	10.0	5.5	20.0
1,1,1,2-Tetrachloroethane	Ave	1.527	1.661		10.9	10.0	8.8	20.0
Ethylbenzene	Ave	1.568	1.660		10.6	10.0	5.9	20.0
m-Xylene & p-Xylene	Ave	2.129	2.268		10.7	10.0	6.5	20.0
o-Xylene	Ave	1.817	1.934		10.6	10.0	6.5	20.0
Styrene	Ave	3.016	3.221		10.7	10.0	6.8	20.0
Bromoform	Lin1		0.8089	0.1000	11.2	10.0	12.0	20.0
Isopropylbenzene	Ave	3.220	3.269		10.2	10.0	1.5	20.0
Cyclohexanone	Ave	0.0136	0.0136		403	400	0.7	20.0
Bromobenzene	Ave	0.8391	0.9216		11.0	10.0	9.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5889	0.6225	0.3000	10.6	10.0	5.7	20.0
1,2,3-Trichloropropane	Ave	0.1316	0.1307		9.93	10.0	-0.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1353	0.1272		9.40	10.0	-6.0	20.0
N-Propylbenzene	Ave	0.8267	0.8488		10.3	10.0	2.7	20.0
2-Chlorotoluene	Ave	0.6840	0.7043		10.3	10.0	3.0	20.0
4-Chlorotoluene	Ave	0.7988	0.8135		10.2	10.0	1.8	20.0
1,3,5-Trimethylbenzene	Ave	2.478	2.526		10.2	10.0	1.9	20.0
tert-Butylbenzene	Ave	2.819	2.826		10.0	10.0	0.2	20.0
1,2,4-Trimethylbenzene	Ave	2.431	2.431		10.0	10.0	0.0	20.0
sec-Butylbenzene	Ave	0.7779	0.8082		10.4	10.0	3.9	20.0
1,3-Dichlorobenzene	Ave	1.466	1.598		10.9	10.0	9.0	20.0
p-Isopropyltoluene	Ave	3.185	3.162		9.93	10.0	-0.7	20.0
1,4-Dichlorobenzene	Ave	1.756	1.866		10.6	10.0	6.3	20.0
1,2-Dichlorobenzene	Ave	1.272	1.342		10.6	10.0	5.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/2 Calibration Date: 05/07/2015 20:29

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7283.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	3.039	3.037		9.99	10.0	-0.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0837	0.0982		11.7	10.0	17.3	20.0
1,2,4-Trichlorobenzene	Ave	0.8579	0.8877		10.3	10.0	3.5	20.0
Hexachlorobutadiene	Ave	0.8657	0.9363		10.8	10.0	8.2	20.0
Naphthalene	Ave	0.8451	0.8003		9.47	10.0	-5.3	20.0
1,2,3-Trichlorobenzene	Ave	0.6665	0.6514		9.77	10.0	-2.3	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7283.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-May-2015 20:29:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv m
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub65

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:53 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:53

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	89	150683	250.0	250.0	
* 2 Fluorobenzene	96	6.394	6.394	0.000	98	816105	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.040	11.040	0.000	88	183849	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.146	15.146	0.000	95	348127	12.5	12.5	
27 Dichlorodifluoromethane	85	1.904	1.904	0.000	98	344456	10.0	10.1	
30 Chloromethane	50	1.974	1.974	0.000	100	207196	10.0	9.69	M
31 Butadiene	54	2.061	2.061	0.000	94	139503	NC	NC	
32 Vinyl chloride	62	2.096	2.096	0.000	98	190472	10.0	9.33	
35 Bromomethane	94	2.322	2.322	0.000	91	201576	10.0	9.64	
36 Chloroethane	64	2.374	2.374	0.000	98	132369	10.0	9.24	
37 Dichlorofluoromethane	67	2.531	2.531	0.000	98	529683	10.0	10.2	
38 Trichlorofluoromethane	101	2.583	2.583	0.000	100	466785	10.0	9.73	
40 Ethyl ether	59	2.792	2.792	0.000	93	100461	10.0	10.9	
44 Acrolein	56	2.896	2.896	0.000	99	52479	100.0	105.6	
45 1,1-Dichloroethene	96	3.018	3.018	0.000	98	230361	10.0	10.8	
48 Acetone	43	3.035	3.035	0.000	90	45146	40.0	36.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.088	0.000	98	359877	10.0	10.8	
49 Iodomethane	142	3.175	3.175	0.000	98	591681	10.0	10.9	
50 Carbon disulfide	76	3.262	3.262	0.000	99	819630	10.0	10.4	
52 3-Chloro-1-propene	41	3.331	3.331	0.000	86	370466	10.0	10.0	
51 Methyl acetate	43	3.349	3.349	0.000	67	245709	50.0	50.5	
54 Methylene Chloride	84	3.453	3.453	0.000	96	208567	10.0	11.6	
55 2-Methyl-2-propanol	59	3.557	3.557	0.000	91	64707	100.0	103.0	M
58 Acrylonitrile	53	3.679	3.679	0.000	99	160904	100.0	101.1	
57 trans-1,2-Dichloroethene	96	3.749	3.749	0.000	99	246020	10.0	10.8	
56 Methyl tert-butyl ether	73	3.766	3.766	0.000	95	349680	10.0	10.8	
59 Hexane	57	4.062	4.062	0.000	95	347639	10.0	10.8	
62 1,1-Dichloroethane	63	4.184	4.184	0.000	96	429335	10.0	10.0	
61 Vinyl acetate	43	4.219	4.219	0.000	96	470953	20.0	20.4	
67 2-Butanone (MEK)	43	4.862	4.862	0.000	42	105788	40.0	39.5	
65 cis-1,2-Dichloroethene	96	4.880	4.880	0.000	85	233357	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
66 2,2-Dichloropropane	77	4.915	4.915	0.000	88	418654	10.0	10.4	
70 sec-Butyl Alcohol	45	5.106	5.106	0.000	97	150902	300.0	299.3	
71 Chlorobromomethane	128	5.176	5.176	0.000	96	110636	10.0	10.5	
74 Chloroform	83	5.263	5.263	0.000	95	438496	10.0	10.4	
72 Tetrahydrofuran	42	5.263	5.263	0.000	36	32876	20.0	20.6	
75 1,1,1-Trichloroethane	97	5.559	5.559	0.000	98	416741	10.0	10.0	
76 Cyclohexane	56	5.646	5.646	0.000	93	387090	10.0	10.3	
78 1,1-Dichloropropene	75	5.750	5.750	0.000	96	351576	10.0	9.89	
77 Carbon tetrachloride	117	5.785	5.785	0.000	97	386005	10.0	10.4	
80 Isobutyl alcohol	41	5.854	5.854	0.000	40	48132	250.0	268.2	
82 1,2-Dichloroethane	62	6.011	6.011	0.000	92	165268	10.0	10.2	
81 Benzene	78	6.011	6.011	0.000	95	679230	10.0	10.4	
84 n-Heptane	43	6.411	6.411	0.000	93	438413	10.0	10.1	
85 Trichloroethene	95	6.916	6.916	0.000	97	287564	10.0	10.1	
89 2-Pentanone	43	7.159	7.159	0.000	99	234171	40.0	43.6	
90 1,2-Dichloropropane	63	7.212	7.212	0.000	92	225932	10.0	9.91	
87 Methylcyclohexane	55	7.229	7.229	0.000	90	321414	10.0	9.88	
92 Dibromomethane	93	7.386	7.386	0.000	96	130449	10.0	10.0	
94 Dichlorobromomethane	83	7.612	7.612	0.000	99	365528	10.0	11.4	
96 2-Chloroethyl vinyl ether	63	8.064	8.064	0.000	92	70729	10.0	9.33	
97 cis-1,3-Dichloropropene	75	8.290	8.290	0.000	96	304298	10.0	10.4	
98 4-Methyl-2-pentanone (MIBK	43	8.534	8.534	0.000	97	333966	40.0	40.0	
99 Toluene	91	8.812	8.812	0.000	99	738163	10.0	10.2	
100 trans-1,3-Dichloropropene	75	9.143	9.143	0.000	94	209758	10.0	10.0	
101 Ethyl methacrylate	69	9.334	9.334	0.000	90	156296	10.0	10.5	
102 1,1,2-Trichloroethane	97	9.439	9.439	0.000	90	129750	10.0	10.5	
104 1,3-Dichloropropane	76	9.700	9.700	0.000	92	213448	10.0	10.4	
103 Tetrachloroethene	164	9.717	9.717	0.000	99	278299	10.0	11.1	
105 2-Hexanone	43	9.874	9.874	0.000	96	197511	40.0	37.4	
107 Chlorodibromomethane	129	10.083	10.083	0.000	90	233149	10.0	11.9	
109 Ethylene Dibromide	107	10.239	10.239	0.000	98	166260	10.0	10.6	
110 1-Chlorohexane	91	11.092	11.092	0.000	83	357742	10.0	10.1	
111 Chlorobenzene	112	11.092	11.092	0.000	92	491445	10.0	10.5	
113 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	94	244241	10.0	10.9	
112 Ethylbenzene	106	11.301	11.301	0.000	99	244154	10.0	10.6	
114 m-Xylene & p-Xylene	106	11.510	11.510	0.000	99	333566	10.0	10.7	
115 o-Xylene	106	12.171	12.171	0.000	97	284505	10.0	10.6	
116 Styrene	104	12.206	12.206	0.000	95	473711	10.0	10.7	
117 Bromoform	173	12.484	12.484	0.000	96	118968	10.0	11.2	
118 Isopropylbenzene	105	12.832	12.832	0.000	96	910283	10.0	10.2	
119 Cyclohexanone	55	12.971	12.971	0.000	91	80246	400.0	402.6	
121 Bromobenzene	156	13.319	13.319	0.000	94	256656	10.0	11.0	
122 1,1,2,2-Tetrachloroethane	83	13.337	13.337	0.000	95	173358	10.0	10.6	
124 1,2,3-Trichloropropane	110	13.389	13.389	0.000	80	36405	10.0	9.93	
125 trans-1,4-Dichloro-2-buten	53	13.441	13.441	0.000	67	35435	10.0	9.40	
123 N-Propylbenzene	120	13.563	13.563	0.000	99	236400	10.0	10.3	
126 2-Chlorotoluene	126	13.685	13.685	0.000	88	196136	10.0	10.3	a
128 4-Chlorotoluene	126	13.876	13.876	0.000	98	226571	10.0	10.2	
127 1,3,5-Trimethylbenzene	105	13.893	13.893	0.000	95	703560	10.0	10.2	
129 tert-Butylbenzene	119	14.468	14.468	0.000	93	786995	10.0	10.0	
130 1,2,4-Trimethylbenzene	105	14.555	14.555	0.000	96	677024	10.0	10.0	
131 sec-Butylbenzene	134	14.868	14.868	0.000	94	225094	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
132 1,3-Dichlorobenzene	146	15.024	15.024	0.000	97	445057	10.0	10.9	
133 4-Isopropyltoluene	119	15.146	15.146	0.000	96	880532	10.0	9.93	
134 1,4-Dichlorobenzene	146	15.181	15.181	0.000	95	519673	10.0	10.6	
138 1,2-Dichlorobenzene	146	15.825	15.825	0.000	98	373763	10.0	10.6	
137 n-Butylbenzene	91	15.860	15.860	0.000	97	845673	10.0	10.0	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.939	0.000	90	27340	10.0	11.7	
141 1,2,4-Trichlorobenzene	180	17.878	17.878	0.000	95	247213	10.0	10.3	
142 Hexachlorobutadiene	225	18.087	18.087	0.000	96	260763	10.0	10.8	
143 Naphthalene	128	18.122	18.122	0.000	97	222884	10.0	9.47	
144 1,2,3-Trichlorobenzene	180	18.365	18.365	0.000	96	181416	10.0	9.77	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		20.0	21.4	
S 146 Xylenes, Total	106				0		20.0	21.3	
S 147 1,2-Dichloroethene, Total	96				0		20.0	21.4	
S 148 1,3-Dichloropropene, Total	1				0		20.0	20.5	
S 149 Trihalomethanes, Total	1				0		40.0	44.9	
S 150 Xylenes, Total (URS)	1				0		20.0	21.3	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

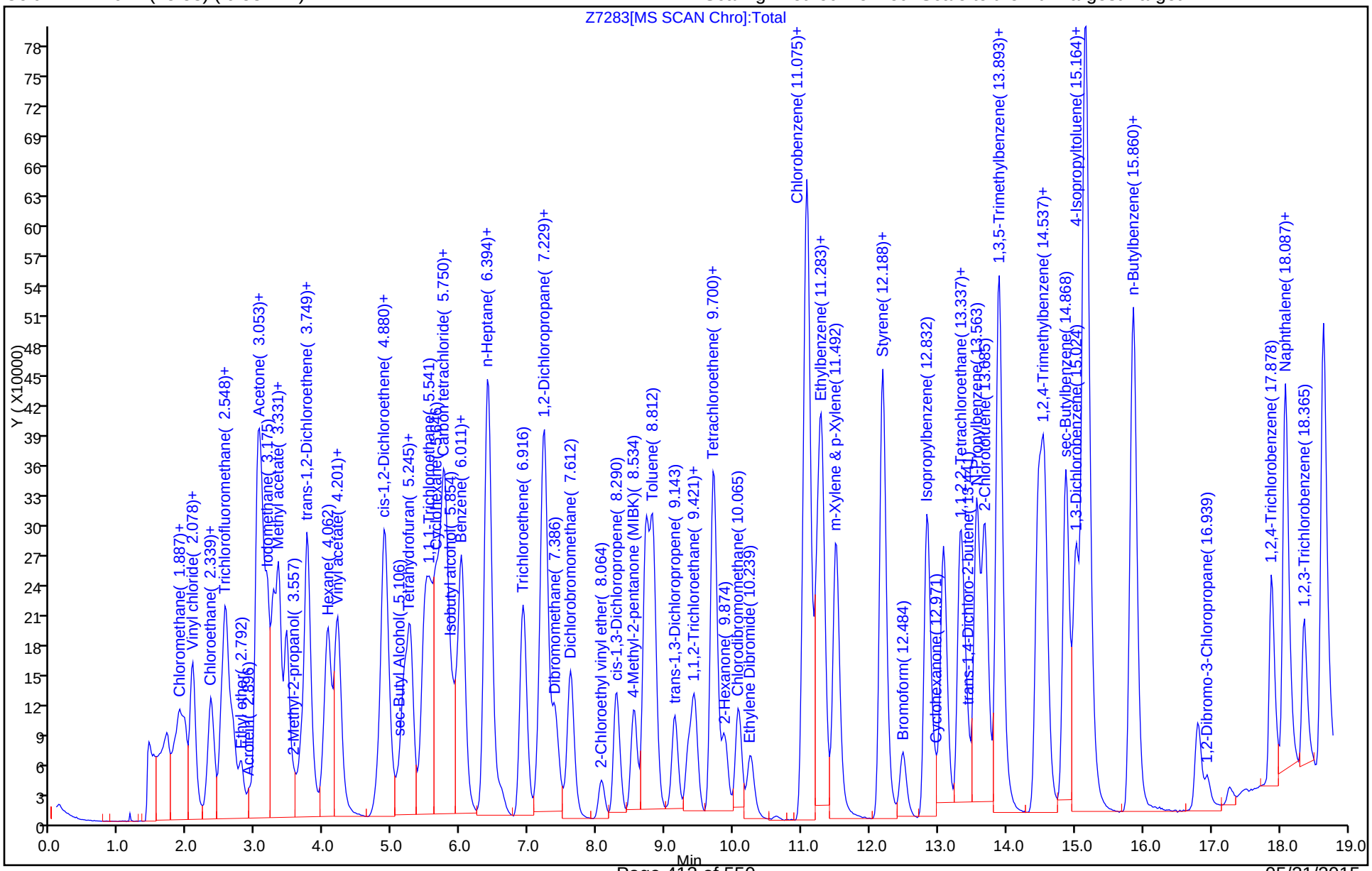
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL

Report Date: 08-May-2015 16:29:53 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7283.D				
Injection Date:	07-May-2015 20:29:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
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

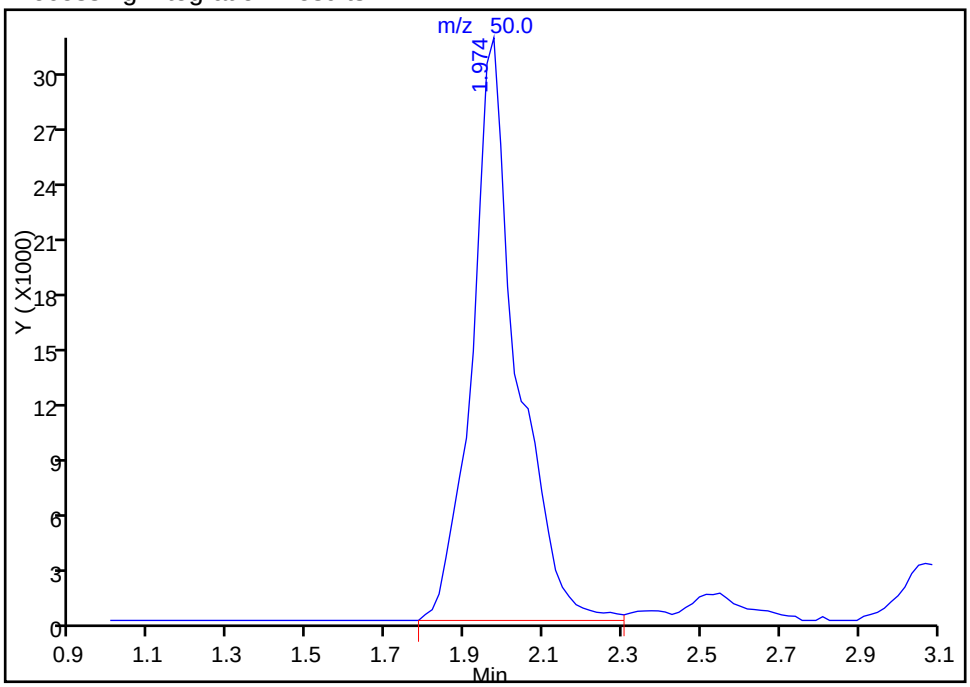
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7283.D				
Injection Date:	07-May-2015 20:29:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	1	Worklist Smp#:	2
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

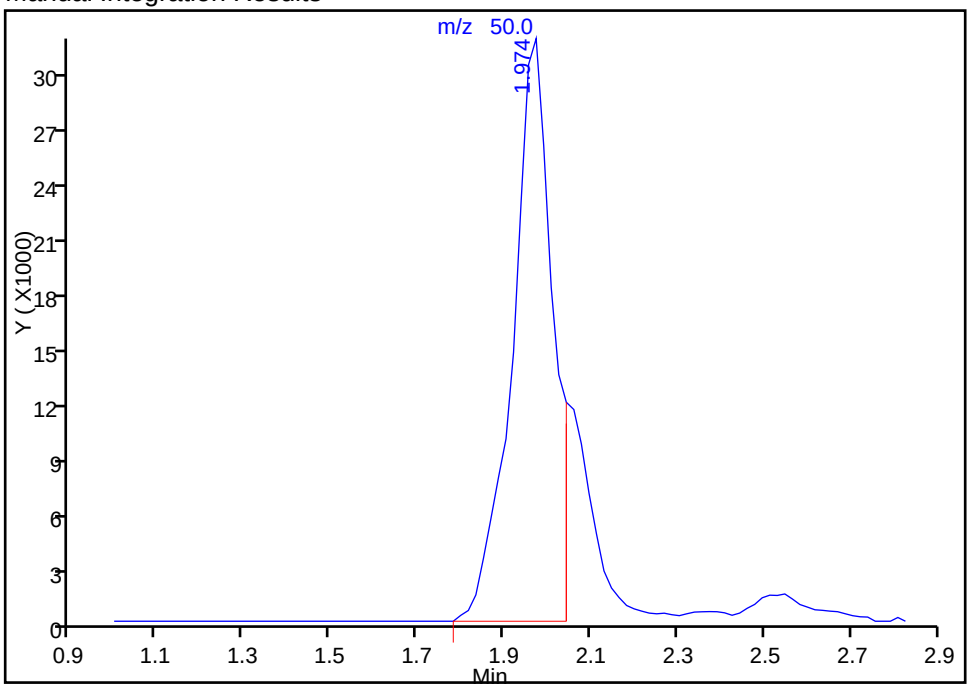
Processing Integration Results

RT: 1.97
Area: 251996
Amount: 11.785459
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 207196
Amount: 9.690233
Amount Units: ug/l



Reviewer: bergerb, 07-May-2015 21:01:59
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

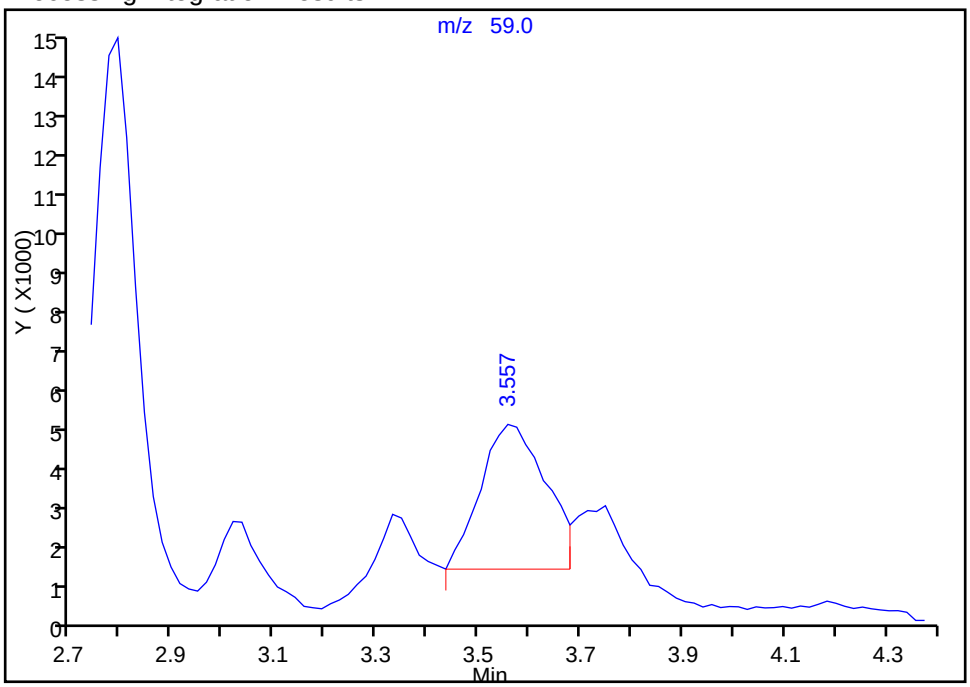
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7283.D				
Injection Date:	07-May-2015 20:29:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	1	Worklist Smp#:	2
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

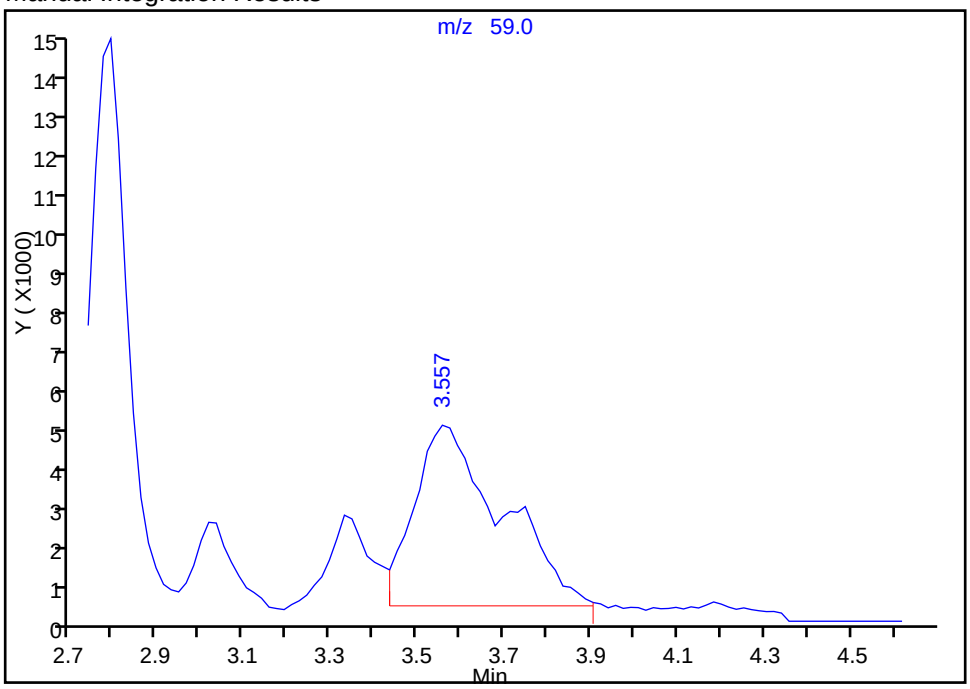
Processing Integration Results

RT: 3.56
Area: 32920
Amount: 44.219016
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 64707
Amount: 103.0364
Amount Units: ug/l



Reviewer: bergerb, 07-May-2015 21:01:59
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

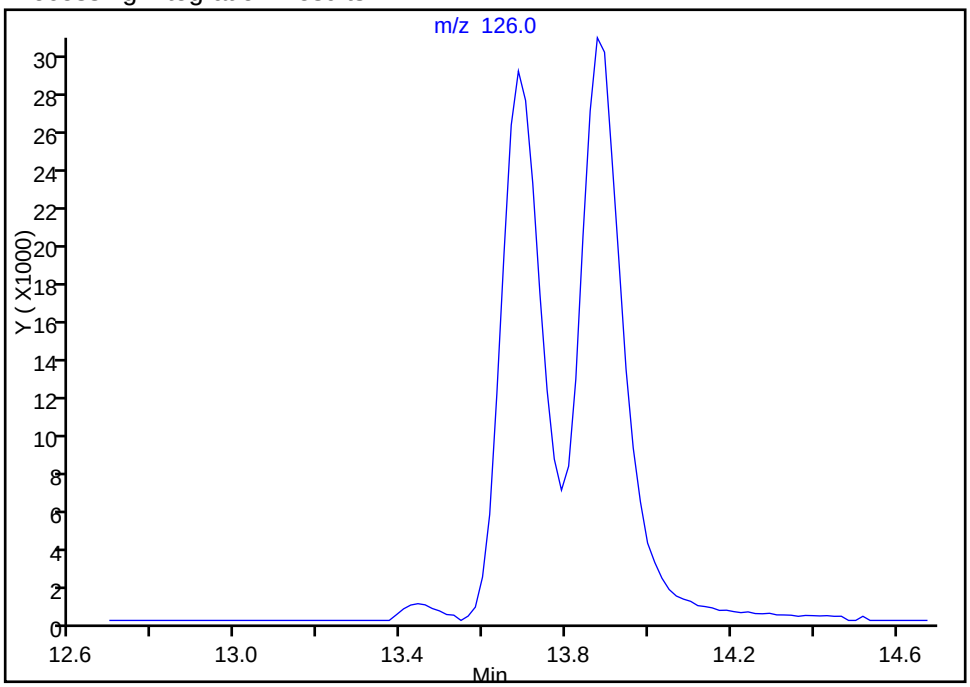
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7283.D				
Injection Date:	07-May-2015 20:29:30	Instrument ID:	VMS_Z		
Lims ID:	CCV				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	1	Worklist Smp#:	2
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

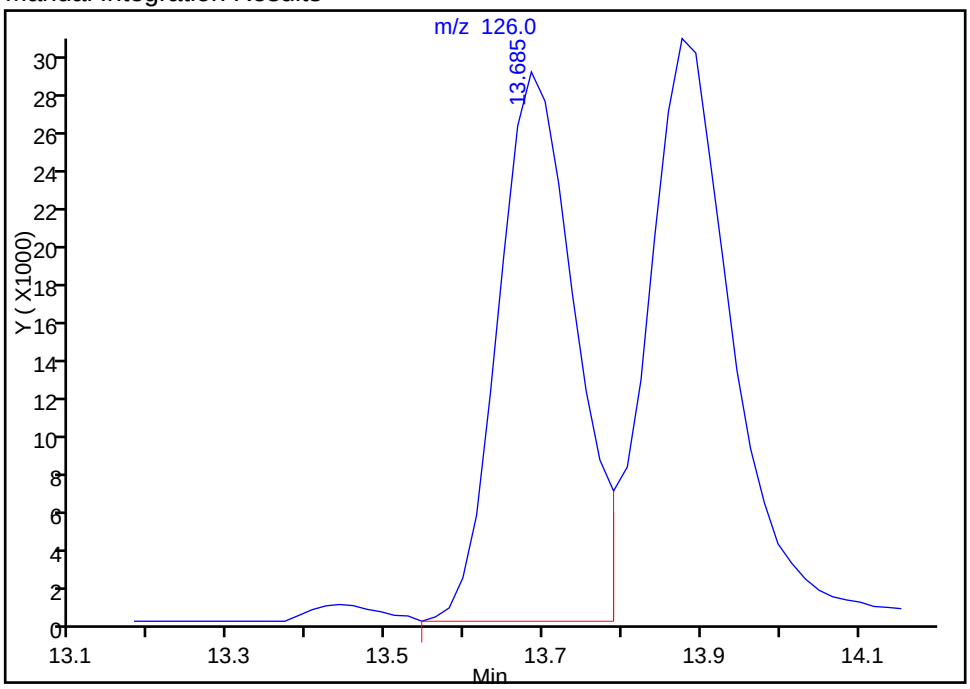
Processing Integration Results

Not Detected
Expected RT: 13.68



Manual Integration Results

RT: 13.68
Area: 196136
Amount: 10.296033
Amount Units: ug/l



Reviewer: bergerb, 07-May-2015 21:01:59
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/3 Calibration Date: 05/07/2015 20:52

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: Z7284.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			250	500		

FORM VII 8260B

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7284.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-May-2015 20:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:46 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:46

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	3.483	3.483	0.000	94	135072	250.0	250.0	
* 2 Fluorobenzene	96	6.372	6.372	0.000	99	783024	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.018	11.018	0.000	87	181435	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.142	15.142	0.000	94	330504	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.467	0.000	94	385203	10.5	11.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.902	0.000	94	152645	10.5	10.5	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	738444	10.5	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.071	13.071	0.000	89	394220	10.5	10.9	
34 Ethylene oxide	43	2.283	2.283	0.000	99	441271	2000.0	1517.6	
39 Ethanol	45		2.841				ND	ND	
42 Propene oxide	58	2.857	2.857	0.000	96	492601	500.0	412.0	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.292	3.292	0.000	98	35972	125.0	114.5	
60 Isopropyl ether	87	4.284	4.284	0.000	98	159254	12.5	10.6	
63 2-Chloro-1,3-butadiene	53	4.301	4.301	0.000	89	239941	10.0	8.18	
64 Tert-butyl ethyl ether	59	4.719	4.719	0.000	98	501970	12.5	10.1	
69 Propionitrile	54	4.910	4.910	0.000	97	48724	125.0	96.2	
68 Ethyl acetate	43	4.945	4.945	0.000	98	90636	20.0	16.5	
73 Methacrylonitrile	41	5.101	5.101	0.000	93	258729	100.0	79.9	
83 Tert-amyl methyl ether	73	6.180	6.180	0.000	98	429029	12.5	10.0	
86 n-Butanol	56	6.807	6.807	0.000	88	21378	250.0	172.1	
88 Ethyl acrylate	55	6.807	6.807	0.000	27	4218	NC	NC	
91 Methyl methacrylate	100	7.398	7.398	0.000	93	41389	20.0	16.2	
95 2-Nitropropane	41	7.903	7.903	0.000	97	21309	20.0	15.5	
106 Tetrahydrothiophene	60	10.043	10.043	0.000	92	37217	10.0	6.97	
120 cis-1,4-Dichloro-2-butene	53	12.897	12.897	0.000	0	20325	10.0	7.16	
135 1,2,3-Trimethylbenzene	105	15.298	15.298	0.000	96	472555	10.0	8.46	
140 1,3,5-Trichlorobenzene	180	17.230	17.230	0.000	98	274035	10.0	8.68	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

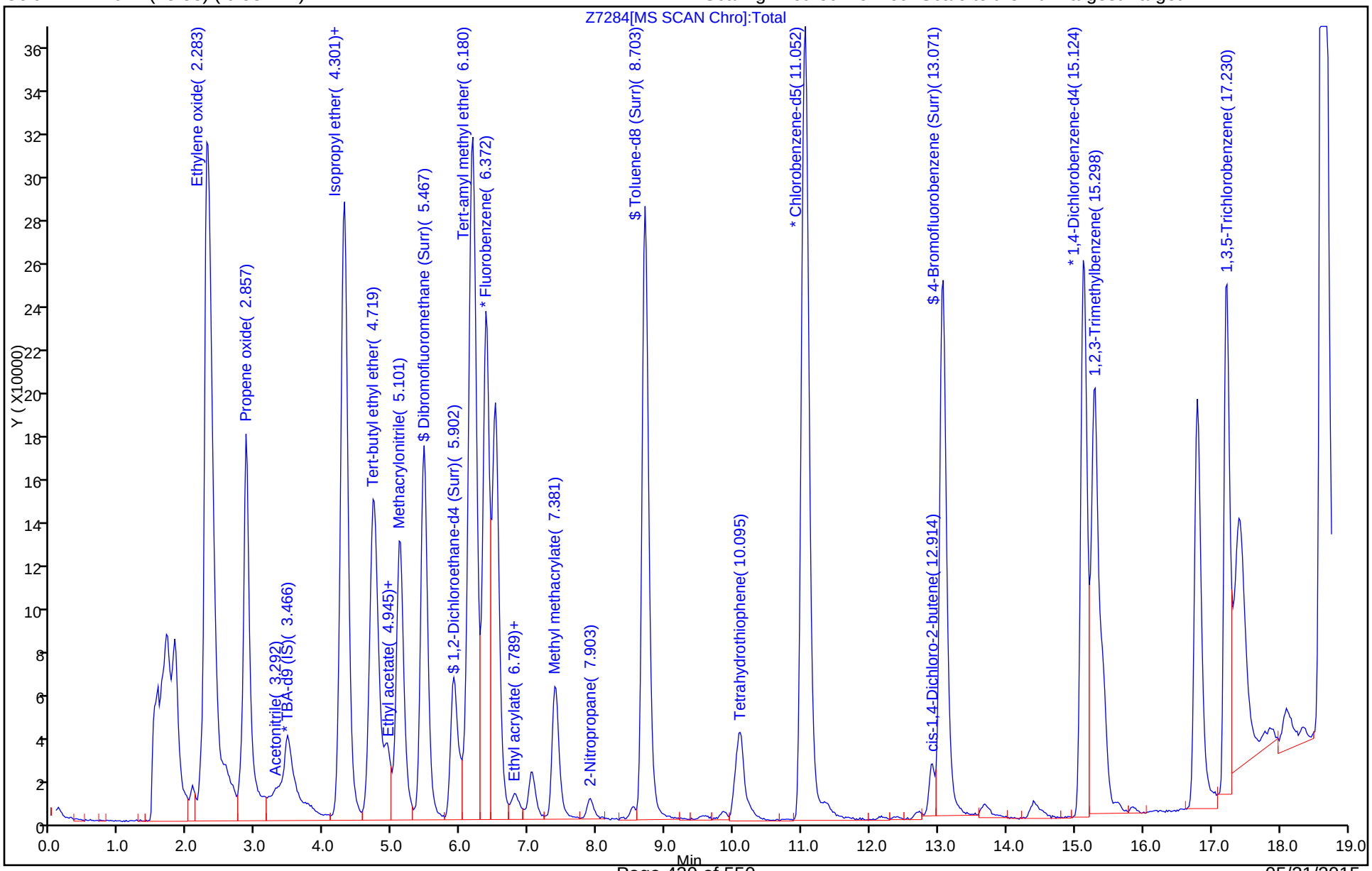
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:29:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7284.D				
Injection Date:	07-May-2015 20:52:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/3 Calibration Date: 05/07/2015 20:52

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: Z7284.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\20150507-34807.b\Z7284.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-May-2015 20:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:46 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:46

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	3.483	3.483	0.000	94	135072	250.0	250.0	
* 2 Fluorobenzene	96	6.372	6.372	0.000	99	783024	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.018	11.018	0.000	87	181435	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.142	15.142	0.000	94	330504	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.467	0.000	94	385203	10.5	11.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.902	0.000	94	152645	10.5	10.5	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	738444	10.5	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.071	13.071	0.000	89	394220	10.5	10.9	
34 Ethylene oxide	43	2.283	2.283	0.000	99	441271	2000.0	1517.6	
39 Ethanol	45		2.841				ND	ND	
42 Propene oxide	58	2.857	2.857	0.000	96	492601	500.0	412.0	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.292	3.292	0.000	98	35972	125.0	114.5	
60 Isopropyl ether	87	4.284	4.284	0.000	98	159254	12.5	10.6	
63 2-Chloro-1,3-butadiene	53	4.301	4.301	0.000	89	239941	10.0	8.18	
64 Tert-butyl ethyl ether	59	4.719	4.719	0.000	98	501970	12.5	10.1	
69 Propionitrile	54	4.910	4.910	0.000	97	48724	125.0	96.2	
68 Ethyl acetate	43	4.945	4.945	0.000	98	90636	20.0	16.5	
73 Methacrylonitrile	41	5.101	5.101	0.000	93	258729	100.0	79.9	
83 Tert-amyl methyl ether	73	6.180	6.180	0.000	98	429029	12.5	10.0	
86 n-Butanol	56	6.807	6.807	0.000	88	21378	250.0	172.1	
88 Ethyl acrylate	55	6.807	6.807	0.000	27	4218	NC	NC	
91 Methyl methacrylate	100	7.398	7.398	0.000	93	41389	20.0	16.2	
95 2-Nitropropane	41	7.903	7.903	0.000	97	21309	20.0	15.5	
106 Tetrahydrothiophene	60	10.043	10.043	0.000	92	37217	10.0	6.97	
120 cis-1,4-Dichloro-2-butene	53	12.897	12.897	0.000	0	20325	10.0	7.16	
135 1,2,3-Trimethylbenzene	105	15.298	15.298	0.000	96	472555	10.0	8.46	
140 1,3,5-Trichlorobenzene	180	17.230	17.230	0.000	98	274035	10.0	8.68	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

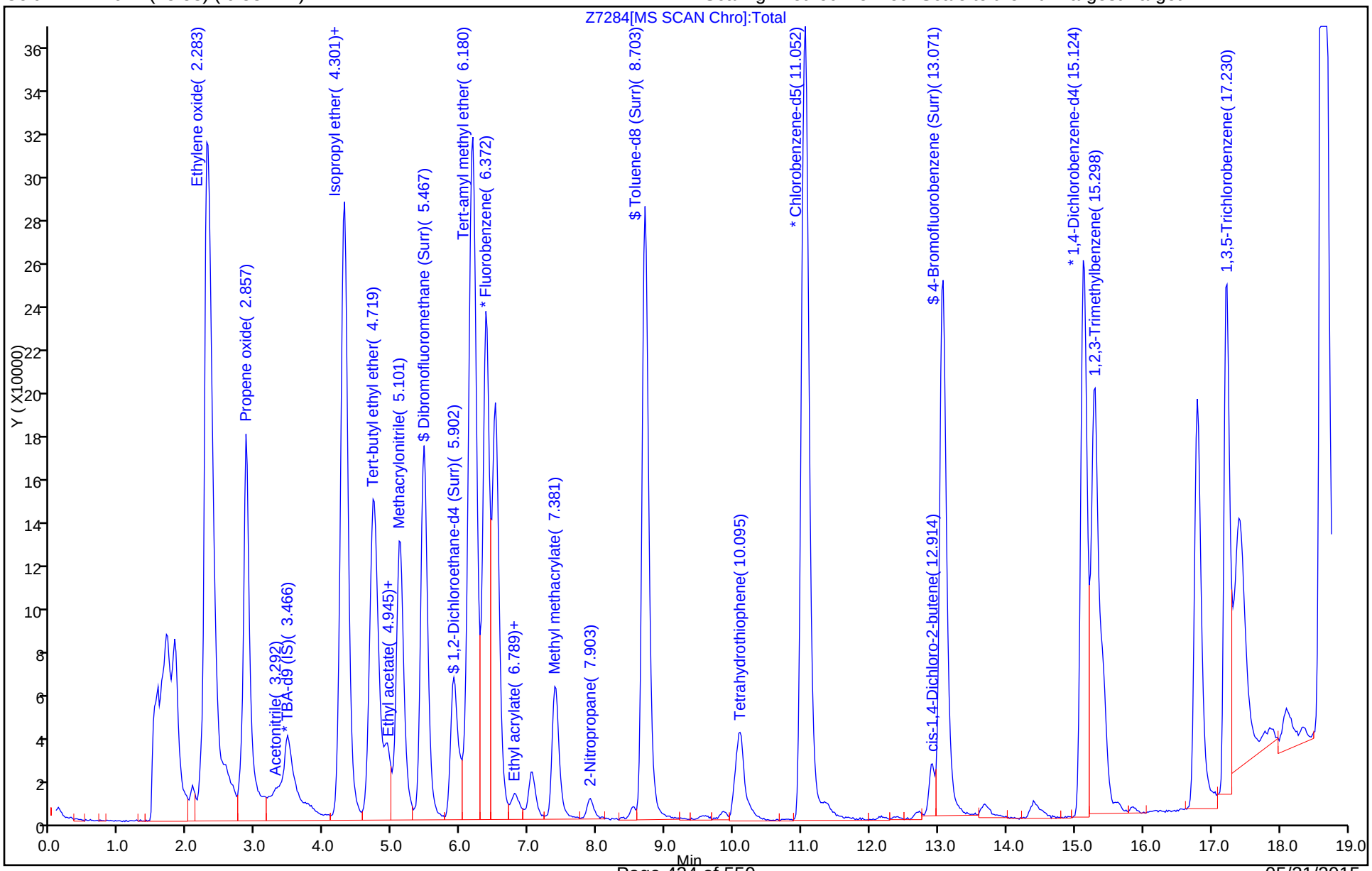
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:29:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7284.D				
Injection Date:	07-May-2015 20:52:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/3 Calibration Date: 05/07/2015 20:52

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: Z7284.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	0.0046		115	125	-8.4	20.0
Isopropyl ether	Ave	0.2406	0.2034		10.6	12.5	-15.5	20.0
2-Chloro-1,3-butadiene	Ave	0.4684	0.3830		8.18	10.0	-18.2	20.0
Tert-butyl ethyl ether	Ave	0.7946	0.6411		10.1	12.5	-19.3	20.0
Propionitrile	Ave	0.0081	0.0062		96.2	125	-23.1*	20.0
Ethyl acetate	Ave	0.0878	0.0723		16.5	20.0	-17.6	20.0
Methacrylonitrile	Ave	0.0517	0.0413		79.9	100	-20.1*	20.0
Tert-amyl methyl ether	Ave	0.6822	0.5479		10.0	12.5	-19.7	20.0
n-Butanol	Ave	0.0020	0.0014		172	250	-31.2*	20.0
Methyl methacrylate	Ave	0.0408	0.0330		16.2	20.0	-19.0	20.0
2-Nitropropane	Ave	0.0219	0.0170		15.5	20.0	-22.4*	20.0
cis-1,4-Dichloro-2-butene	Ave	0.1074	0.0769		7.16	10.0	-28.4*	20.0
1,2,3-Trimethylbenzene	Ave	2.113	1.787		8.46	10.0	-15.4	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7284.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-May-2015 20:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:46 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:46

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	3.483	3.483	0.000	94	135072	250.0	250.0	
* 2 Fluorobenzene	96	6.372	6.372	0.000	99	783024	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.018	11.018	0.000	87	181435	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.142	15.142	0.000	94	330504	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.467	0.000	94	385203	10.5	11.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.902	0.000	94	152645	10.5	10.5	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	738444	10.5	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.071	13.071	0.000	89	394220	10.5	10.9	
34 Ethylene oxide	43	2.283	2.283	0.000	99	441271	2000.0	1517.6	
39 Ethanol	45		2.841				ND	ND	
42 Propene oxide	58	2.857	2.857	0.000	96	492601	500.0	412.0	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.292	3.292	0.000	98	35972	125.0	114.5	
60 Isopropyl ether	87	4.284	4.284	0.000	98	159254	12.5	10.6	
63 2-Chloro-1,3-butadiene	53	4.301	4.301	0.000	89	239941	10.0	8.18	
64 Tert-butyl ethyl ether	59	4.719	4.719	0.000	98	501970	12.5	10.1	
69 Propionitrile	54	4.910	4.910	0.000	97	48724	125.0	96.2	
68 Ethyl acetate	43	4.945	4.945	0.000	98	90636	20.0	16.5	
73 Methacrylonitrile	41	5.101	5.101	0.000	93	258729	100.0	79.9	
83 Tert-amyl methyl ether	73	6.180	6.180	0.000	98	429029	12.5	10.0	
86 n-Butanol	56	6.807	6.807	0.000	88	21378	250.0	172.1	
88 Ethyl acrylate	55	6.807	6.807	0.000	27	4218	NC	NC	
91 Methyl methacrylate	100	7.398	7.398	0.000	93	41389	20.0	16.2	
95 2-Nitropropane	41	7.903	7.903	0.000	97	21309	20.0	15.5	
106 Tetrahydrothiophene	60	10.043	10.043	0.000	92	37217	10.0	6.97	
120 cis-1,4-Dichloro-2-butene	53	12.897	12.897	0.000	0	20325	10.0	7.16	
135 1,2,3-Trimethylbenzene	105	15.298	15.298	0.000	96	472555	10.0	8.46	
140 1,3,5-Trichlorobenzene	180	17.230	17.230	0.000	98	274035	10.0	8.68	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

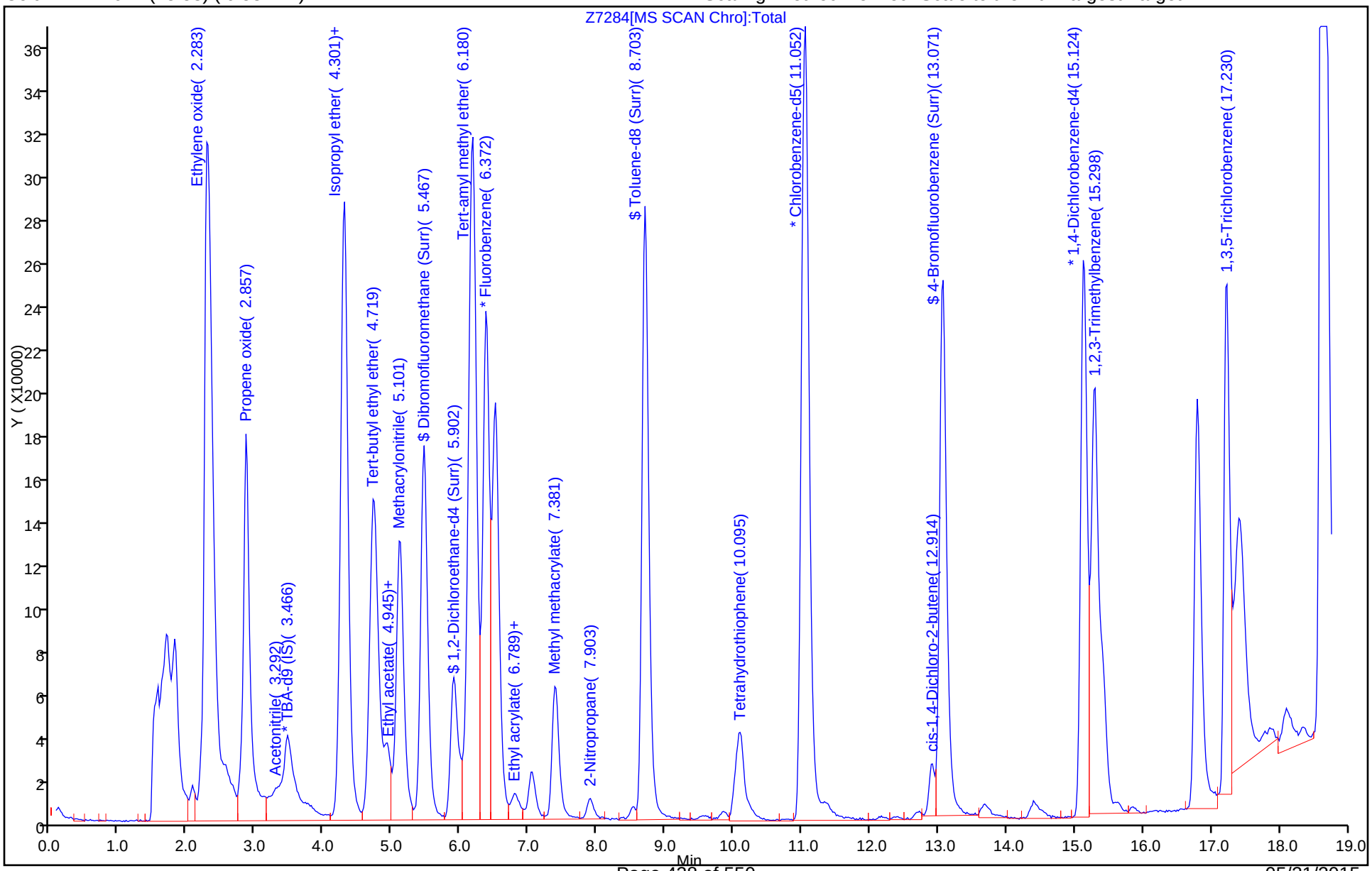
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:29:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7284.D				
Injection Date:	07-May-2015 20:52:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCV 280-276534/3 Calibration Date: 05/07/2015 20:52

Instrument ID: VMS_Z Calib Start Date: 05/02/2015 07:56

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/02/2015 09:27

Lab File ID: Z7284.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.5562	0.5857		11.1	10.5	5.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2317	0.2321		10.5	10.5	0.1	20.0
Toluene-d8 (Surr)	Ave	4.678	4.845		10.9	10.5	3.6	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.420		10.9	10.5	4.2	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7284.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-May-2015 20:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv s
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub111

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:46 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:46

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	3.483	3.483	0.000	94	135072	250.0	250.0	
* 2 Fluorobenzene	96	6.372	6.372	0.000	99	783024	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.018	11.018	0.000	87	181435	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.142	15.142	0.000	94	330504	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.467	0.000	94	385203	10.5	11.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.902	0.000	94	152645	10.5	10.5	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	738444	10.5	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.071	13.071	0.000	89	394220	10.5	10.9	
34 Ethylene oxide	43	2.283	2.283	0.000	99	441271	2000.0	1517.6	
39 Ethanol	45		2.841				ND	ND	
42 Propene oxide	58	2.857	2.857	0.000	96	492601	500.0	412.0	
47 Isopropyl alcohol	45		3.154				ND	ND	
53 Acetonitrile	41	3.292	3.292	0.000	98	35972	125.0	114.5	
60 Isopropyl ether	87	4.284	4.284	0.000	98	159254	12.5	10.6	
63 2-Chloro-1,3-butadiene	53	4.301	4.301	0.000	89	239941	10.0	8.18	
64 Tert-butyl ethyl ether	59	4.719	4.719	0.000	98	501970	12.5	10.1	
69 Propionitrile	54	4.910	4.910	0.000	97	48724	125.0	96.2	
68 Ethyl acetate	43	4.945	4.945	0.000	98	90636	20.0	16.5	
73 Methacrylonitrile	41	5.101	5.101	0.000	93	258729	100.0	79.9	
83 Tert-amyl methyl ether	73	6.180	6.180	0.000	98	429029	12.5	10.0	
86 n-Butanol	56	6.807	6.807	0.000	88	21378	250.0	172.1	
88 Ethyl acrylate	55	6.807	6.807	0.000	27	4218	NC	NC	
91 Methyl methacrylate	100	7.398	7.398	0.000	93	41389	20.0	16.2	
95 2-Nitropropane	41	7.903	7.903	0.000	97	21309	20.0	15.5	
106 Tetrahydrothiophene	60	10.043	10.043	0.000	92	37217	10.0	6.97	
120 cis-1,4-Dichloro-2-butene	53	12.897	12.897	0.000	0	20325	10.0	7.16	
135 1,2,3-Trimethylbenzene	105	15.298	15.298	0.000	96	472555	10.0	8.46	
140 1,3,5-Trichlorobenzene	180	17.230	17.230	0.000	98	274035	10.0	8.68	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

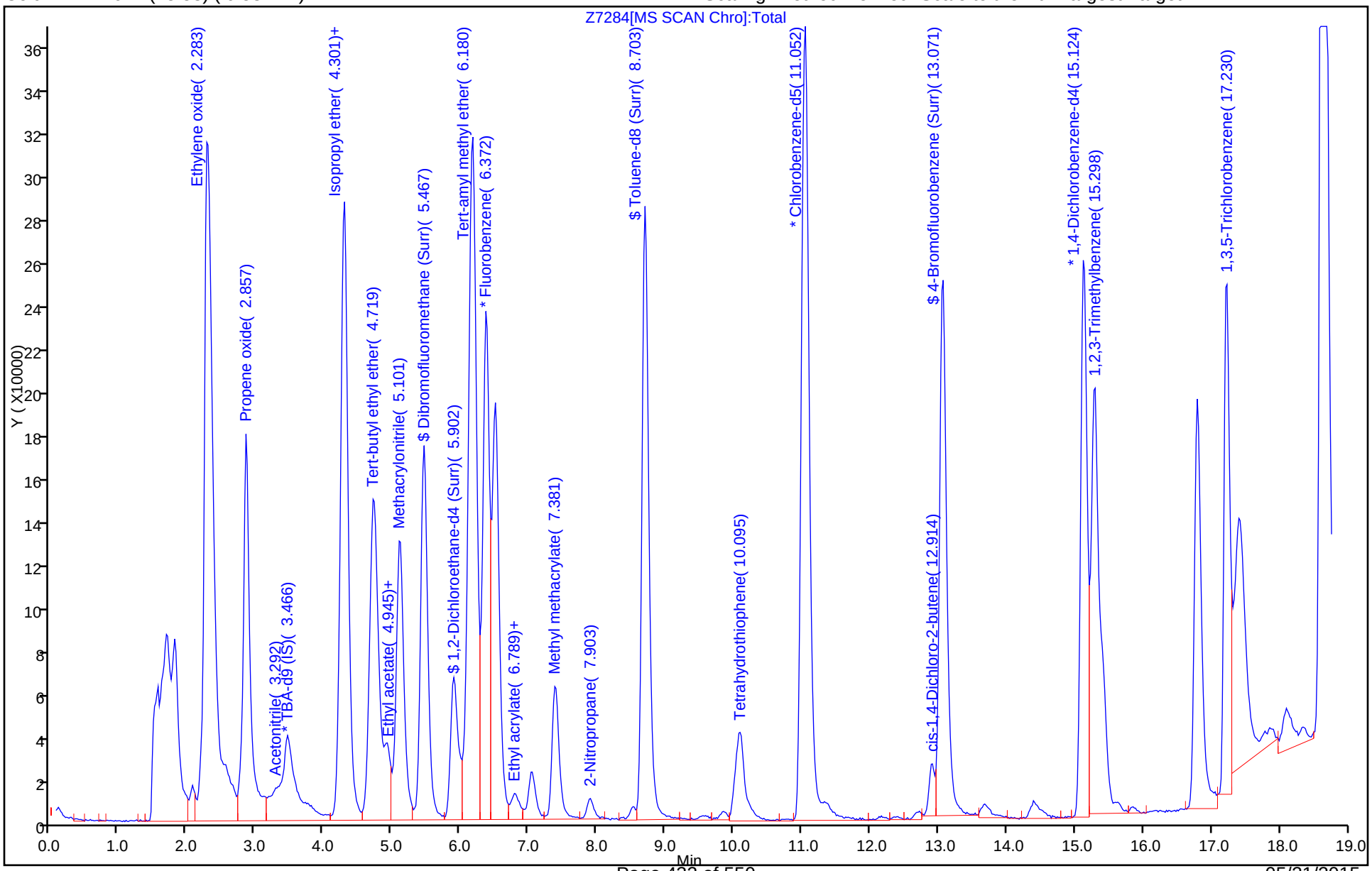
MV-Supp A_00011	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:29:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7284.D				
Injection Date:	07-May-2015 20:52:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	CCV			Worklist Smp#:	3
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276534/25 Calibration Date: 05/08/2015 04:25

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: Z7303.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\20150507-34807.b\Z7303.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 08-May-2015 04:25:30 ALS Bottle#: 22 Worklist Smp#: 25
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:21:39 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:21:39

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	3.489	3.489	0.000	88	121761	250.0	250.0	
* 2 Fluorobenzene	96	6.378	6.378	0.000	98	664457	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.024	11.024	0.000	87	151897	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.130	15.130	0.000	95	314084	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.473	5.473	0.000	94	321595	10.5	10.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.908	5.908	0.000	96	139487	10.5	11.3	
$ 10 Toluene-d8 (Surr)	98	8.709	8.709	0.000	93	619207	10.5	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.060	13.060	0.000	89	367151	10.5	10.7	M
27 Dichlorodifluoromethane	85	1.923	1.923	0.000	98	273273	10.0	9.87	
30 Chloromethane	50	1.993	1.993	0.000	100	150546	10.0	8.65	M
31 Butadiene	54	2.097	2.097	0.000	85	100293	NC	NC	
32 Vinyl chloride	62	2.115	2.115	0.000	98	146470	10.0	8.81	
35 Bromomethane	94	2.341	2.341	0.000	90	166909	10.0	9.81	
36 Chloroethane	64	2.393	2.393	0.000	99	102759	10.0	8.81	
37 Dichlorofluoromethane	67	2.550	2.550	0.000	98	397076	10.0	9.41	
38 Trichlorofluoromethane	101	2.602	2.602	0.000	99	359059	10.0	9.19	
40 Ethyl ether	59	2.811	2.811	0.000	93	78535	10.0	10.4	
44 Acrolein	56	2.915	2.915	0.000	97	32520	100.0	80.4	
45 1,1-Dichloroethene	96	3.037	3.037	0.000	99	185328	10.0	10.7	
48 Acetone	43	3.054	3.054	0.000	77	35717	40.0	35.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.089	3.089	0.000	97	296225	10.0	10.9	
49 Iodomethane	142	3.193	3.193	0.000	98	484707	10.0	10.9	
50 Carbon disulfide	76	3.280	3.280	0.000	99	622672	10.0	9.68	
52 3-Chloro-1-propene	41	3.350	3.350	0.000	84	261487	10.0	8.68	
51 Methyl acetate	43	3.367	3.367	0.000	73	194271	50.0	49.1	
54 Methylene Chloride	84	3.472	3.472	0.000	92	167199	10.0	11.4	
55 2-Methyl-2-propanol	59	3.559	3.559	0.000	91	53619	100.0	106.1	
58 Acrylonitrile	53	3.681	3.681	0.000	98	120564	100.0	93.0	
57 trans-1,2-Dichloroethene	96	3.768	3.768	0.000	100	192049	10.0	10.3	
56 Methyl tert-butyl ether	73	3.785	3.785	0.000	94	275750	10.0	10.4	
59 Hexane	57	4.063	4.063	0.000	93	241079	10.0	9.03	

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	4.203	0.000	96	314512	10.0	9.03	
61 Vinyl acetate	43	4.220	4.220	0.000	96	281391	20.0	15.0	
67 2-Butanone (MEK)	43	4.881	4.881	0.000	44	79596	40.0	36.5	
65 cis-1,2-Dichloroethene	96	4.881	4.881	0.000	83	185585	10.0	10.4	
66 2,2-Dichloropropane	77	4.916	4.916	0.000	89	303127	10.0	9.12	
70 sec-Butyl Alcohol	45	5.125	5.125	0.000	93	126859	300.0	311.4	
71 Chlorobromomethane	128	5.177	5.177	0.000	83	92668	10.0	10.8	
74 Chloroform	83	5.264	5.264	0.000	93	340483	10.0	9.94	
72 Tetrahydrofuran	42	5.264	5.264	0.000	36	25734	20.0	19.8	
75 1,1,1-Trichloroethane	97	5.560	5.560	0.000	98	324193	10.0	9.59	
76 Cyclohexane	56	5.647	5.647	0.000	91	277238	10.0	9.07	
78 1,1-Dichloropropene	75	5.751	5.751	0.000	97	259031	10.0	8.95	
77 Carbon tetrachloride	117	5.786	5.786	0.000	97	298467	10.0	9.89	
80 Isobutyl alcohol	41	5.873	5.873	0.000	94	33001	250.0	227.6	
82 1,2-Dichloroethane	62	6.012	6.012	0.000	95	136719	10.0	10.3	
81 Benzene	78	6.012	6.012	0.000	95	522212	10.0	9.85	
84 n-Heptane	43	6.412	6.412	0.000	92	306835	10.0	8.70	
85 Trichloroethene	95	6.917	6.917	0.000	97	235350	10.0	10.1	
89 2-Pentanone	43	7.143	7.143	0.000	100	189059	40.0	43.2	
90 1,2-Dichloropropane	63	7.196	7.196	0.000	92	172904	10.0	9.31	
87 Methylcyclohexane	55	7.213	7.213	0.000	91	233774	10.0	8.83	
92 Dibromomethane	93	7.370	7.370	0.000	95	110319	10.0	10.4	
94 Dichlorobromomethane	83	7.613	7.613	0.000	99	286280	10.0	10.9	
96 2-Chloroethyl vinyl ether	63	8.048	8.048	0.000	92	55241	10.0	8.95	
97 cis-1,3-Dichloropropene	75	8.274	8.274	0.000	96	236209	10.0	9.80	
98 4-Methyl-2-pentanone (MIBK	43	8.535	8.535	0.000	97	259744	40.0	38.2	
99 Toluene	91	8.814	8.814	0.000	99	572803	10.0	9.76	
100 trans-1,3-Dichloropropene	75	9.127	9.127	0.000	93	168122	10.0	9.89	
101 Ethyl methacrylate	69	9.336	9.336	0.000	90	134000	10.0	10.9	
102 1,1,2-Trichloroethane	97	9.423	9.423	0.000	90	108999	10.0	10.9	
104 1,3-Dichloropropane	76	9.684	9.684	0.000	91	175308	10.0	10.3	
103 Tetrachloroethene	164	9.701	9.701	0.000	99	223265	10.0	10.8	
105 2-Hexanone	43	9.858	9.858	0.000	97	164865	40.0	37.7	
107 Chlorodibromomethane	129	10.049	10.049	0.000	90	192340	10.0	11.9	
109 Ethylene Dibromide	107	10.241	10.241	0.000	99	141331	10.0	10.9	
111 Chlorobenzene	112	11.076	11.076	0.000	90	400725	10.0	10.4	
110 1-Chlorohexane	91	11.076	11.076	0.000	79	270415	10.0	9.27	
113 1,1,1,2-Tetrachloroethane	131	11.215	11.215	0.000	94	205054	10.0	11.1	
112 Ethylbenzene	106	11.285	11.285	0.000	99	193526	10.0	10.2	
114 m-Xylene & p-Xylene	106	11.493	11.493	0.000	99	259917	10.0	10.0	
115 o-Xylene	106	12.155	12.155	0.000	97	232142	10.0	10.5	
116 Styrene	104	12.172	12.172	0.000	94	385597	10.0	10.5	
117 Bromoform	173	12.468	12.468	0.000	97	107730	10.0	12.2	
118 Isopropylbenzene	105	12.816	12.816	0.000	96	721786	10.0	8.92	
119 Cyclohexanone	55	12.938	12.938	0.000	92	67328	400.0	408.9	
121 Bromobenzene	156	13.303	13.303	0.000	92	218990	10.0	10.4	
122 1,1,2,2-Tetrachloroethane	83	13.321	13.321	0.000	95	142163	10.0	9.61	
124 1,2,3-Trichloropropane	110	13.373	13.373	0.000	81	32628	10.0	9.87	
125 trans-1,4-Dichloro-2-buten	53	13.425	13.425	0.000	84	28455	10.0	8.37	
123 N-Propylbenzene	120	13.547	13.547	0.000	99	188950	10.0	9.10	
126 2-Chlorotoluene	126	13.669	13.669	0.000	85	164165	10.0	9.55	a
128 4-Chlorotoluene	126	13.860	13.860	0.000	99	193243	10.0	9.63	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.877	13.877	0.000	97	574812	10.0	9.23	
129 tert-Butylbenzene	119	14.452	14.452	0.000	93	628931	10.0	8.88	
130 1,2,4-Trimethylbenzene	105	14.539	14.539	0.000	96	553734	10.0	9.07	
131 sec-Butylbenzene	134	14.852	14.852	0.000	94	178523	10.0	9.13	
132 1,3-Dichlorobenzene	146	15.008	15.008	0.000	98	359050	10.0	9.75	
133 4-Isopropyltoluene	119	15.130	15.130	0.000	97	721629	10.0	9.02	
134 1,4-Dichlorobenzene	146	15.165	15.165	0.000	95	458394	10.0	10.4	
138 1,2-Dichlorobenzene	146	15.809	15.809	0.000	98	325567	10.0	10.2	
137 n-Butylbenzene	91	15.844	15.844	0.000	97	677313	10.0	8.87	
139 1,2-Dibromo-3-Chloropropan	157	16.940	16.940	0.000	91	26036	10.0	12.4	
141 1,2,4-Trichlorobenzene	180	17.862	17.862	0.000	95	215943	10.0	10.0	
142 Hexachlorobutadiene	225	18.071	18.071	0.000	96	216149	10.0	9.94	
143 Naphthalene	128	18.106	18.106	0.000	97	208627	10.0	9.83	
144 1,2,3-Trichlorobenzene	180	18.349	18.349	0.000	96	165487	10.0	9.88	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.0	
S 150 Xylenes, Total (URS)	1				0		20.0	20.6	
S 151 Total BTEX	1				0			50.3	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.7	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.7	
S 146 Xylenes, Total	106				0		20.0	20.6	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.7	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

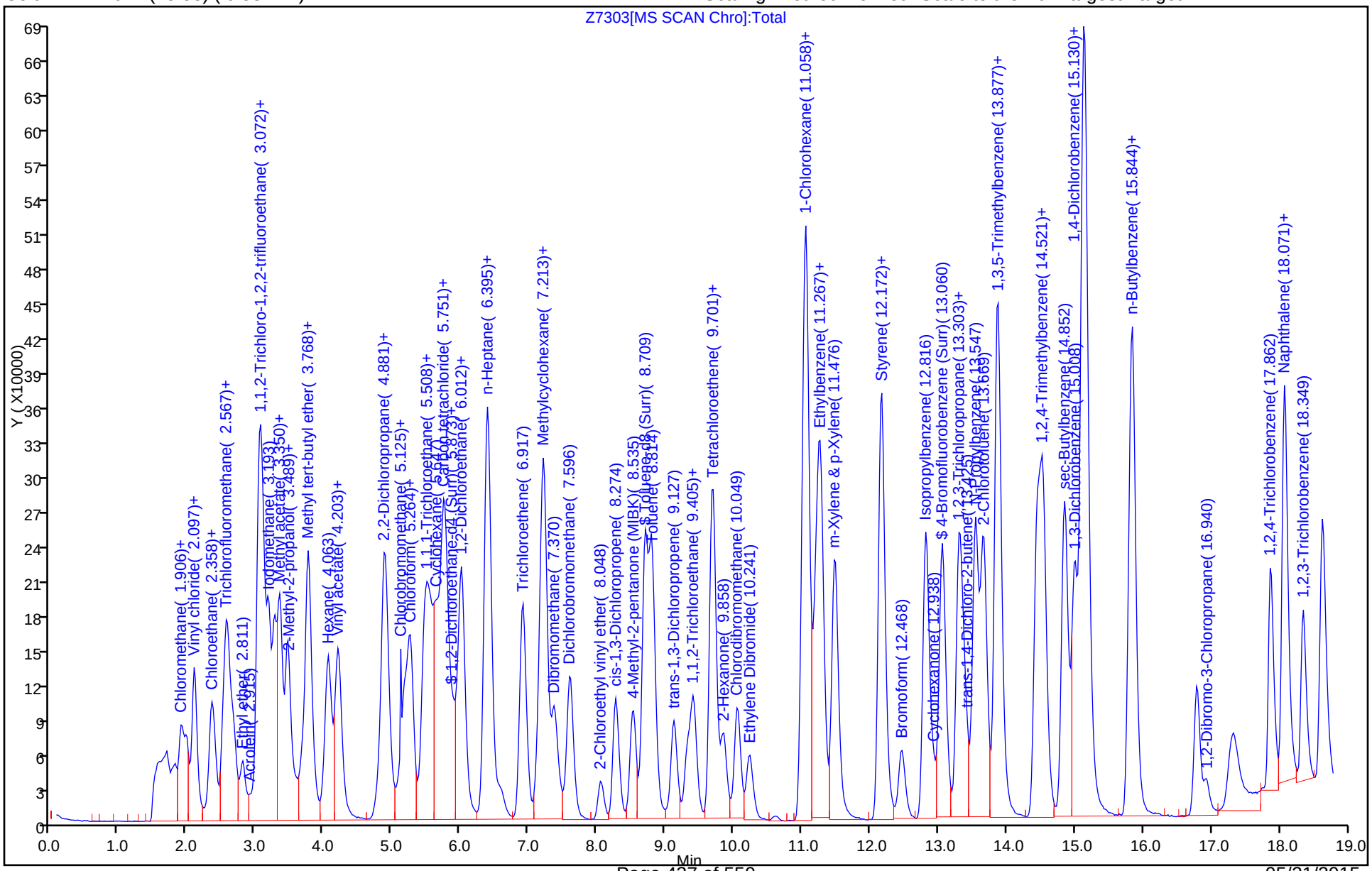
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:21:39 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D				
Injection Date:	08-May-2015 04:25:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	ccvc			Worklist Smp#:	25
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
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.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276534/25 Calibration Date: 05/08/2015 04:25

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7303.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	0.5208	0.5141		9.87	10.0	-1.3	50.0
Chloromethane	Ave	0.3275	0.2832	0.1000	8.65	10.0	-13.5	50.0
Vinyl chloride	Ave	0.3126	0.2755		8.81	10.0	-11.9	50.0
Bromomethane	Ave	0.3202	0.3140		9.81	10.0	-1.9	50.0
Chloroethane	Ave	0.2194	0.1933		8.81	10.0	-11.9	50.0
Dichlorofluoromethane	Ave	0.7941	0.7470		9.41	10.0	-5.9	50.0
Trichlorofluoromethane	Ave	0.7348	0.6755		9.19	10.0	-8.1	50.0
Ethyl ether	Lin2		0.1477		10.4	10.0	4.2	50.0
Acrolein	Ave	0.0076	0.0061		80.4	100	-19.6	50.0
1,1-Dichloroethene	Ave	0.3274	0.3487		10.7	10.0	6.5	50.0
Acetone	Ave	0.0188	0.0168		35.7	40.0	-10.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5098	0.5573		10.9	10.0	9.3	50.0
Iodomethane	Ave	0.8339	0.9119		10.9	10.0	9.3	50.0
Carbon disulfide	Ave	1.210	1.171		9.68	10.0	-3.2	50.0
3-Chloro-1-propene	Ave	0.5668	0.4919		8.68	10.0	-13.2	50.0
Methyl acetate	Ave	0.0745	0.0731		49.1	50.0	-1.9	50.0
Methylene Chloride	Lin1		0.3145		11.4	10.0	14.5	50.0
tert-Butyl alcohol	Lin2		1.101		106	100	6.1	50.0
Acrylonitrile	Ave	0.0244	0.0227		93.0	100	-7.0	50.0
trans-1,2-Dichloroethene	Ave	0.3497	0.3613		10.3	10.0	3.3	50.0
Methyl tert-butyl ether	Ave	0.4977	0.5188		10.4	10.0	4.2	50.0
Hexane	Ave	2.198	1.984		9.03	10.0	-9.7	50.0
1,1-Dichloroethane	Ave	0.6555	0.5917	0.1000	9.03	10.0	-9.7	50.0
Vinyl acetate	Ave	0.3532	0.2647		15.0	20.0	-25.1	50.0
2-Butanone (MEK)	Ave	0.0410	0.0374		36.5	40.0	-8.7	50.0
cis-1,2-Dichloroethene	Ave	0.3368	0.3491		10.4	10.0	3.7	50.0
2,2-Dichloropropane	Lin2		0.5703		9.12	10.0	-8.8	50.0
sec-Butyl Alcohol	Ave	0.8366	0.8682		311	300	3.8	50.0
Bromochloromethane	Ave	0.1617	0.1743		10.8	10.0	7.8	50.0
Chloroform	Ave	0.6444	0.6405		9.94	10.0	-0.6	50.0
Tetrahydrofuran	Ave	0.0244	0.0242		19.8	20.0	-0.9	50.0
1,1,1-Trichloroethane	Ave	0.6363	0.6099		9.59	10.0	-4.1	50.0
Cyclohexane	Ave	0.5749	0.5216		9.07	10.0	-9.3	50.0
1,1-Dichloropropene	Ave	0.5445	0.4873		8.95	10.0	-10.5	50.0
Carbon tetrachloride	Ave	0.5677	0.5615		9.89	10.0	-1.1	50.0
Isobutyl alcohol	Ave	0.2978	0.2710		228	250	-9.0	50.0
1,2-Dichloroethane	Ave	0.2487	0.2572		10.3	10.0	3.4	50.0
Benzene	Ave	0.998	0.9824		9.85	10.0	-1.5	50.0
Trichloroethene	Ave	0.4375	0.4428		10.1	10.0	1.2	50.0
2-Pentanone	Ave	0.0823	0.0889		43.2	40.0	8.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276534/25 Calibration Date: 05/08/2015 04:25

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7303.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	0.3492	0.3253		9.31	10.0	-6.9	50.0
Methylcyclohexane	Ave	0.4983	0.4398		8.83	10.0	-11.7	50.0
Dibromomethane	Ave	0.1999	0.2075		10.4	10.0	3.8	50.0
Bromodichloromethane	Ave	0.4932	0.5386		10.9	10.0	9.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1161	0.1039		8.95	10.0	-10.5	50.0
cis-1,3-Dichloropropene	Ave	1.984	1.944		9.80	10.0	-2.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1278	0.1222		38.2	40.0	-4.4	50.0
Toluene	Ave	1.104	1.078		9.76	10.0	-2.4	50.0
trans-1,3-Dichloropropene	Ave	0.3197	0.3163		9.89	10.0	-1.1	50.0
Ethyl methacrylate	Ave	1.011	1.103		10.9	10.0	9.0	50.0
1,1,2-Trichloroethane	Lin2		0.2051		10.9	10.0	8.9	50.0
1,3-Dichloropropane	Ave	1.400	1.443		10.3	10.0	3.0	50.0
Tetrachloroethene	Ave	1.702	1.837		10.8	10.0	7.9	50.0
2-Hexanone	Ave	0.3594	0.3392		37.7	40.0	-5.6	50.0
Chlorodibromomethane	Ave	1.328	1.583		11.9	10.0	19.2	50.0
1,2-Dibromoethane	Ave	1.068	1.163		10.9	10.0	8.9	50.0
1-Chlorohexane	Ave	2.400	2.225		9.27	10.0	-7.3	50.0
Chlorobenzene	Ave	3.168	3.298	0.3000	10.4	10.0	4.1	50.0
1,1,1,2-Tetrachloroethane	Ave	1.527	1.687		11.1	10.0	10.5	50.0
Ethylbenzene	Ave	1.568	1.593		10.2	10.0	1.6	50.0
m-Xylene & p-Xylene	Ave	2.129	2.139		10.0	10.0	0.5	50.0
o-Xylene	Ave	1.817	1.910		10.5	10.0	5.2	50.0
Styrene	Ave	3.016	3.173		10.5	10.0	5.2	50.0
Bromoform	Lin1		0.8865	0.1000	12.2	10.0	22.1	50.0
Isopropylbenzene	Ave	3.220	2.873		8.92	10.0	-10.8	50.0
Cyclohexanone	Ave	0.0136	0.0139		409	400	2.2	50.0
Bromobenzene	Ave	0.8391	0.8715		10.4	10.0	3.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5889	0.5658	0.3000	9.61	10.0	-3.9	50.0
1,2,3-Trichloropropane	Ave	0.1316	0.1299		9.87	10.0	-1.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1353	0.1133		8.37	10.0	-16.3	50.0
N-Propylbenzene	Ave	0.8267	0.7520		9.10	10.0	-9.0	50.0
2-Chlorotoluene	Ave	0.6840	0.6534		9.55	10.0	-4.5	50.0
4-Chlorotoluene	Ave	0.7988	0.7691		9.63	10.0	-3.7	50.0
1,3,5-Trimethylbenzene	Ave	2.478	2.288		9.23	10.0	-7.7	50.0
tert-Butylbenzene	Ave	2.819	2.503		8.88	10.0	-11.2	50.0
1,2,4-Trimethylbenzene	Ave	2.431	2.204		9.07	10.0	-9.3	50.0
sec-Butylbenzene	Ave	0.7779	0.7105		9.13	10.0	-8.7	50.0
1,3-Dichlorobenzene	Ave	1.466	1.429		9.75	10.0	-2.5	50.0
p-Isopropyltoluene	Ave	3.185	2.872		9.02	10.0	-9.8	50.0
1,4-Dichlorobenzene	Ave	1.756	1.824		10.4	10.0	3.9	50.0
1,2-Dichlorobenzene	Ave	1.272	1.296		10.2	10.0	1.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276534/25 Calibration Date: 05/08/2015 04:25

Instrument ID: VMS_Z Calib Start Date: 04/27/2015 07:59

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 04/27/2015 10:16

Lab File ID: Z7303.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	3.039	2.696		8.87	10.0	-11.3	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0837	0.1036		12.4	10.0	23.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8579	0.8594		10.0	10.0	0.2	50.0
Hexachlorobutadiene	Ave	0.8657	0.8602		9.94	10.0	-0.6	50.0
Naphthalene	Ave	0.8451	0.8303		9.83	10.0	-1.7	50.0
1,2,3-Trichlorobenzene	Ave	0.6665	0.6586		9.88	10.0	-1.2	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 08-May-2015 04:25:30 ALS Bottle#: 22 Worklist Smp#: 25
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:21:39 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:21:39

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	3.489	3.489	0.000	88	121761	250.0	250.0	
* 2 Fluorobenzene	96	6.378	6.378	0.000	98	664457	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.024	11.024	0.000	87	151897	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.130	15.130	0.000	95	314084	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.473	5.473	0.000	94	321595	10.5	10.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.908	5.908	0.000	96	139487	10.5	11.3	
$ 10 Toluene-d8 (Surr)	98	8.709	8.709	0.000	93	619207	10.5	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.060	13.060	0.000	89	367151	10.5	10.7	M
27 Dichlorodifluoromethane	85	1.923	1.923	0.000	98	273273	10.0	9.87	
30 Chloromethane	50	1.993	1.993	0.000	100	150546	10.0	8.65	M
31 Butadiene	54	2.097	2.097	0.000	85	100293	NC	NC	
32 Vinyl chloride	62	2.115	2.115	0.000	98	146470	10.0	8.81	
35 Bromomethane	94	2.341	2.341	0.000	90	166909	10.0	9.81	
36 Chloroethane	64	2.393	2.393	0.000	99	102759	10.0	8.81	
37 Dichlorofluoromethane	67	2.550	2.550	0.000	98	397076	10.0	9.41	
38 Trichlorofluoromethane	101	2.602	2.602	0.000	99	359059	10.0	9.19	
40 Ethyl ether	59	2.811	2.811	0.000	93	78535	10.0	10.4	
44 Acrolein	56	2.915	2.915	0.000	97	32520	100.0	80.4	
45 1,1-Dichloroethene	96	3.037	3.037	0.000	99	185328	10.0	10.7	
48 Acetone	43	3.054	3.054	0.000	77	35717	40.0	35.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.089	3.089	0.000	97	296225	10.0	10.9	
49 Iodomethane	142	3.193	3.193	0.000	98	484707	10.0	10.9	
50 Carbon disulfide	76	3.280	3.280	0.000	99	622672	10.0	9.68	
52 3-Chloro-1-propene	41	3.350	3.350	0.000	84	261487	10.0	8.68	
51 Methyl acetate	43	3.367	3.367	0.000	73	194271	50.0	49.1	
54 Methylene Chloride	84	3.472	3.472	0.000	92	167199	10.0	11.4	
55 2-Methyl-2-propanol	59	3.559	3.559	0.000	91	53619	100.0	106.1	
58 Acrylonitrile	53	3.681	3.681	0.000	98	120564	100.0	93.0	
57 trans-1,2-Dichloroethene	96	3.768	3.768	0.000	100	192049	10.0	10.3	
56 Methyl tert-butyl ether	73	3.785	3.785	0.000	94	275750	10.0	10.4	
59 Hexane	57	4.063	4.063	0.000	93	241079	10.0	9.03	

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	4.203	0.000	96	314512	10.0	9.03	
61 Vinyl acetate	43	4.220	4.220	0.000	96	281391	20.0	15.0	
67 2-Butanone (MEK)	43	4.881	4.881	0.000	44	79596	40.0	36.5	
65 cis-1,2-Dichloroethene	96	4.881	4.881	0.000	83	185585	10.0	10.4	
66 2,2-Dichloropropane	77	4.916	4.916	0.000	89	303127	10.0	9.12	
70 sec-Butyl Alcohol	45	5.125	5.125	0.000	93	126859	300.0	311.4	
71 Chlorobromomethane	128	5.177	5.177	0.000	83	92668	10.0	10.8	
74 Chloroform	83	5.264	5.264	0.000	93	340483	10.0	9.94	
72 Tetrahydrofuran	42	5.264	5.264	0.000	36	25734	20.0	19.8	
75 1,1,1-Trichloroethane	97	5.560	5.560	0.000	98	324193	10.0	9.59	
76 Cyclohexane	56	5.647	5.647	0.000	91	277238	10.0	9.07	
78 1,1-Dichloropropene	75	5.751	5.751	0.000	97	259031	10.0	8.95	
77 Carbon tetrachloride	117	5.786	5.786	0.000	97	298467	10.0	9.89	
80 Isobutyl alcohol	41	5.873	5.873	0.000	94	33001	250.0	227.6	
82 1,2-Dichloroethane	62	6.012	6.012	0.000	95	136719	10.0	10.3	
81 Benzene	78	6.012	6.012	0.000	95	522212	10.0	9.85	
84 n-Heptane	43	6.412	6.412	0.000	92	306835	10.0	8.70	
85 Trichloroethene	95	6.917	6.917	0.000	97	235350	10.0	10.1	
89 2-Pentanone	43	7.143	7.143	0.000	100	189059	40.0	43.2	
90 1,2-Dichloropropane	63	7.196	7.196	0.000	92	172904	10.0	9.31	
87 Methylcyclohexane	55	7.213	7.213	0.000	91	233774	10.0	8.83	
92 Dibromomethane	93	7.370	7.370	0.000	95	110319	10.0	10.4	
94 Dichlorobromomethane	83	7.613	7.613	0.000	99	286280	10.0	10.9	
96 2-Chloroethyl vinyl ether	63	8.048	8.048	0.000	92	55241	10.0	8.95	
97 cis-1,3-Dichloropropene	75	8.274	8.274	0.000	96	236209	10.0	9.80	
98 4-Methyl-2-pentanone (MIBK	43	8.535	8.535	0.000	97	259744	40.0	38.2	
99 Toluene	91	8.814	8.814	0.000	99	572803	10.0	9.76	
100 trans-1,3-Dichloropropene	75	9.127	9.127	0.000	93	168122	10.0	9.89	
101 Ethyl methacrylate	69	9.336	9.336	0.000	90	134000	10.0	10.9	
102 1,1,2-Trichloroethane	97	9.423	9.423	0.000	90	108999	10.0	10.9	
104 1,3-Dichloropropane	76	9.684	9.684	0.000	91	175308	10.0	10.3	
103 Tetrachloroethene	164	9.701	9.701	0.000	99	223265	10.0	10.8	
105 2-Hexanone	43	9.858	9.858	0.000	97	164865	40.0	37.7	
107 Chlorodibromomethane	129	10.049	10.049	0.000	90	192340	10.0	11.9	
109 Ethylene Dibromide	107	10.241	10.241	0.000	99	141331	10.0	10.9	
111 Chlorobenzene	112	11.076	11.076	0.000	90	400725	10.0	10.4	
110 1-Chlorohexane	91	11.076	11.076	0.000	79	270415	10.0	9.27	
113 1,1,1,2-Tetrachloroethane	131	11.215	11.215	0.000	94	205054	10.0	11.1	
112 Ethylbenzene	106	11.285	11.285	0.000	99	193526	10.0	10.2	
114 m-Xylene & p-Xylene	106	11.493	11.493	0.000	99	259917	10.0	10.0	
115 o-Xylene	106	12.155	12.155	0.000	97	232142	10.0	10.5	
116 Styrene	104	12.172	12.172	0.000	94	385597	10.0	10.5	
117 Bromoform	173	12.468	12.468	0.000	97	107730	10.0	12.2	
118 Isopropylbenzene	105	12.816	12.816	0.000	96	721786	10.0	8.92	
119 Cyclohexanone	55	12.938	12.938	0.000	92	67328	400.0	408.9	
121 Bromobenzene	156	13.303	13.303	0.000	92	218990	10.0	10.4	
122 1,1,2,2-Tetrachloroethane	83	13.321	13.321	0.000	95	142163	10.0	9.61	
124 1,2,3-Trichloropropane	110	13.373	13.373	0.000	81	32628	10.0	9.87	
125 trans-1,4-Dichloro-2-buten	53	13.425	13.425	0.000	84	28455	10.0	8.37	
123 N-Propylbenzene	120	13.547	13.547	0.000	99	188950	10.0	9.10	
126 2-Chlorotoluene	126	13.669	13.669	0.000	85	164165	10.0	9.55	a
128 4-Chlorotoluene	126	13.860	13.860	0.000	99	193243	10.0	9.63	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.877	13.877	0.000	97	574812	10.0	9.23	
129 tert-Butylbenzene	119	14.452	14.452	0.000	93	628931	10.0	8.88	
130 1,2,4-Trimethylbenzene	105	14.539	14.539	0.000	96	553734	10.0	9.07	
131 sec-Butylbenzene	134	14.852	14.852	0.000	94	178523	10.0	9.13	
132 1,3-Dichlorobenzene	146	15.008	15.008	0.000	98	359050	10.0	9.75	
133 4-Isopropyltoluene	119	15.130	15.130	0.000	97	721629	10.0	9.02	
134 1,4-Dichlorobenzene	146	15.165	15.165	0.000	95	458394	10.0	10.4	
138 1,2-Dichlorobenzene	146	15.809	15.809	0.000	98	325567	10.0	10.2	
137 n-Butylbenzene	91	15.844	15.844	0.000	97	677313	10.0	8.87	
139 1,2-Dibromo-3-Chloropropan	157	16.940	16.940	0.000	91	26036	10.0	12.4	
141 1,2,4-Trichlorobenzene	180	17.862	17.862	0.000	95	215943	10.0	10.0	
142 Hexachlorobutadiene	225	18.071	18.071	0.000	96	216149	10.0	9.94	
143 Naphthalene	128	18.106	18.106	0.000	97	208627	10.0	9.83	
144 1,2,3-Trichlorobenzene	180	18.349	18.349	0.000	96	165487	10.0	9.88	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.0	
S 150 Xylenes, Total (URS)	1				0		20.0	20.6	
S 151 Total BTEX	1				0			50.3	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.7	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.7	
S 146 Xylenes, Total	106				0		20.0	20.6	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.7	

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:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:21:39 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D

Injection Date: 08-May-2015 04:25:30 Instrument ID: VMS_Z Operator ID: bergerb

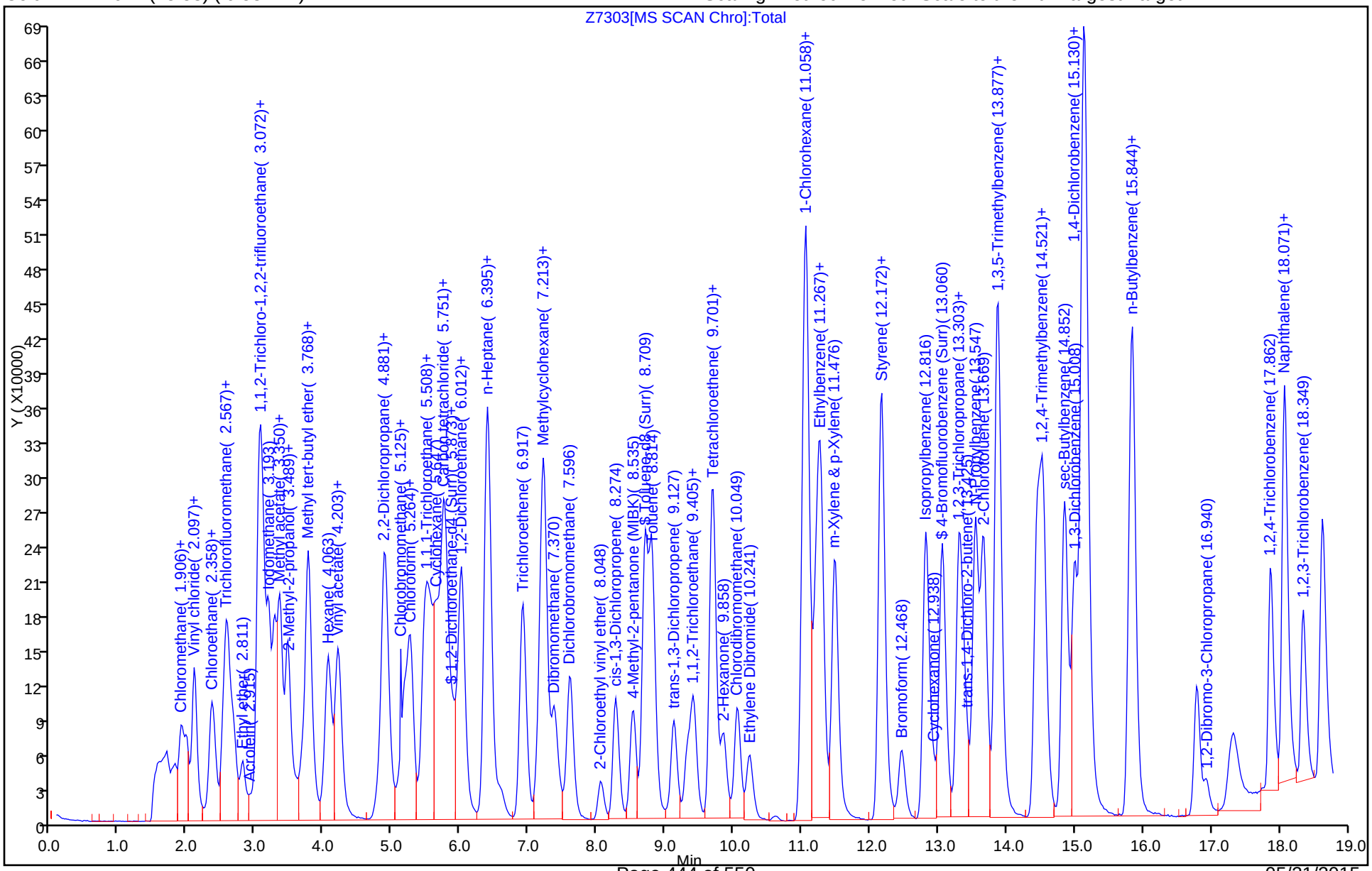
Lims ID: ccvc Worklist Smp#: 25

Client ID:

Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 22

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

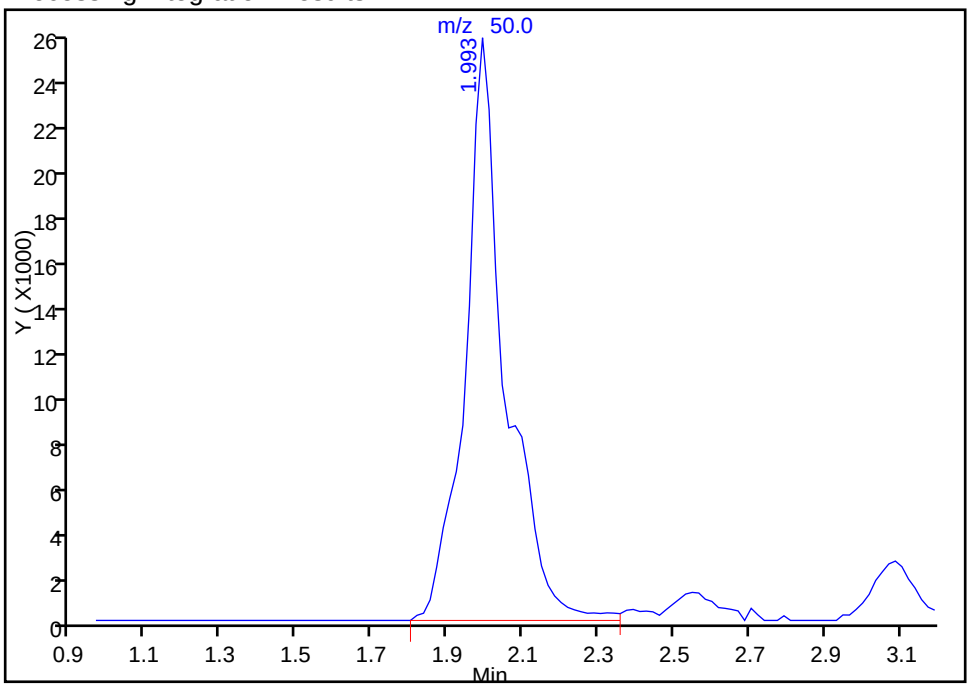
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D				
Injection Date:	08-May-2015 04:25:30	Instrument ID:	VMS_Z		
Lims ID:	ccvc				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	22	Worklist Smp#:	25
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

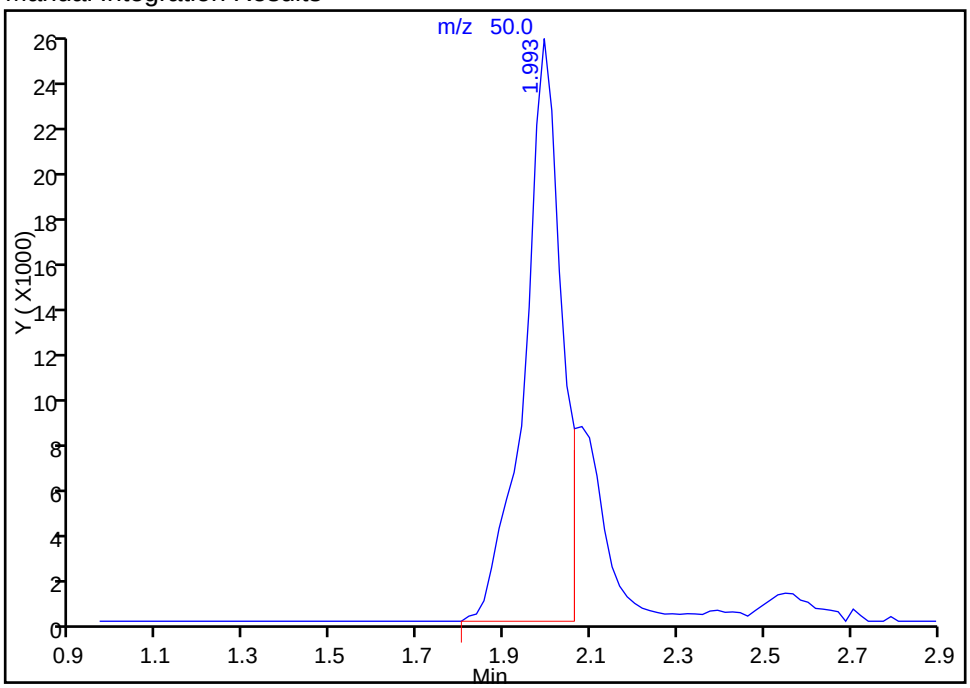
Processing Integration Results

RT: 1.99
Area: 187762
Amount: 10.785486
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 150546
Amount: 8.647712
Amount Units: ug/l



Reviewer: bergerb, 08-May-2015 16:21:39
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

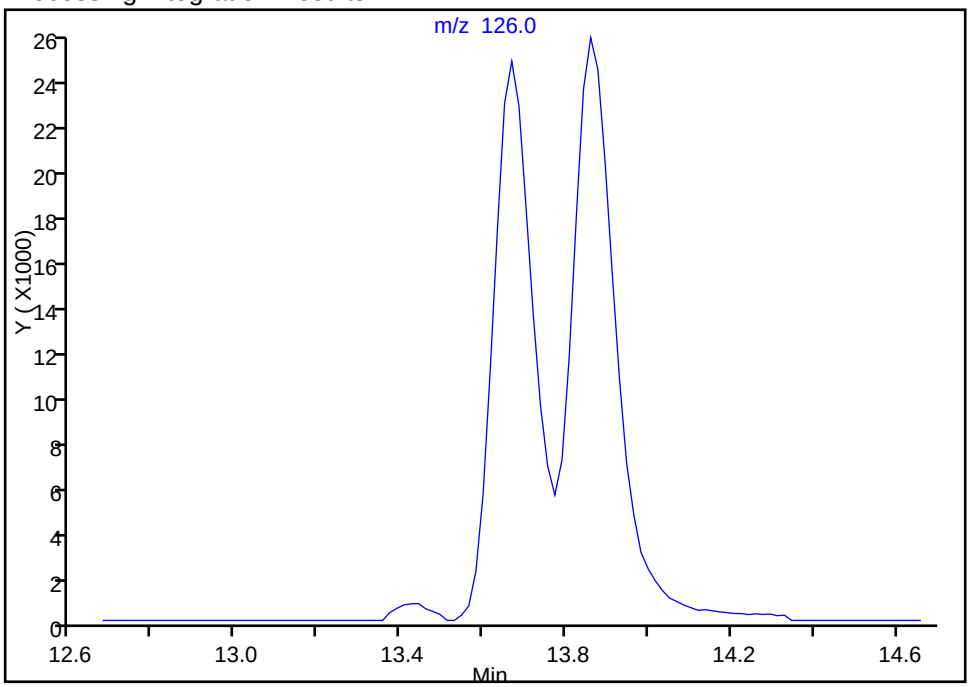
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D				
Injection Date:	08-May-2015 04:25:30	Instrument ID:	VMS_Z		
Lims ID:	ccvc				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	22	Worklist Smp#:	25
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

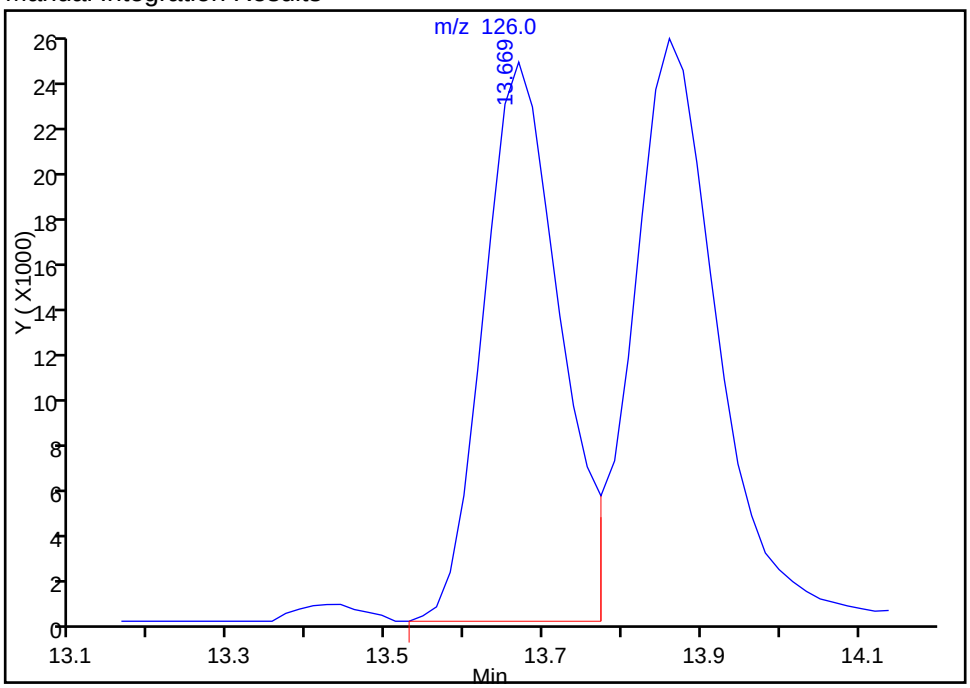
Processing Integration Results

Not Detected
Expected RT: 13.67



Manual Integration Results

RT: 13.67
Area: 164165
Amount: 9.551797
Amount Units: ug/l



Reviewer: bergerb, 08-May-2015 16:21:39
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Lab Sample ID: CCVC 280-276534/25 Calibration Date: 05/08/2015 04:25

Instrument ID: VMS_Z Calib Start Date: 05/02/2015 07:56

GC Column: DB-624 (75.53) ID: 0.53(mm) Calib End Date: 05/02/2015 09:27

Lab File ID: Z7303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.5562	0.5762		10.9	10.5	3.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2317	0.2499		11.3	10.5	7.8	50.0
Toluene-d8 (Surr)	Ave	4.678	4.853		10.9	10.5	3.7	50.0
4-Bromofluorobenzene (Surr)	Lin2		1.392		10.7	10.5	1.9	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 08-May-2015 04:25:30 ALS Bottle#: 22 Worklist Smp#: 25
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: bergerb Instrument ID: VMS_Z
Sublist: chrom-AQ_VMSZ_8260*sub71

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:21:39 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:21:39

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	3.489	3.489	0.000	88	121761	250.0	250.0	
* 2 Fluorobenzene	96	6.378	6.378	0.000	98	664457	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.024	11.024	0.000	87	151897	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.130	15.130	0.000	95	314084	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.473	5.473	0.000	94	321595	10.5	10.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.908	5.908	0.000	96	139487	10.5	11.3	
$ 10 Toluene-d8 (Surr)	98	8.709	8.709	0.000	93	619207	10.5	10.9	
$ 11 4-Bromofluorobenzene (Surr	95	13.060	13.060	0.000	89	367151	10.5	10.7	M
27 Dichlorodifluoromethane	85	1.923	1.923	0.000	98	273273	10.0	9.87	
30 Chloromethane	50	1.993	1.993	0.000	100	150546	10.0	8.65	M
31 Butadiene	54	2.097	2.097	0.000	85	100293	NC	NC	
32 Vinyl chloride	62	2.115	2.115	0.000	98	146470	10.0	8.81	
35 Bromomethane	94	2.341	2.341	0.000	90	166909	10.0	9.81	
36 Chloroethane	64	2.393	2.393	0.000	99	102759	10.0	8.81	
37 Dichlorofluoromethane	67	2.550	2.550	0.000	98	397076	10.0	9.41	
38 Trichlorofluoromethane	101	2.602	2.602	0.000	99	359059	10.0	9.19	
40 Ethyl ether	59	2.811	2.811	0.000	93	78535	10.0	10.4	
44 Acrolein	56	2.915	2.915	0.000	97	32520	100.0	80.4	
45 1,1-Dichloroethene	96	3.037	3.037	0.000	99	185328	10.0	10.7	
48 Acetone	43	3.054	3.054	0.000	77	35717	40.0	35.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.089	3.089	0.000	97	296225	10.0	10.9	
49 Iodomethane	142	3.193	3.193	0.000	98	484707	10.0	10.9	
50 Carbon disulfide	76	3.280	3.280	0.000	99	622672	10.0	9.68	
52 3-Chloro-1-propene	41	3.350	3.350	0.000	84	261487	10.0	8.68	
51 Methyl acetate	43	3.367	3.367	0.000	73	194271	50.0	49.1	
54 Methylene Chloride	84	3.472	3.472	0.000	92	167199	10.0	11.4	
55 2-Methyl-2-propanol	59	3.559	3.559	0.000	91	53619	100.0	106.1	
58 Acrylonitrile	53	3.681	3.681	0.000	98	120564	100.0	93.0	
57 trans-1,2-Dichloroethene	96	3.768	3.768	0.000	100	192049	10.0	10.3	
56 Methyl tert-butyl ether	73	3.785	3.785	0.000	94	275750	10.0	10.4	
59 Hexane	57	4.063	4.063	0.000	93	241079	10.0	9.03	

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	4.203	0.000	96	314512	10.0	9.03	
61 Vinyl acetate	43	4.220	4.220	0.000	96	281391	20.0	15.0	
67 2-Butanone (MEK)	43	4.881	4.881	0.000	44	79596	40.0	36.5	
65 cis-1,2-Dichloroethene	96	4.881	4.881	0.000	83	185585	10.0	10.4	
66 2,2-Dichloropropane	77	4.916	4.916	0.000	89	303127	10.0	9.12	
70 sec-Butyl Alcohol	45	5.125	5.125	0.000	93	126859	300.0	311.4	
71 Chlorobromomethane	128	5.177	5.177	0.000	83	92668	10.0	10.8	
74 Chloroform	83	5.264	5.264	0.000	93	340483	10.0	9.94	
72 Tetrahydrofuran	42	5.264	5.264	0.000	36	25734	20.0	19.8	
75 1,1,1-Trichloroethane	97	5.560	5.560	0.000	98	324193	10.0	9.59	
76 Cyclohexane	56	5.647	5.647	0.000	91	277238	10.0	9.07	
78 1,1-Dichloropropene	75	5.751	5.751	0.000	97	259031	10.0	8.95	
77 Carbon tetrachloride	117	5.786	5.786	0.000	97	298467	10.0	9.89	
80 Isobutyl alcohol	41	5.873	5.873	0.000	94	33001	250.0	227.6	
82 1,2-Dichloroethane	62	6.012	6.012	0.000	95	136719	10.0	10.3	
81 Benzene	78	6.012	6.012	0.000	95	522212	10.0	9.85	
84 n-Heptane	43	6.412	6.412	0.000	92	306835	10.0	8.70	
85 Trichloroethene	95	6.917	6.917	0.000	97	235350	10.0	10.1	
89 2-Pentanone	43	7.143	7.143	0.000	100	189059	40.0	43.2	
90 1,2-Dichloropropane	63	7.196	7.196	0.000	92	172904	10.0	9.31	
87 Methylcyclohexane	55	7.213	7.213	0.000	91	233774	10.0	8.83	
92 Dibromomethane	93	7.370	7.370	0.000	95	110319	10.0	10.4	
94 Dichlorobromomethane	83	7.613	7.613	0.000	99	286280	10.0	10.9	
96 2-Chloroethyl vinyl ether	63	8.048	8.048	0.000	92	55241	10.0	8.95	
97 cis-1,3-Dichloropropene	75	8.274	8.274	0.000	96	236209	10.0	9.80	
98 4-Methyl-2-pentanone (MIBK	43	8.535	8.535	0.000	97	259744	40.0	38.2	
99 Toluene	91	8.814	8.814	0.000	99	572803	10.0	9.76	
100 trans-1,3-Dichloropropene	75	9.127	9.127	0.000	93	168122	10.0	9.89	
101 Ethyl methacrylate	69	9.336	9.336	0.000	90	134000	10.0	10.9	
102 1,1,2-Trichloroethane	97	9.423	9.423	0.000	90	108999	10.0	10.9	
104 1,3-Dichloropropane	76	9.684	9.684	0.000	91	175308	10.0	10.3	
103 Tetrachloroethene	164	9.701	9.701	0.000	99	223265	10.0	10.8	
105 2-Hexanone	43	9.858	9.858	0.000	97	164865	40.0	37.7	
107 Chlorodibromomethane	129	10.049	10.049	0.000	90	192340	10.0	11.9	
109 Ethylene Dibromide	107	10.241	10.241	0.000	99	141331	10.0	10.9	
111 Chlorobenzene	112	11.076	11.076	0.000	90	400725	10.0	10.4	
110 1-Chlorohexane	91	11.076	11.076	0.000	79	270415	10.0	9.27	
113 1,1,1,2-Tetrachloroethane	131	11.215	11.215	0.000	94	205054	10.0	11.1	
112 Ethylbenzene	106	11.285	11.285	0.000	99	193526	10.0	10.2	
114 m-Xylene & p-Xylene	106	11.493	11.493	0.000	99	259917	10.0	10.0	
115 o-Xylene	106	12.155	12.155	0.000	97	232142	10.0	10.5	
116 Styrene	104	12.172	12.172	0.000	94	385597	10.0	10.5	
117 Bromoform	173	12.468	12.468	0.000	97	107730	10.0	12.2	
118 Isopropylbenzene	105	12.816	12.816	0.000	96	721786	10.0	8.92	
119 Cyclohexanone	55	12.938	12.938	0.000	92	67328	400.0	408.9	
121 Bromobenzene	156	13.303	13.303	0.000	92	218990	10.0	10.4	
122 1,1,2,2-Tetrachloroethane	83	13.321	13.321	0.000	95	142163	10.0	9.61	
124 1,2,3-Trichloropropane	110	13.373	13.373	0.000	81	32628	10.0	9.87	
125 trans-1,4-Dichloro-2-buten	53	13.425	13.425	0.000	84	28455	10.0	8.37	
123 N-Propylbenzene	120	13.547	13.547	0.000	99	188950	10.0	9.10	
126 2-Chlorotoluene	126	13.669	13.669	0.000	85	164165	10.0	9.55	a
128 4-Chlorotoluene	126	13.860	13.860	0.000	99	193243	10.0	9.63	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	13.877	13.877	0.000	97	574812	10.0	9.23	
129 tert-Butylbenzene	119	14.452	14.452	0.000	93	628931	10.0	8.88	
130 1,2,4-Trimethylbenzene	105	14.539	14.539	0.000	96	553734	10.0	9.07	
131 sec-Butylbenzene	134	14.852	14.852	0.000	94	178523	10.0	9.13	
132 1,3-Dichlorobenzene	146	15.008	15.008	0.000	98	359050	10.0	9.75	
133 4-Isopropyltoluene	119	15.130	15.130	0.000	97	721629	10.0	9.02	
134 1,4-Dichlorobenzene	146	15.165	15.165	0.000	95	458394	10.0	10.4	
138 1,2-Dichlorobenzene	146	15.809	15.809	0.000	98	325567	10.0	10.2	
137 n-Butylbenzene	91	15.844	15.844	0.000	97	677313	10.0	8.87	
139 1,2-Dibromo-3-Chloropropan	157	16.940	16.940	0.000	91	26036	10.0	12.4	
141 1,2,4-Trichlorobenzene	180	17.862	17.862	0.000	95	215943	10.0	10.0	
142 Hexachlorobutadiene	225	18.071	18.071	0.000	96	216149	10.0	9.94	
143 Naphthalene	128	18.106	18.106	0.000	97	208627	10.0	9.83	
144 1,2,3-Trichlorobenzene	180	18.349	18.349	0.000	96	165487	10.0	9.88	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		40.0	45.0	
S 150 Xylenes, Total (URS)	1				0		20.0	20.6	
S 151 Total BTEX	1				0			50.3	
S 148 1,3-Dichloropropene, Total	1				0		20.0	19.7	
S 145 1,2-Dichloroethene, Total	1				0		20.0	20.7	
S 146 Xylenes, Total	106				0		20.0	20.6	
S 147 1,2-Dichloroethene, Total	96				0		20.0	20.7	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

Reagents:

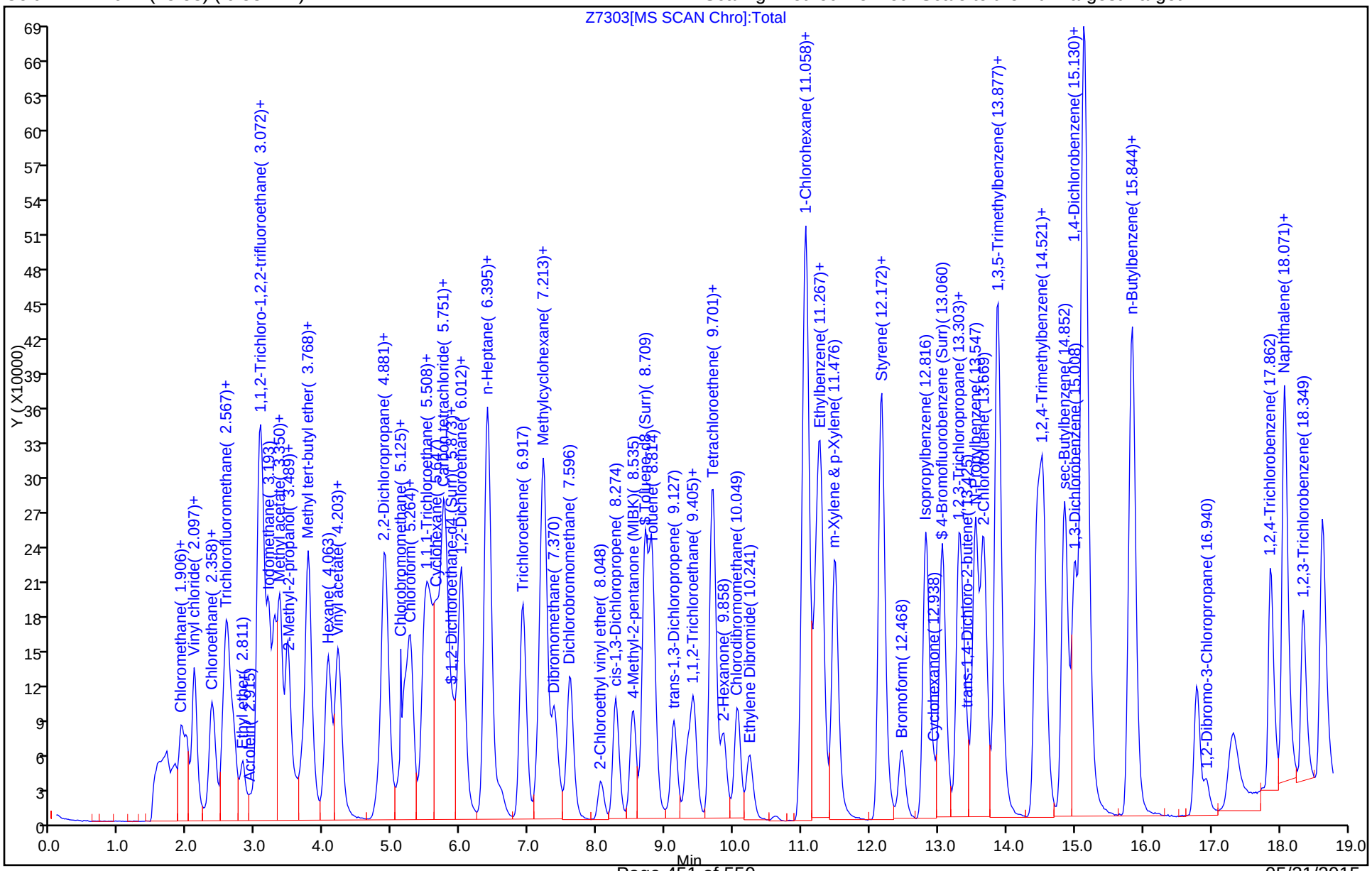
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:21:39 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D				
Injection Date:	08-May-2015 04:25:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	ccvc			Worklist Smp#:	25
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
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

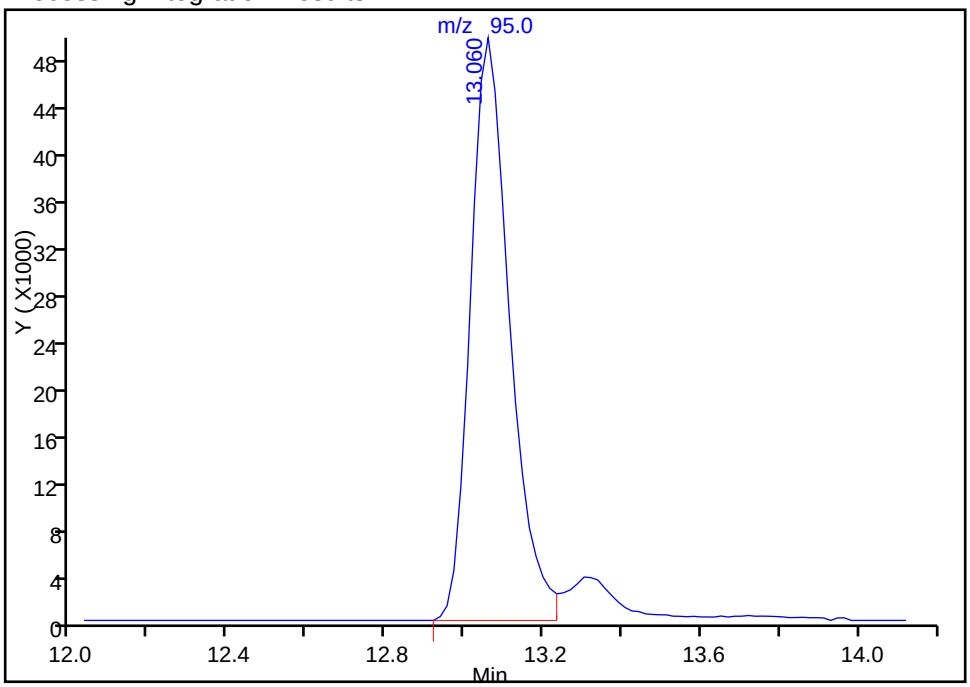
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7303.D				
Injection Date:	08-May-2015 04:25:30	Instrument ID:	VMS_Z		
Lims ID:	ccvc				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	22	Worklist Smp#:	25
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		

$ 11 4-Bromofluorobenzene (Surr), CAS: 460-00-4

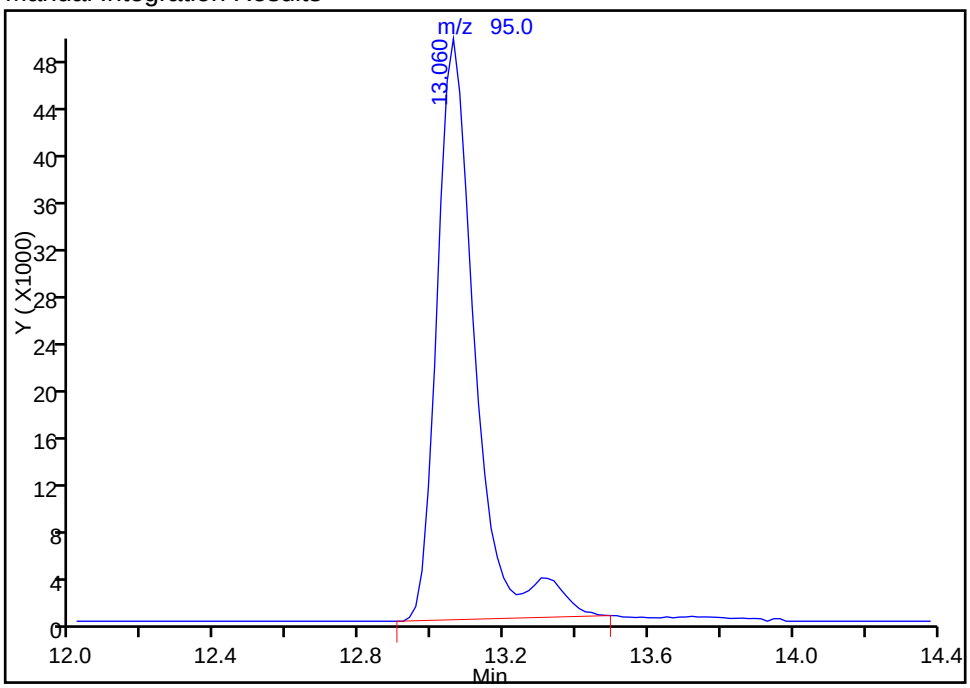
Processing Integration Results

RT: 13.06
Area: 345197
Amount: 10.006191
Amount Units: ug/l



Manual Integration Results

RT: 13.06
Area: 367151
Amount: 10.702473
Amount Units: ug/l



Reviewer: bergerb, 08-May-2015 16:21:39
Audit Action: Manually Integrated
Audit Reason: Split Peak

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:

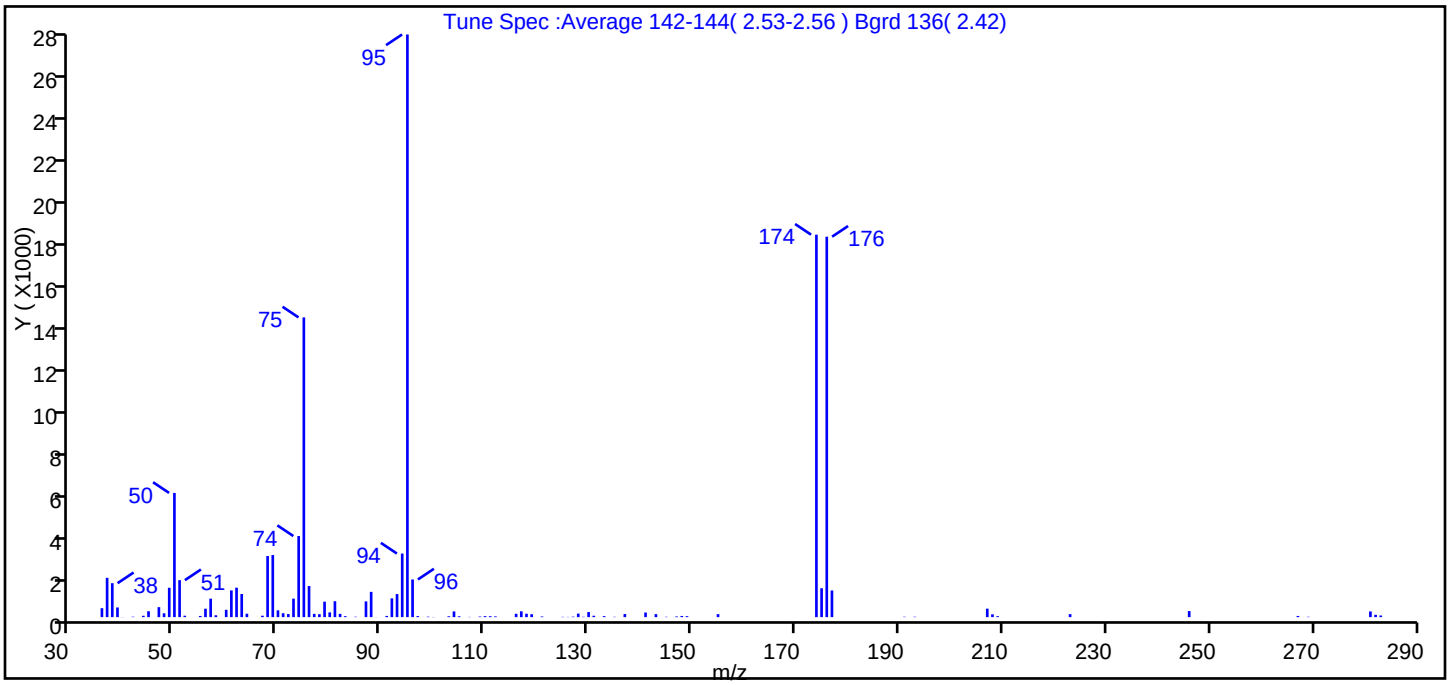
MV-BFB_00018 Amount Added: 1.00 Units: uL

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\20150430-34486.b\Z6919.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	30-Apr-2015 06:12:30	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\20150430-34486.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Apr-2015 09:11:00	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:	XAWRK007				
First Level Reviewer: moanm		Date:	30-Apr-2015 06:53:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.550	2.550	0.000	84	147763	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

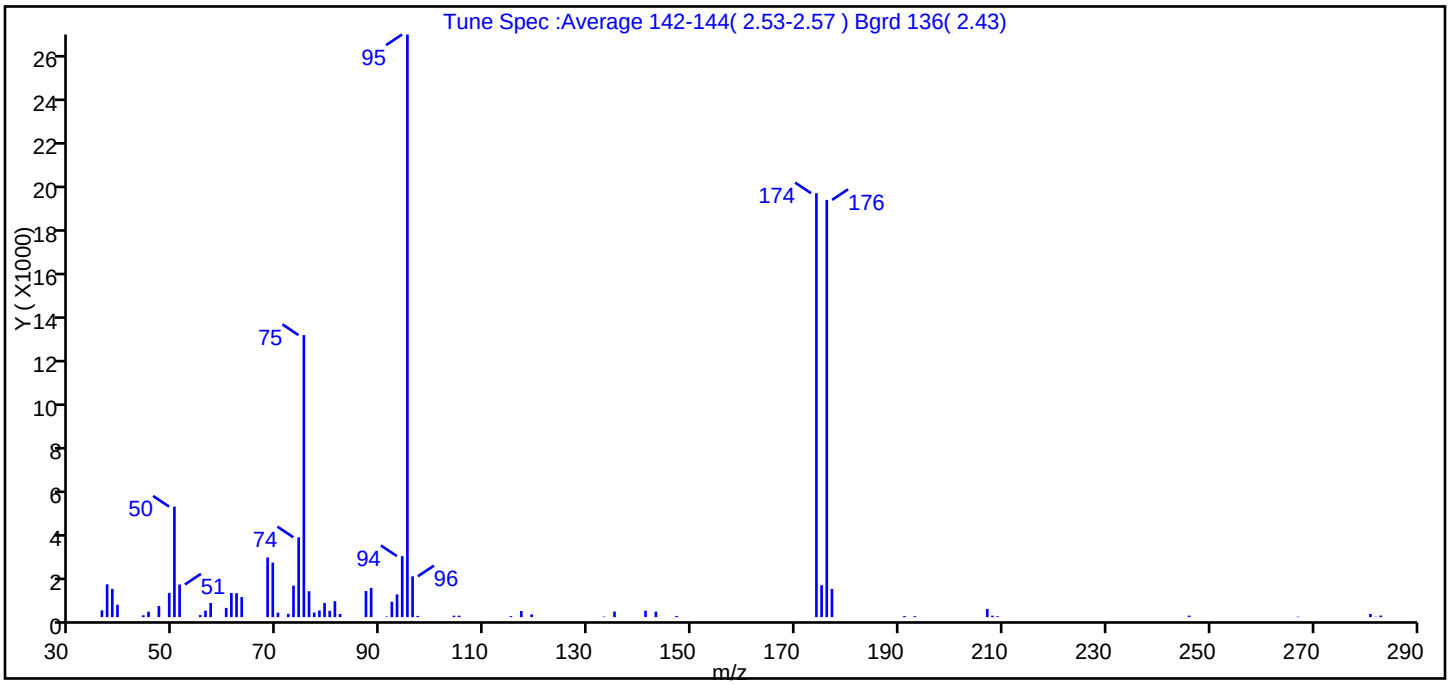
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6919.D				
Injection Date:	30-Apr-2015 06:12:30	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	19.0
75	30 to 60% of m/z 95	48.4
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	72.8
175	5 to 9% of m/z 174	5.5 (7.5)
176	Greater than 95% but less than 101% of m/z 174	71.6 (98.4)
177	5 to 9% of m/z 176	4.8 (6.8)

Data File: \\Denchrom\ChromData\VMS_Z\20150430-34486.b\Z6919.D\AQ_VMSZ_8260.rslt\spectra.d
Injection Date: 30-Apr-2015 06:12:30
Spectrum: Tune Spec :Average 142-144(2.53-2.57) Bgrd 136(2.43)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	310	63.00	915	88.00	1335	143.00	254
37.00	1497	68.00	2718	91.00	29	147.00	54
38.00	1287	69.00	2485	92.00	702	174.00	19312
39.00	566	70.00	204	93.00	1036	175.00	1456
44.00	85	72.00	150	94.00	2780	176.00	19008
45.00	247	73.00	1436	95.00	26544	177.00	1286
47.00	512	74.00	3638	96.00	1860	191.00	50
49.00	1105	75.00	12850	97.00	56	193.00	45
50.00	5035	76.00	1179	104.00	67	207.00	370
51.00	1488	77.00	208	105.00	69	208.00	68
55.00	95	78.00	303	115.00	47	209.00	40
56.00	296	79.00	647	117.00	278	246.00	71
57.00	647	80.00	286	119.00	126	267.00	22
60.00	423	81.00	729	133.00	25	281.00	141
61.00	1099	82.00	144	135.00	255	282.00	18
62.00	1092	87.00	1191	141.00	294	283.00	73

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7033.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	02-May-2015 05:53:30	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\20150502-34583.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-May-2015 10:21:04	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: moanm Date: 02-May-2015 06:00:54

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	84	158168	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

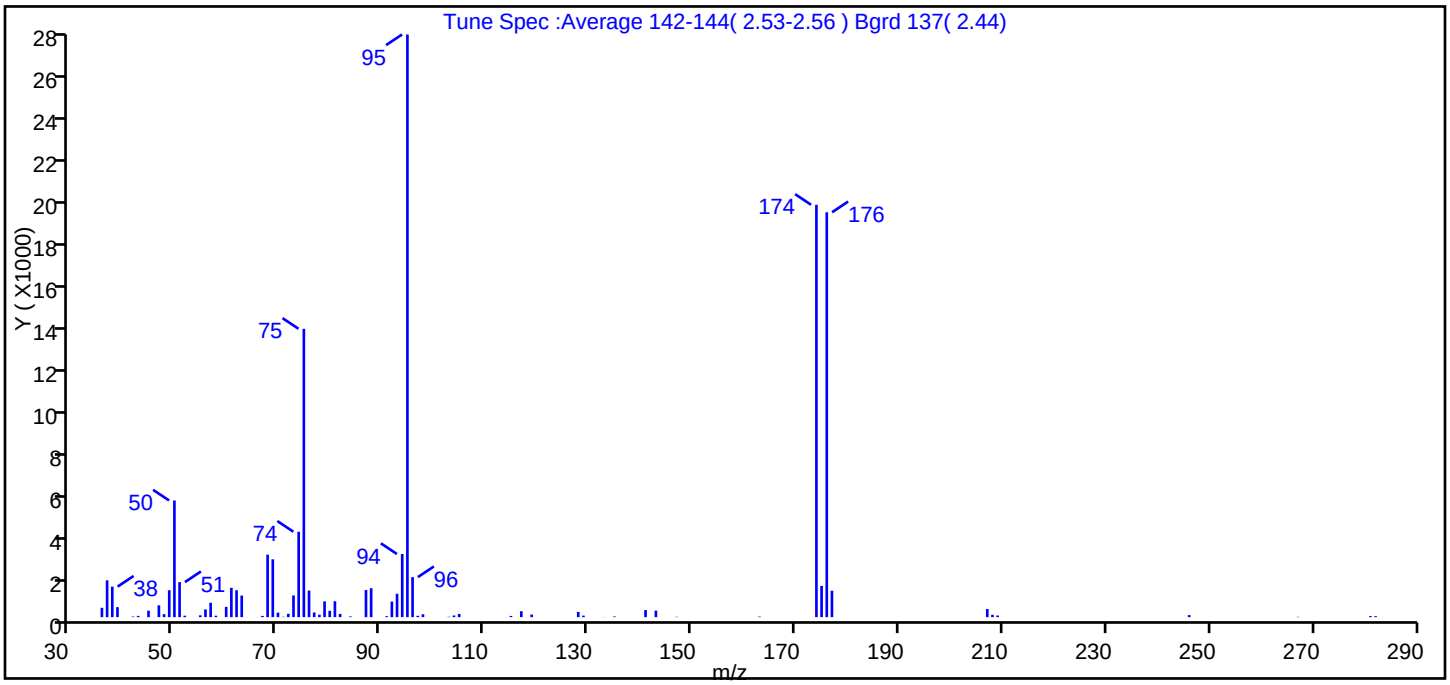
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7033.D				
Injection Date:	02-May-2015 05:53:30	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	20.0
75	30 to 60% of m/z 95	49.5
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	70.8
175	5 to 9% of m/z 174	5.4 (7.6)
176	Greater than 95% but less than 101% of m/z 174	69.5 (98.2)
177	5 to 9% of m/z 176	4.5 (6.5)

Data File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7033.D\AQ_VMSZ_8260.rslt\spectra.d
Injection Date: 02-May-2015 05:53:30
Spectrum: Tune Spec :Average 142-144(2.53-2.56) Bgrd 137(2.44)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	440	62.00	1268	87.00	1280	135.00	32
37.00	1737	63.00	1019	88.00	1365	141.00	335
38.00	1439	67.00	58	91.00	46	143.00	308
39.00	472	68.00	2948	92.00	735	147.00	17
42.00	27	69.00	2729	93.00	1099	163.00	27
43.00	60	70.00	212	94.00	2978	174.00	19448
45.00	305	71.00	17	95.00	27480	175.00	1474
47.00	559	72.00	159	96.00	1889	176.00	19096
48.00	141	73.00	1022	97.00	61	177.00	1248
49.00	1269	74.00	4029	98.00	136	207.00	382
50.00	5502	75.00	13599	103.00	18	208.00	108
51.00	1652	76.00	1255	104.00	79	209.00	77
52.00	68	77.00	220	105.00	152	246.00	97
55.00	86	78.00	113	115.00	57	267.00	16
56.00	364	79.00	744	117.00	280	281.00	52
57.00	677	80.00	298	119.00	121	282.00	45
58.00	68	81.00	751	128.00	246		
60.00	486	82.00	153	129.00	72		
61.00	1383	84.00	34	133.00	6		

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7158.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-May-2015 20:05:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	bfb				
Operator ID:	bergerb	Instrument ID:	VMS_Z		
Method:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	06-May-2015 15:31:06	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK016				
First Level Reviewer: bergerb		Date:	06-May-2015 15:31:06		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.613	2.613	0.000	84	120889	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

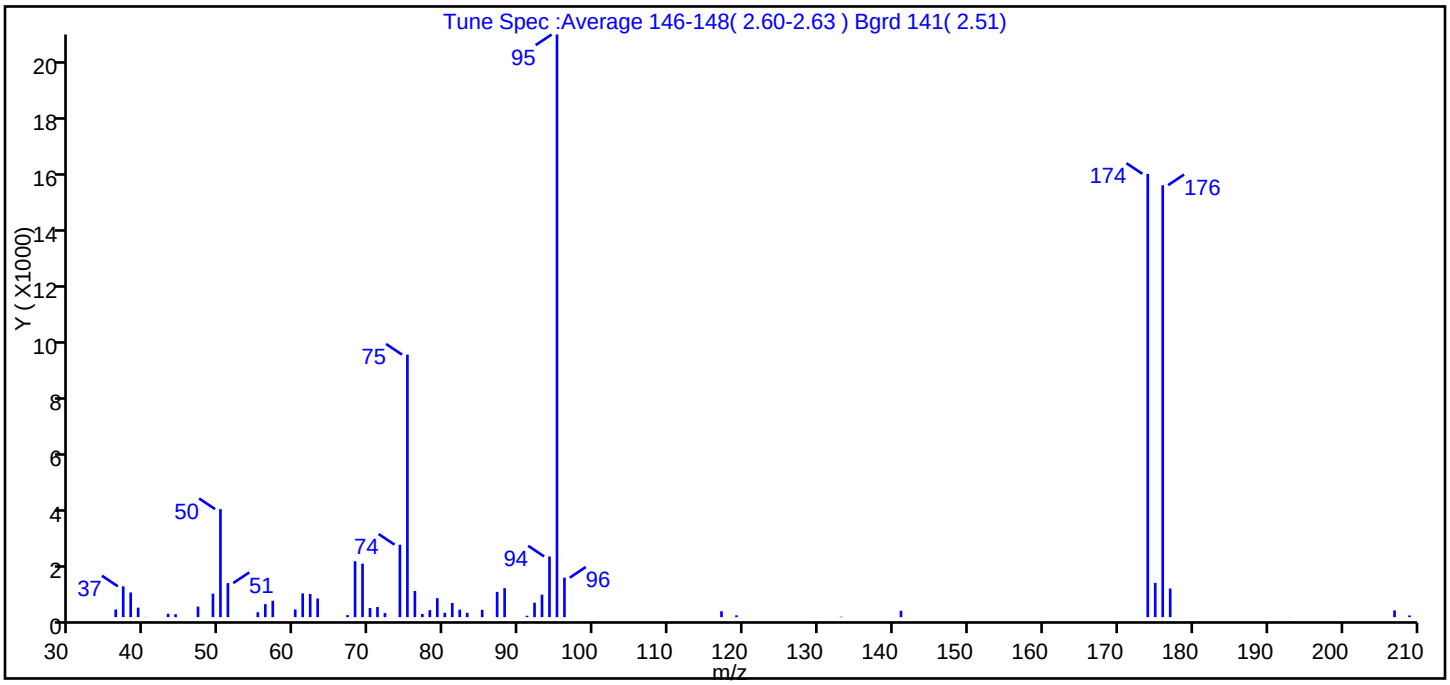
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7158.D				
Injection Date:	05-May-2015 20:05:30	Instrument ID:	VMS_Z		
Lims ID:	BFB				
Client ID:					
Operator ID:	bergerb	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	18.5
75	30 to 60% of m/z 95	45.1
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	76.1
175	5 to 9% of m/z 174	5.9 (7.7)
176	Greater than 95% but less than 101% of m/z 174	74.1 (97.4)
177	5 to 9% of m/z 176	4.9 (6.6)

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7158.D\AQ_VMSZ_8260.rslt\spectra.d
Injection Date: 05-May-2015 20:05:30
Spectrum: Tune Spec :Average 146-148(2.60-2.63) Bgrd 141(2.51)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 54

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	274	60.00	275	78.00	250	96.00	1412
37.00	1101	61.00	849	79.00	679	117.00	210
38.00	883	62.00	828	80.00	156	119.00	65
39.00	340	63.00	667	81.00	507	133.00	16
40.00	6	67.00	73	82.00	267	141.00	227
43.00	122	68.00	2000	83.00	155	174.00	15855
44.00	104	69.00	1911	85.00	261	175.00	1225
47.00	378	70.00	328	87.00	904	176.00	15449
49.00	839	71.00	363	88.00	1037	177.00	1023
50.00	3864	72.00	146	91.00	51	193.00	4
51.00	1219	74.00	2592	92.00	517	207.00	242
55.00	175	75.00	9389	93.00	804	209.00	60
56.00	467	76.00	937	94.00	2170		
57.00	588	77.00	114	95.00	20840		

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7282.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	07-May-2015 20:08:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	bfb				
Operator ID:	bergerb	Instrument ID:	VMS_Z		
Method:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	08-May-2015 16:29:58	Calib Date:	02-May-2015 09:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D				
Column 1 :	DB-624 (75.53) (0.53 mm)		Det: MS SCAN		
Process Host:	XAWRK001				

First Level Reviewer: bergerb Date: 08-May-2015 16:29:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.595	2.595	0.000	86	123965	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

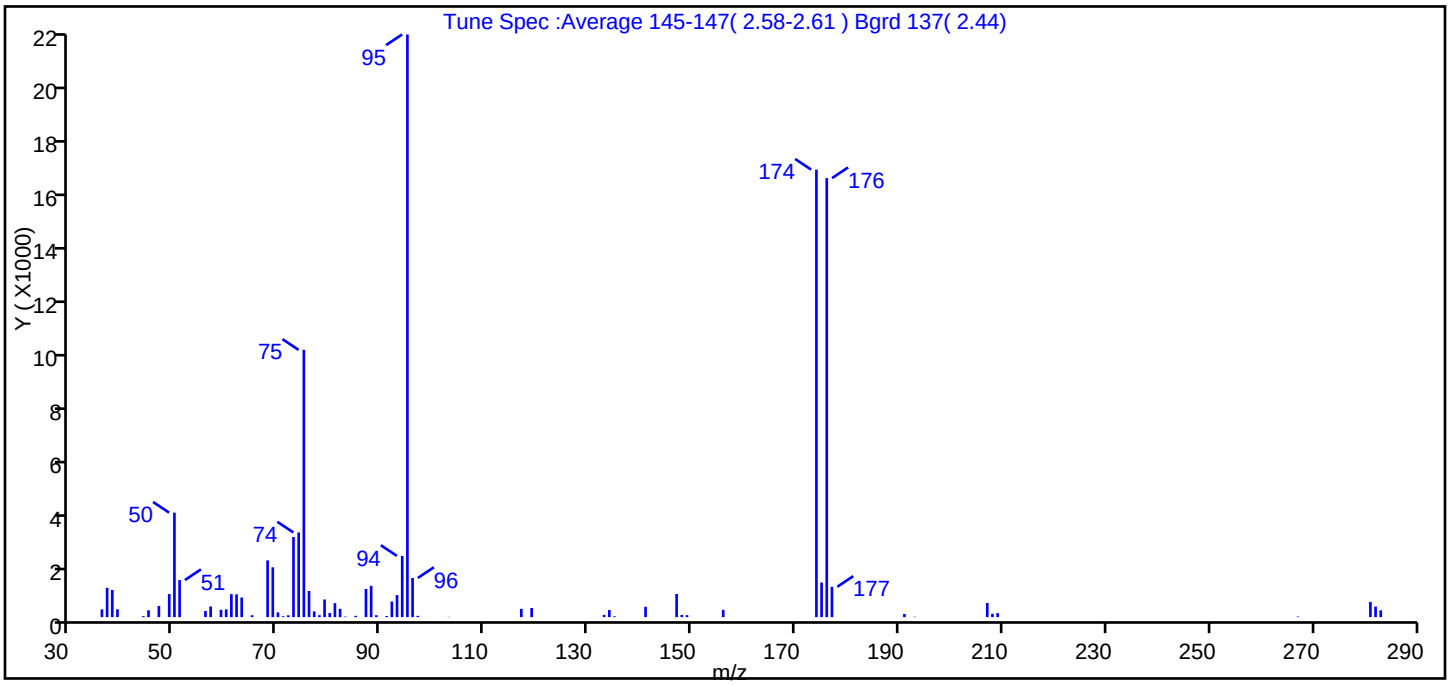
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7282.D				
Injection Date:	07-May-2015 20:08:30	Instrument ID:	VMS_Z		
Lims ID:	BFB				
Client ID:					
Operator ID:	bergerb	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	17.9
75	30 to 60% of m/z 95	45.9
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	76.8
175	5 to 9% of m/z 174	5.9 (7.7)
176	Greater than 95% but less than 101% of m/z 174	75.4 (98.1)
177	5 to 9% of m/z 176	5.2 (6.9)

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7282.D\AQ_VMSZ_8260.rslt\spectra.d
Injection Date: 07-May-2015 20:08:30
Spectrum: Tune Spec :Average 145-147(2.58-2.61) Bgrd 137(2.44)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	282	68.00	2052	88.00	1132	149.00	72
37.00	1063	69.00	1802	89.00	70	156.00	264
38.00	983	70.00	173	91.00	43	174.00	16180
39.00	284	71.00	31	92.00	563	175.00	1253
44.00	35	72.00	67	93.00	797	176.00	15872
45.00	248	73.00	2896	94.00	2214	177.00	1097
47.00	402	74.00	3061	95.00	21064	191.00	114
49.00	835	75.00	9663	96.00	1418	193.00	14
50.00	3778	76.00	947	97.00	47	207.00	512
51.00	1341	77.00	207	103.00	10	208.00	121
56.00	225	78.00	70	117.00	300	209.00	146
57.00	386	79.00	639	119.00	331	267.00	21
59.00	265	80.00	148	133.00	82	281.00	551
60.00	280	81.00	506	134.00	258	282.00	381
61.00	831	82.00	302	135.00	30	283.00	247
62.00	824	83.00	19	141.00	375		
63.00	709	85.00	47	147.00	838		
65.00	69	87.00	1018	148.00	81		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-276091/6
Matrix: Water | Lab File ID: Z7164.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/05/2015 22:18
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.: 276091 | 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.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-276091/6
Matrix: Water | Lab File ID: Z7164.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/05/2015 22:18
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.: 276091 | 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.: 280-68518-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-276091/6
Matrix: Water
Lab File ID: Z7164.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/05/2015 22:18
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.: 276091
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	103		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7164.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-May-2015 22:18:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb af
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:30:34

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	3.483	3.483	0.000	94	115675	250.0	250.0	
* 2 Fluorobenzene	96	6.372	6.389	-0.017	98	729280	12.5	12.5	
* 3 1,4-Dioxane-d8	96	7.364	7.292	0.072	27	6365		0	
* 4 Chlorobenzene-d5	119	11.018	11.017	0.001	88	167077	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.124	15.124	0.000	95	301148	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.466	0.001	94	339946	10.5	10.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.901	0.001	94	134174	10.5	9.92	
$ 10 Toluene-d8 (Surr)	98	8.704	8.703	0.001	93	653487	10.5	10.5	
$ 11 4-Bromofluorobenzene (Surr	95	13.054	13.053	0.001	88	356017	10.5	10.8	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.613					ND	
26 Chlorotrifluoroethene	116		1.824					ND	
27 Dichlorodifluoromethane	85		1.917					ND	
29 1,2-Dichloro-1,1,2,2-tetra	85		1.946					ND	
30 Chloromethane	50		2.004					ND	
31 Butadiene	54		2.091					ND	
33 2-Chloro-1,1,1-Trifluoroet	118		2.102					ND	
32 Vinyl chloride	62		2.108					ND	
34 Ethylene oxide	43		2.287					ND	
35 Bromomethane	94		2.352					ND	
36 Chloroethane	64		2.404					ND	
37 Dichlorofluoromethane	67		2.560					ND	
38 Trichlorofluoromethane	101		2.613					ND	
39 Ethanol	45		2.739					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		2.804					ND	
42 Propene oxide	58		2.861					ND	
44 Acrolein	56		2.908					ND	
45 1,1-Dichloroethene	96		3.048					ND	
48 Acetone	43		3.065					ND	
46 1,1,2-Trichloro-1,2,2-trif	151		3.082					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		3.187					ND	
50 Carbon disulfide	76		3.274					ND	
53 Acetonitrile	41		3.314					ND	
52 3-Chloro-1-propene	41		3.361					ND	
51 Methyl acetate	43		3.361					ND	
54 Methylene Chloride	84		3.465					ND	
55 2-Methyl-2-propanol	59		3.570					ND	
58 Acrylonitrile	53		3.691					ND	
57 trans-1,2-Dichloroethene	96		3.761					ND	
56 Methyl tert-butyl ether	73		3.778					ND	
59 Hexane	57		4.057					ND	
62 1,1-Dichloroethane	63		4.196					ND	
61 Vinyl acetate	43		4.231					ND	
60 Isopropyl ether	87		4.288					ND	
63 2-Chloro-1,3-butadiene	53		4.306					ND	
64 Tert-butyl ethyl ether	59		4.723					ND	
67 2-Butanone (MEK)	43		4.875					ND	
65 cis-1,2-Dichloroethene	96		4.875					ND	
66 2,2-Dichloropropane	77		4.909					ND	
69 Propionitrile	54		4.915					ND	
68 Ethyl acetate	43		4.949					ND	
70 sec-Butyl Alcohol	45		5.101					ND	
73 Methacrylonitrile	41		5.123					ND	
71 Chlorobromomethane	128		5.171					ND	
74 Chloroform	83		5.257					ND	
72 Tetrahydrofuran	42		5.275					ND	
75 1,1,1-Trichloroethane	97		5.553					ND	
76 Cyclohexane	56		5.640					ND	
78 1,1-Dichloropropene	75		5.745					ND	
77 Carbon tetrachloride	117		5.780					ND	
80 Isobutyl alcohol	41		5.867					ND	
82 1,2-Dichloroethane	62		6.006					ND	
81 Benzene	78		6.023					ND	
83 Tert-amyl methyl ether	73		6.202					ND	
84 n-Heptane	43		6.406					ND	
88 Ethyl acrylate	55		6.794					ND	
86 n-Butanol	56		6.811					ND	
85 Trichloroethene	95		6.911					ND	
89 2-Pentanone	43		7.137					ND	
90 1,2-Dichloropropane	63		7.206					ND	
87 Methylcyclohexane	55		7.224					ND	
92 Dibromomethane	93		7.363					ND	
91 Methyl methacrylate	100		7.385					ND	
94 Dichlorobromomethane	83		7.607					ND	
95 2-Nitropropane	41		7.907					ND	
96 2-Chloroethyl vinyl ether	63		8.059					ND	
97 cis-1,3-Dichloropropene	75		8.268					ND	
98 4-Methyl-2-pentanone (MIBK	43		8.529					ND	
99 Toluene	91		8.807					ND	
100 trans-1,3-Dichloropropene	75		9.120					ND	
101 Ethyl methacrylate	69		9.329					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		9.416					ND	
104 1,3-Dichloropropane	76		9.677					ND	
103 Tetrachloroethene	164		9.695					ND	
105 2-Hexanone	43		9.851					ND	
108 n-Butyl acetate	43		9.866					ND	
106 Tetrahydrothiophene	60		10.030					ND	
107 Chlorodibromomethane	129		10.060					ND	
109 Ethylene Dibromide	107		10.234					ND	
152 Propene TIC	41	10.809	10.778	0.031	0	1457		0.1090	
153 Dicyclopentadiene TIC	66		10.778					ND	
155 1,3-Butadiene TIC	39		10.778					ND	
154 4-Ethyltoluene TIC	105		10.778					ND	
110 1-Chlorohexane	91		11.069					ND	
111 Chlorobenzene	112		11.069					ND	
113 1,1,1,2-Tetrachloroethane	131		11.209					ND	
112 Ethylbenzene	106		11.278					ND	
114 m-Xylene & p-Xylene	106		11.487					ND	
115 o-Xylene	106		12.148					ND	
116 Styrene	104		12.166					ND	
117 Bromoform	173		12.461					ND	
118 Isopropylbenzene	105		12.809					ND	
120 cis-1,4-Dichloro-2-butene	53		12.901					ND	
119 Cyclohexanone	55		12.931					ND	
121 Bromobenzene	156		13.297					ND	
122 1,1,2,2-Tetrachloroethane	83		13.314					ND	
124 1,2,3-Trichloropropane	110		13.366					ND	
125 trans-1,4-Dichloro-2-buten	53		13.418					ND	
123 N-Propylbenzene	120		13.540					ND	
126 2-Chlorotoluene	126		13.662					ND	
128 4-Chlorotoluene	126		13.853					ND	
127 1,3,5-Trimethylbenzene	105		13.871					ND	
129 tert-Butylbenzene	119		14.445					ND	
130 1,2,4-Trimethylbenzene	105		14.532					ND	
131 sec-Butylbenzene	134		14.845					ND	
132 1,3-Dichlorobenzene	146		15.002					ND	
133 4-Isopropyltoluene	119		15.124					ND	
136 Benzyl chloride	126		15.156					ND	
134 1,4-Dichlorobenzene	146		15.158					ND	
135 1,2,3-Trimethylbenzene	105		15.285					ND	
138 1,2-Dichlorobenzene	146		15.802					ND	
137 n-Butylbenzene	91		15.855					ND	
139 1,2-Dibromo-3-Chloropropan	157		16.933					ND	
140 1,3,5-Trichlorobenzene	180		17.217					ND	
141 1,2,4-Trichlorobenzene	180		17.873					ND	
142 Hexachlorobutadiene	225		18.064					ND	
143 Naphthalene	128		18.099					ND	
144 1,2,3-Trichlorobenzene	180		18.343					ND	
93 1,4-Dioxane	88		18.432					ND	
17 n-Nonyl Aldehyde	1		0.000					ND	
15 2-Methylnaphthalene	142		0.000					ND	
12 2,2,3-Trimethylbutane	1		0.000					ND	
22 Dimethyl disulfide	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
16 2-Methylhexane	1		0.000					ND	
13 2,3-Dimethylpentane	1		0.000					ND	
14 3-Methylhexane	1		0.000					ND	
19 2-Butoxyethanol TIC	1		0.000					ND	
18 Pentachloroethane	167		0.000					ND	
21 2,2-Dimethylpentane	1		0.000					ND	
20 3,3-Dimethylpentane	1		0.000					ND	
23 2,4-Dimethylpentane	1		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:

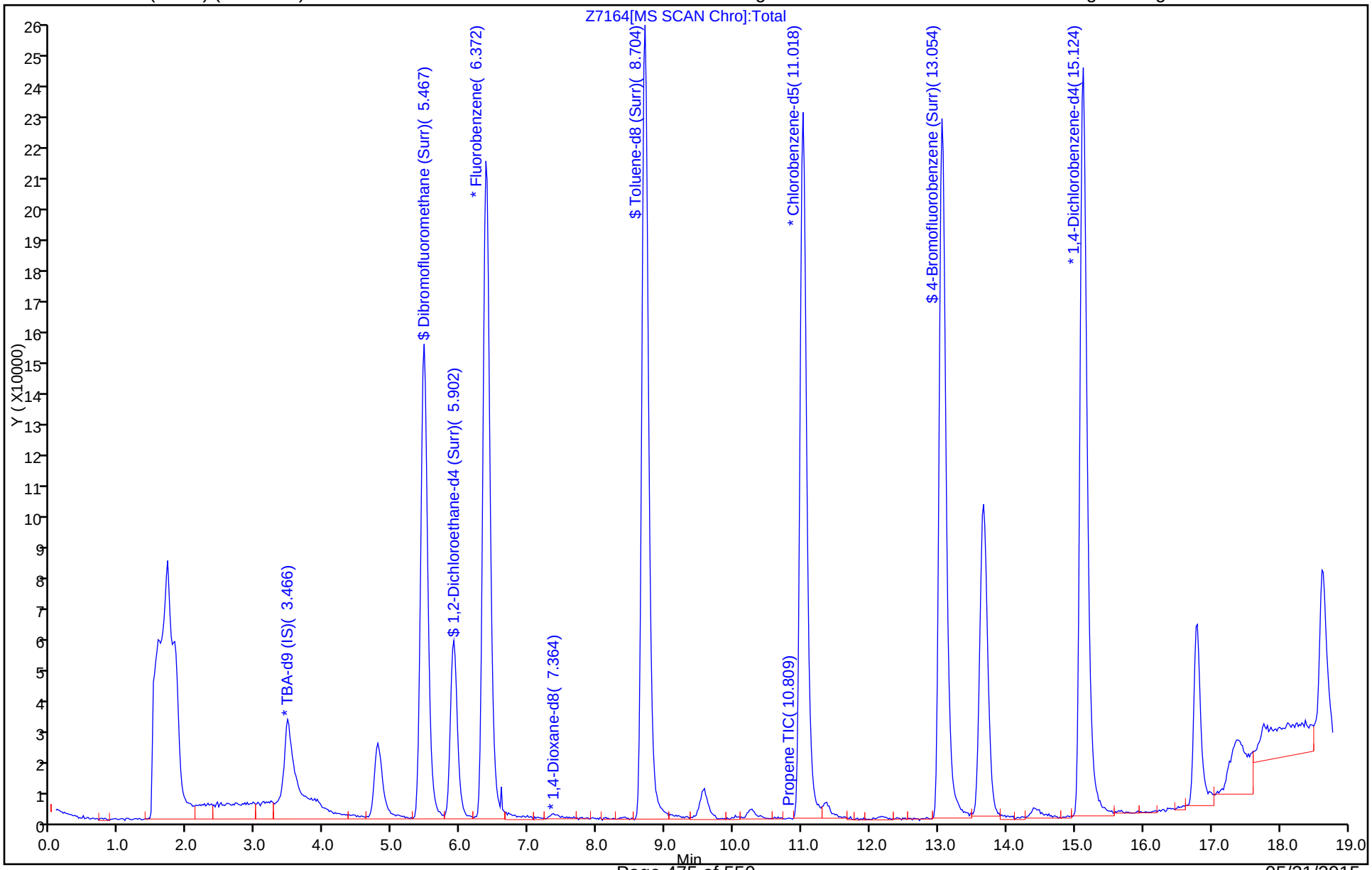
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:30:34 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7164.D				
Injection Date:	05-May-2015 22:18:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	MB			Worklist Smp#:	6
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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-276534/6
Matrix: Water | Lab File ID: Z7287.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 22:22
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.: 276534 | 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.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-276534/6
Matrix: Water | Lab File ID: Z7287.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 22:22
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.: 276534 | 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.: 280-68518-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-276534/6
Matrix: Water
Lab File ID: Z7287.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/07/2015 22:22
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.: 276534
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		81-118
460-00-4	4-Bromofluorobenzene (Surr)	106		85-114
1868-53-7	Dibromofluoromethane (Surr)	106		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7287.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 07-May-2015 22:22:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb af
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:30 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:30

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	3.484	3.489	-0.005	94	115778	250.0	250.0	
* 2 Fluorobenzene	96	6.390	6.378	0.012	98	674660	12.5	12.5	
* 3 1,4-Dioxane-d8	96		7.292					ND	
* 4 Chlorobenzene-d5	119	11.018	11.024	-0.006	87	157003	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.125	15.130	-0.005	95	286264	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.467	5.473	-0.006	94	332667	10.5	11.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.902	5.908	-0.006	94	133203	10.5	10.6	
$ 10 Toluene-d8 (Surr)	98	8.704	8.709	-0.005	93	629969	10.5	10.7	
$ 11 4-Bromofluorobenzene (Surr	95	13.054	13.060	-0.006	89	347759	10.5	11.2	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.595					ND	
26 Chlorotrifluoroethene	116		1.824					ND	
27 Dichlorodifluoromethane	85		1.923					ND	
29 1,2-Dichloro-1,1,2,2-tetra	85		1.946					ND	
30 Chloromethane	50		1.993					ND	
31 Butadiene	54		2.097					ND	
33 2-Chloro-1,1,1-Trifluoroet	118		2.102					ND	
32 Vinyl chloride	62		2.115					ND	
34 Ethylene oxide	43		2.283					ND	
35 Bromomethane	94		2.341					ND	
36 Chloroethane	64		2.393					ND	
37 Dichlorofluoromethane	67		2.550					ND	
38 Trichlorofluoromethane	101		2.602					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		2.811					ND	
39 Ethanol	45		2.841					ND	
42 Propene oxide	58		2.857					ND	
44 Acrolein	56		2.915					ND	
45 1,1-Dichloroethene	96		3.037					ND	
48 Acetone	43		3.054					ND	
46 1,1,2-Trichloro-1,2,2-trif	151		3.089					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		3.193					ND	
50 Carbon disulfide	76		3.280					ND	
53 Acetonitrile	41		3.292					ND	
52 3-Chloro-1-propene	41		3.350					ND	
51 Methyl acetate	43		3.367					ND	
54 Methylene Chloride	84	3.466	3.472	-0.006	92	13937		0.1698	
55 2-Methyl-2-propanol	59		3.559					ND	
58 Acrylonitrile	53		3.681					ND	
57 trans-1,2-Dichloroethene	96		3.768					ND	
56 Methyl tert-butyl ether	73		3.785					ND	
59 Hexane	57		4.063					ND	
62 1,1-Dichloroethane	63		4.203					ND	
61 Vinyl acetate	43		4.220					ND	
60 Isopropyl ether	87		4.284					ND	
63 2-Chloro-1,3-butadiene	53		4.301					ND	
64 Tert-butyl ethyl ether	59		4.719					ND	
67 2-Butanone (MEK)	43		4.881					ND	
65 cis-1,2-Dichloroethene	96		4.881					ND	
69 Propionitrile	54		4.910					ND	
66 2,2-Dichloropropane	77		4.916					ND	
68 Ethyl acetate	43		4.945					ND	
73 Methacrylonitrile	41		5.101					ND	
70 sec-Butyl Alcohol	45		5.125					ND	
71 Chlorobromomethane	128		5.177					ND	
74 Chloroform	83		5.264					ND	
72 Tetrahydrofuran	42		5.264					ND	
75 1,1,1-Trichloroethane	97		5.560					ND	
76 Cyclohexane	56		5.647					ND	
78 1,1-Dichloropropene	75		5.751					ND	
77 Carbon tetrachloride	117		5.786					ND	
80 Isobutyl alcohol	41		5.873					ND	
82 1,2-Dichloroethane	62		6.012					ND	
81 Benzene	78		6.012					ND	
83 Tert-amyl methyl ether	73		6.180					ND	
84 n-Heptane	43		6.412					ND	
86 n-Butanol	56		6.807					ND	
88 Ethyl acrylate	55		6.807					ND	
85 Trichloroethene	95		6.917					ND	
89 2-Pentanone	43		7.143					ND	
90 1,2-Dichloropropane	63		7.196					ND	
87 Methylcyclohexane	55		7.213					ND	
92 Dibromomethane	93		7.370					ND	
91 Methyl methacrylate	100		7.398					ND	
94 Dichlorobromomethane	83		7.613					ND	
95 2-Nitropropane	41		7.903					ND	
96 2-Chloroethyl vinyl ether	63		8.048					ND	
97 cis-1,3-Dichloropropene	75		8.274					ND	
98 4-Methyl-2-pentanone (MIBK	43		8.535					ND	
99 Toluene	91		8.814					ND	
100 trans-1,3-Dichloropropene	75		9.127					ND	
101 Ethyl methacrylate	69		9.336					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		9.423					ND	
104 1,3-Dichloropropane	76		9.684					ND	
103 Tetrachloroethene	164		9.701					ND	
105 2-Hexanone	43		9.858					ND	
108 n-Butyl acetate	43		9.866					ND	
106 Tetrahydrothiophene	60		10.043					ND	
107 Chlorodibromomethane	129		10.049					ND	
109 Ethylene Dibromide	107		10.241					ND	
154 4-Ethyltoluene TIC	105		10.778					ND	
153 Dicyclopentadiene TIC	66		10.778					ND	
155 1,3-Butadiene TIC	39	10.757	10.778	-0.021	0	239		0.0190	
152 Propene TIC	41	10.757	10.778	-0.021	0	429		0.0342	
110 1-Chlorohexane	91		11.076					ND	
111 Chlorobenzene	112		11.076					ND	
113 1,1,1,2-Tetrachloroethane	131		11.215					ND	
112 Ethylbenzene	106		11.285					ND	
114 m-Xylene & p-Xylene	106		11.493					ND	
115 o-Xylene	106		12.155					ND	
116 Styrene	104		12.172					ND	
117 Bromoform	173		12.468					ND	
118 Isopropylbenzene	105		12.816					ND	
120 cis-1,4-Dichloro-2-butene	53		12.897					ND	
119 Cyclohexanone	55		12.938					ND	
121 Bromobenzene	156		13.303					ND	
122 1,1,2,2-Tetrachloroethane	83		13.321					ND	
124 1,2,3-Trichloropropane	110		13.373					ND	
125 trans-1,4-Dichloro-2-buten	53		13.425					ND	
123 N-Propylbenzene	120		13.547					ND	
126 2-Chlorotoluene	126		13.669					ND	
128 4-Chlorotoluene	126		13.860					ND	
127 1,3,5-Trimethylbenzene	105		13.877					ND	
129 tert-Butylbenzene	119		14.452					ND	
130 1,2,4-Trimethylbenzene	105		14.539					ND	
131 sec-Butylbenzene	134		14.852					ND	
132 1,3-Dichlorobenzene	146		15.008					ND	
133 4-Isopropyltoluene	119		15.130					ND	
136 Benzyl chloride	126		15.156					ND	
134 1,4-Dichlorobenzene	146		15.165					ND	
135 1,2,3-Trimethylbenzene	105		15.298					ND	
138 1,2-Dichlorobenzene	146		15.809					ND	
137 n-Butylbenzene	91		15.844					ND	
139 1,2-Dibromo-3-Chloropropan	157		16.940					ND	
140 1,3,5-Trichlorobenzene	180		17.230					ND	
141 1,2,4-Trichlorobenzene	180		17.862					ND	
142 Hexachlorobutadiene	225		18.071					ND	
143 Naphthalene	128		18.106					ND	
144 1,2,3-Trichlorobenzene	180		18.349					ND	
93 1,4-Dioxane	88		18.432					ND	
15 2-Methylnaphthalene	142		0.000					ND	
12 2,2,3-Trimethylbutane	1		0.000					ND	
16 2-Methylhexane	1		0.000					ND	
23 2,4-Dimethylpentane	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
17 n-Nonyl Aldehyde	1		0.000					ND	
14 3-Methylhexane	1		0.000					ND	
19 2-Butoxyethanol TIC	1		0.000					ND	
18 Pentachloroethane	167		0.000					ND	
13 2,3-Dimethylpentane	1		0.000					ND	
20 3,3-Dimethylpentane	1		0.000					ND	
22 Dimethyl disulfide	1		0.000					ND	
21 2,2-Dimethylpentane	1		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 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	
S 148 1,3-Dichloropropene, Total	1		0.000					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	

Reagents:

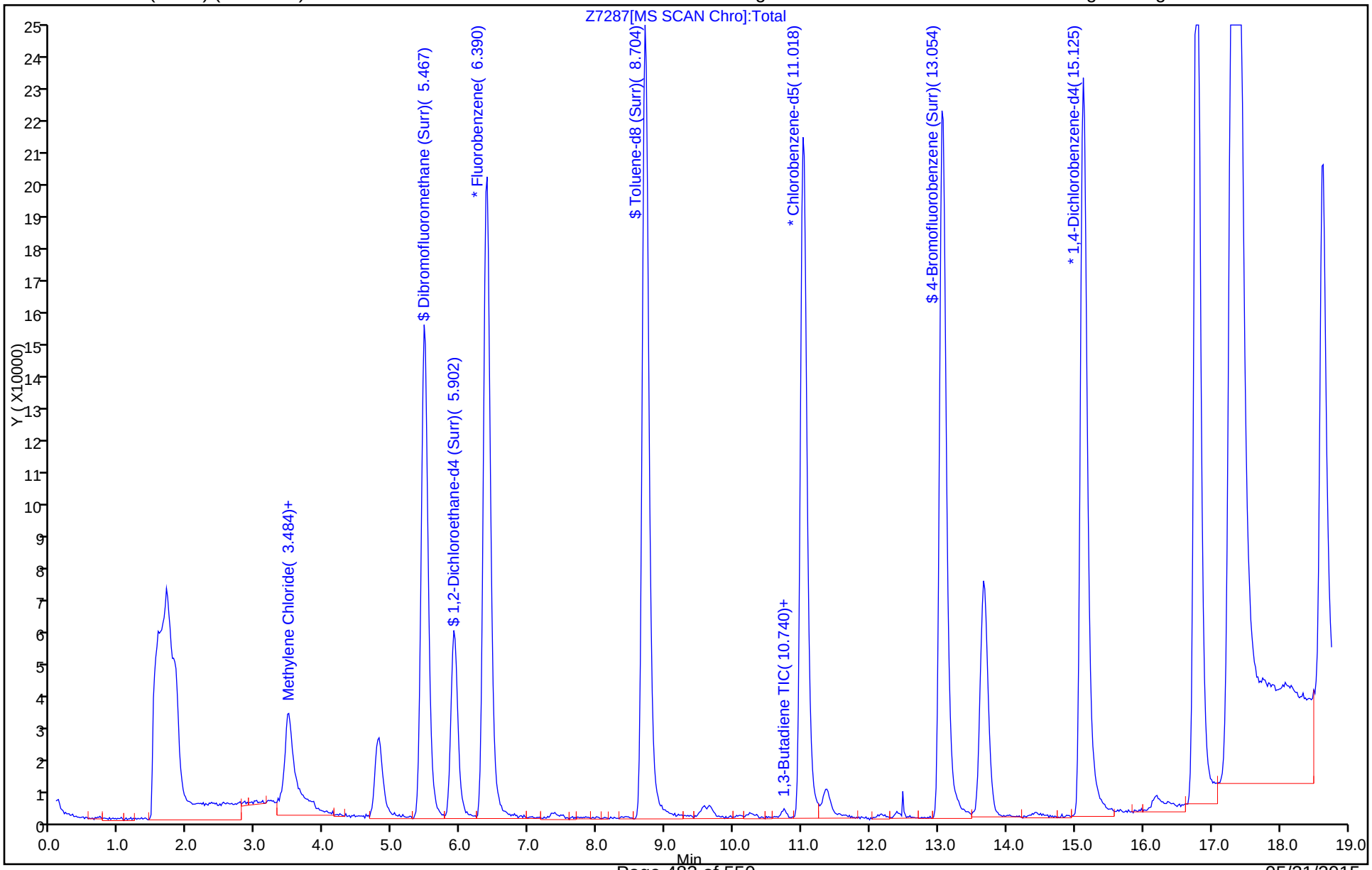
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:29:31 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7287.D				
Injection Date:	07-May-2015 22:22:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	MB			Worklist Smp#:	6
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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-276091/4
Matrix: Water | Lab File ID: Z7161.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/05/2015 21:09
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.: 276091 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	5.24		1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	4.72		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	5.11		1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	4.91		1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	4.85		1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	4.62		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	5.01		1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	5.35		1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	4.92		3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	5.19		1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	4.83		1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	5.45		5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	5.09		1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	5.29		1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	4.85		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	4.73		1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	4.88		1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	5.15		1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	4.96		1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	5.28		1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	4.70		1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	19.1		6.0	4.0	1.8
95-49-8	2-Chlorotoluene	5.21	M	1.0	0.40	0.17
591-78-6	2-Hexanone	19.4		5.0	4.0	1.4
106-43-4	4-Chlorotoluene	5.00		1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	19.5		5.0	3.2	1.0
67-64-1	Acetone	15.7		10	6.4	1.9
71-43-2	Benzene	4.92		1.0	0.40	0.16
108-86-1	Bromobenzene	5.25		1.0	0.40	0.17
74-97-5	Bromochloromethane	4.88		1.0	0.20	0.10
75-27-4	Bromodichloromethane	5.01		1.0	0.40	0.17
75-25-2	Bromoform	5.50		1.0	0.40	0.19
74-83-9	Bromomethane	5.40		2.0	0.80	0.21
75-15-0	Carbon disulfide	4.71		2.0	1.6	0.45
56-23-5	Carbon tetrachloride	5.03		2.0	0.40	0.19
108-90-7	Chlorobenzene	5.17		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-276091/4
Matrix: Water | Lab File ID: Z7161.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/05/2015 21:09
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.: 276091 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	5.59		1.0	0.40	0.17
75-00-3	Chloroethane	5.18		2.0	1.6	0.41
67-66-3	Chloroform	4.94		1.0	0.40	0.16
74-87-3	Chloromethane	5.61	M	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	5.13		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	5.11		1.0	0.40	0.16
74-95-3	Dibromomethane	4.66		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	5.72		2.0	0.80	0.31
100-41-4	Ethylbenzene	5.07		1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	5.28		1.0	0.80	0.36
98-82-8	Isopropylbenzene	4.98		1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	4.90	J	5.0	0.80	0.25
75-09-2	Methylene Chloride	5.26		5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	5.04		2.0	0.80	0.34
91-20-3	Naphthalene	4.99		1.0	0.80	0.22
104-51-8	n-Butylbenzene	4.85		1.0	0.80	0.32
103-65-1	N-Propylbenzene	5.06		1.0	0.40	0.16
95-47-6	o-Xylene	5.31		1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	4.93		1.0	0.40	0.17
135-98-8	sec-Butylbenzene	5.06		1.0	0.40	0.17
100-42-5	Styrene	5.00		1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	39.6	J M	50	32	11
98-06-6	tert-Butylbenzene	4.89		1.0	0.40	0.16
127-18-4	Tetrachloroethene	5.28		1.0	0.40	0.20
108-88-3	Toluene	4.73		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	5.15		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	5.07		1.0	0.40	0.19
79-01-6	Trichloroethene	4.91		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	5.18		2.0	0.80	0.29
75-01-4	Vinyl chloride	5.41		1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68518-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-276091/4
Matrix: Water
Lab File ID: Z7161.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/05/2015 21:09
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.: 276091
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		81-118
460-00-4	4-Bromofluorobenzene (Surr)	106		85-114
1868-53-7	Dibromofluoromethane (Surr)	104		80-119
2037-26-5	Toluene-d8 (Surr)	110		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7161.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-May-2015 21:09:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150505-34699.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-May-2015 15:20:58 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: bergerb Date: 06-May-2015 15:30:50

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	3.466	3.483	-0.017	89	128975	250.0	250.0	
* 2 Fluorobenzene	96	6.372	6.389	-0.017	98	768609	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.035	11.017	0.018	89	166836	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.124	15.124	0.000	96	315280	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.450	5.466	-0.016	93	374638	10.5	11.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.885	5.901	-0.016	95	159161	10.5	11.2	
$ 10 Toluene-d8 (Surr)	98	8.703	8.703	0.000	93	719611	10.5	11.5	
$ 11 4-Bromofluorobenzene (Surr	95	13.071	13.053	0.018	92	380613	10.5	11.1	
27 Dichlorodifluoromethane	85	1.900	1.917	-0.017	98	183048	5.00	5.72	
30 Chloromethane	50	1.969	2.004	-0.035	99	113002	5.00	5.61	M
31 Butadiene	54	2.056	2.091	-0.035	93	76785	NC	NC	
32 Vinyl chloride	62	2.091	2.108	-0.017	99	103926	5.00	5.41	
35 Bromomethane	94	2.317	2.352	-0.035	91	106241	5.00	5.40	
36 Chloroethane	64	2.370	2.404	-0.034	98	69934	5.00	5.18	
37 Dichlorofluoromethane	67	2.526	2.560	-0.034	98	255473	5.00	5.23	
38 Trichlorofluoromethane	101	2.578	2.613	-0.035	100	233891	5.00	5.18	
40 Ethyl ether	59	2.770	2.804	-0.034	93	42751	5.00	4.79	
44 Acrolein	56	2.892	2.908	-0.016	99	28436	50.0	60.8	
45 1,1-Dichloroethene	96	3.013	3.048	-0.035	98	92991	5.00	4.62	
48 Acetone	43	3.031	3.065	-0.034	28	18198	20.0	15.7	
46 1,1,2-Trichloro-1,2,2-trif	151	3.066	3.082	-0.016	97	147279	5.00	4.70	
49 Iodomethane	142	3.170	3.187	-0.017	98	256091	5.00	4.99	
50 Carbon disulfide	76	3.257	3.274	-0.017	99	350515	5.00	4.71	
52 3-Chloro-1-propene	41	3.327	3.361	-0.034	84	146082	5.00	4.19	
51 Methyl acetate	43	3.327	3.361	-0.034	69	104631	25.0	22.8	
54 Methylene Chloride	84	3.448	3.465	-0.017	94	96045	5.00	5.26	
55 2-Methyl-2-propanol	59	3.535	3.570	-0.035	91	26021	50.0	39.6	M
58 Acrylonitrile	53	3.657	3.691	-0.034	97	69267	50.0	46.2	
57 trans-1,2-Dichloroethene	96	3.744	3.761	-0.017	98	110768	5.00	5.15	
56 Methyl tert-butyl ether	73	3.762	3.778	-0.016	96	149854	5.00	4.90	
59 Hexane	57	4.040	4.057	-0.017	95	150779	5.00	5.14	
62 1,1-Dichloroethane	63	4.179	4.196	-0.017	96	195510	5.00	4.85	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 Vinyl acetate	43	4.197	4.231	-0.034	96	208315	10.0	9.59	
67 2-Butanone (MEK)	43	4.841	4.875	-0.035	53	48198	20.0	19.1	
65 cis-1,2-Dichloroethene	96	4.858	4.875	-0.017	85	106244	5.00	5.13	
66 2,2-Dichloropropane	77	4.893	4.909	-0.016	89	197813	5.00	4.70	
70 sec-Butyl Alcohol	45	5.084	5.101	-0.017	99	65833	150.0	152.5	
71 Chlorobromomethane	128	5.154	5.171	-0.016	96	48478	5.00	4.88	
74 Chloroform	83	5.241	5.257	-0.016	94	195613	5.00	4.94	
72 Tetrahydrofuran	42	5.258	5.275	-0.017	36	14860	10.0	9.89	
75 1,1,1-Trichloroethane	97	5.537	5.553	-0.016	98	184636	5.00	4.72	
76 Cyclohexane	56	5.641	5.640	0.001	90	167075	5.00	4.73	
78 1,1-Dichloropropene	75	5.728	5.745	-0.017	95	167653	5.00	5.01	
77 Carbon tetrachloride	117	5.763	5.780	-0.017	97	175669	5.00	5.03	
80 Isobutyl alcohol	41	5.867	5.867	0.000	35	21505	125.0	140.0	
82 1,2-Dichloroethane	62	5.989	6.006	-0.017	89	74202	5.00	4.85	
81 Benzene	78	6.006	6.023	-0.017	94	302069	5.00	4.92	
84 n-Heptane	43	6.389	6.406	-0.017	94	190109	5.00	4.66	
85 Trichloroethene	95	6.894	6.911	-0.017	97	132100	5.00	4.91	
89 2-Pentanone	43	7.137	7.137	0.000	99	100317	20.0	19.8	
90 1,2-Dichloropropane	63	7.190	7.206	-0.016	93	101504	5.00	4.73	
87 Methylcyclohexane	55	7.224	7.224	0.000	91	143780	5.00	4.69	
92 Dibromomethane	93	7.364	7.363	0.001	97	57287	5.00	4.66	
94 Dichlorobromomethane	83	7.590	7.607	-0.017	99	151934	5.00	5.01	
96 2-Chloroethyl vinyl ether	63	8.060	8.059	0.001	92	28906	5.00	4.05	
97 cis-1,3-Dichloropropene	75	8.268	8.268	0.000	96	135412	5.00	5.11	
98 4-Methyl-2-pentanone (MIBK	43	8.529	8.529	0.000	97	152843	20.0	19.5	
99 Toluene	91	8.808	8.807	0.001	99	321268	5.00	4.73	
100 trans-1,3-Dichloropropene	75	9.121	9.120	0.001	94	99632	5.00	5.07	
101 Ethyl methacrylate	69	9.330	9.329	0.001	91	70532	5.00	5.23	
102 1,1,2-Trichloroethane	97	9.417	9.416	0.001	90	58271	5.00	4.91	
104 1,3-Dichloropropane	76	9.678	9.677	0.001	93	92751	5.00	4.96	
103 Tetrachloroethene	164	9.695	9.695	0.000	98	119867	5.00	5.28	
105 2-Hexanone	43	9.869	9.851	0.018	98	93095	20.0	19.4	
107 Chlorodibromomethane	129	10.061	10.060	0.001	90	99137	5.00	5.59	
109 Ethylene Dibromide	107	10.235	10.234	0.001	98	72631	5.00	5.09	
110 1-Chlorohexane	91	11.070	11.069	0.001	84	160435	5.00	5.01	
111 Chlorobenzene	112	11.070	11.069	0.001	92	218706	5.00	5.17	
113 1,1,1,2-Tetrachloroethane	131	11.227	11.209	0.018	90	106823	5.00	5.24	
112 Ethylbenzene	106	11.279	11.278	0.001	99	106100	5.00	5.07	
114 m-Xylene & p-Xylene	106	11.488	11.487	0.001	99	143179	5.00	5.04	
115 o-Xylene	106	12.166	12.148	0.018	97	128797	5.00	5.31	
116 Styrene	104	12.184	12.166	0.018	94	201291	5.00	5.00	
117 Bromoform	173	12.462	12.461	0.001	96	48825	5.00	5.50	
118 Isopropylbenzene	105	12.827	12.809	0.018	96	404068	5.00	4.98	
119 Cyclohexanone	55	12.949	12.931	0.018	92	36497	200.0	201.8	
121 Bromobenzene	156	13.315	13.297	0.018	93	111177	5.00	5.25	
122 1,1,2,2-Tetrachloroethane	83	13.315	13.314	0.001	95	75843	5.00	5.11	
124 1,2,3-Trichloropropane	110	13.384	13.366	0.018	80	16333	5.00	4.92	
125 trans-1,4-Dichloro-2-buten	53	13.419	13.418	0.001	74	15736	5.00	4.61	
123 N-Propylbenzene	120	13.558	13.540	0.018	99	105479	5.00	5.06	
126 2-Chlorotoluene	126	13.680	13.662	0.018	29	89845	5.00	5.21	a
128 4-Chlorotoluene	126	13.871	13.853	0.018	98	100833	5.00	5.00	
127 1,3,5-Trimethylbenzene	105	13.889	13.871	0.018	95	305253	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
129 tert-Butylbenzene	119	14.463	14.445	0.018	93	347788	5.00	4.89	
130 1,2,4-Trimethylbenzene	105	14.550	14.532	0.018	96	296328	5.00	4.83	
131 sec-Butylbenzene	134	14.863	14.845	0.018	94	99381	5.00	5.06	
132 1,3-Dichlorobenzene	146	15.020	15.002	0.018	98	190541	5.00	5.15	
133 4-Isopropyltoluene	119	15.142	15.124	0.018	97	395731	5.00	4.93	
134 1,4-Dichlorobenzene	146	15.176	15.158	0.018	95	233831	5.00	5.28	
138 1,2-Dichlorobenzene	146	15.820	15.802	0.018	97	169777	5.00	5.29	
137 n-Butylbenzene	91	15.855	15.855	0.001	97	371924	5.00	4.85	
139 1,2-Dibromo-3-Chloropropan	157	16.934	16.933	0.001	87	11506	5.00	5.45	
141 1,2,4-Trichlorobenzene	180	17.874	17.873	0.001	95	112398	5.00	5.19	
142 Hexachlorobutadiene	225	18.065	18.064	0.001	97	115196	5.00	5.28	
143 Naphthalene	128	18.100	18.099	0.001	97	106419	5.00	4.99	
144 1,2,3-Trichlorobenzene	180	18.361	18.343	0.018	96	90007	5.00	5.35	
93 1,4-Dioxane	88		18.432				ND	ND	
S 149 Trihalomethanes, Total	1				0		20.0	21.0	
S 150 Xylenes, Total (URS)	1				0		10.0	10.4	
S 148 1,3-Dichloropropene, Total	1				0		10.0	10.2	
S 145 1,2-Dichloroethene, Total	1				0		10.0	10.3	
S 146 Xylenes, Total	106				0		10.0	10.4	
S 147 1,2-Dichloroethene, Total	96				0		10.0	10.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

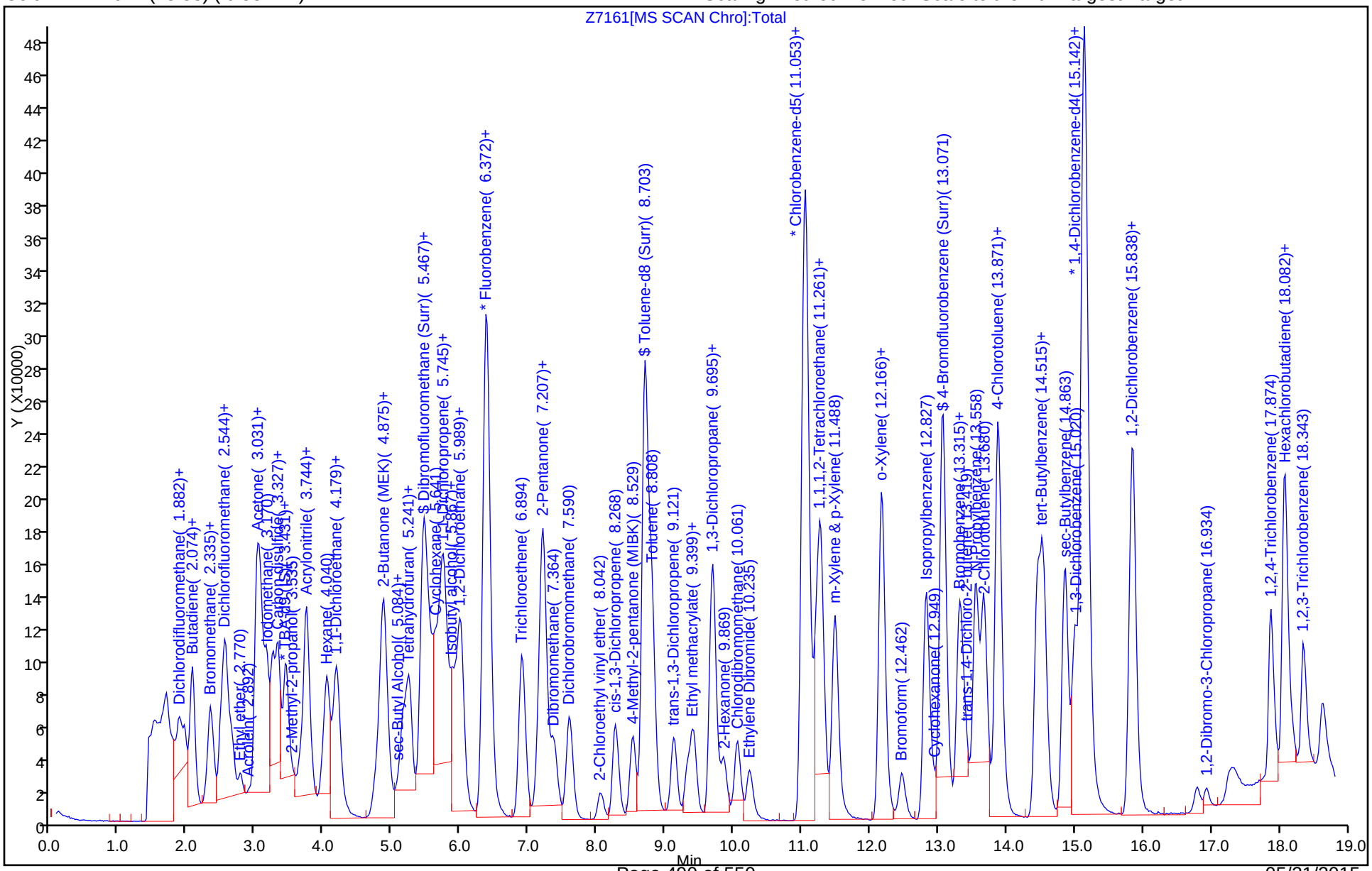
MV-Main B_00009	Amount Added:	2.50	Units: uL	
MV-Gas/Ket B_00019	Amount Added:	2.50	Units: uL	
MV-SS 2-Cleve_00020	Amount Added:	2.50	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 06-May-2015 15:30:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7161.D				
Injection Date:	05-May-2015 21:09:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	LCS			Worklist Smp#:	4
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

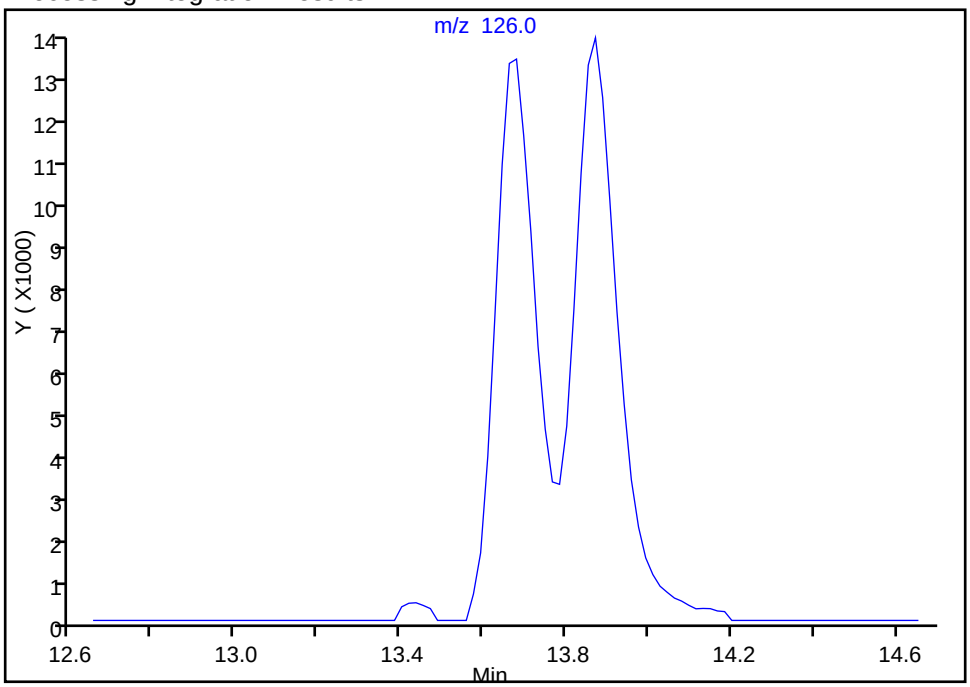
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7161.D				
Injection Date:	05-May-2015 21:09:30	Instrument ID:	VMS_Z		
Lims ID:	LCS				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	3	Worklist Smp#:	4
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

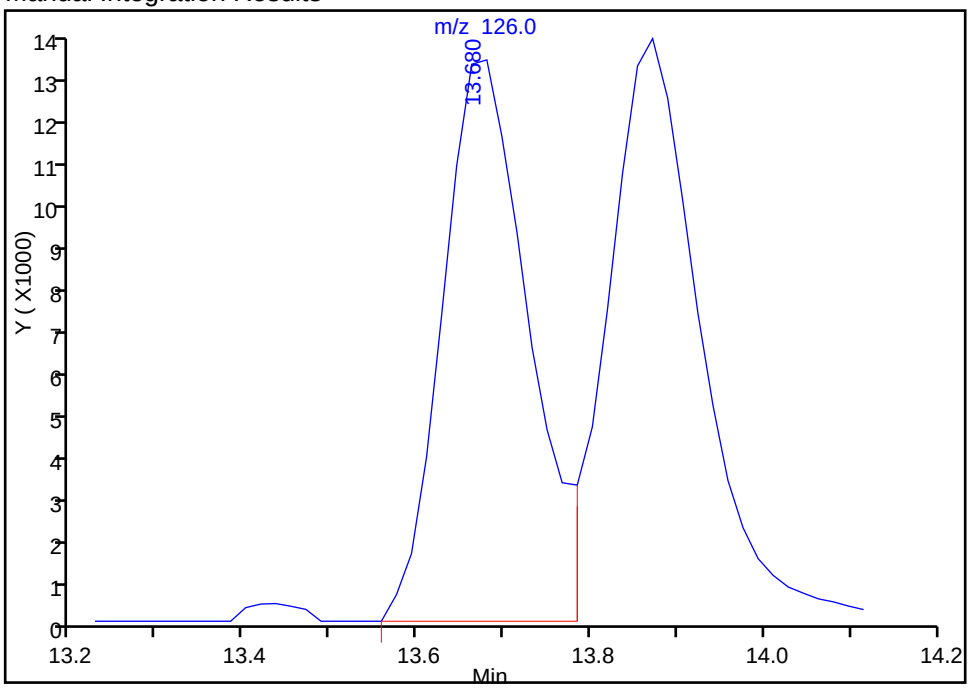
Processing Integration Results

Not Detected
Expected RT: 13.66



Manual Integration Results

RT: 13.68
Area: 89845
Amount: 5.207722
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:46:40
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

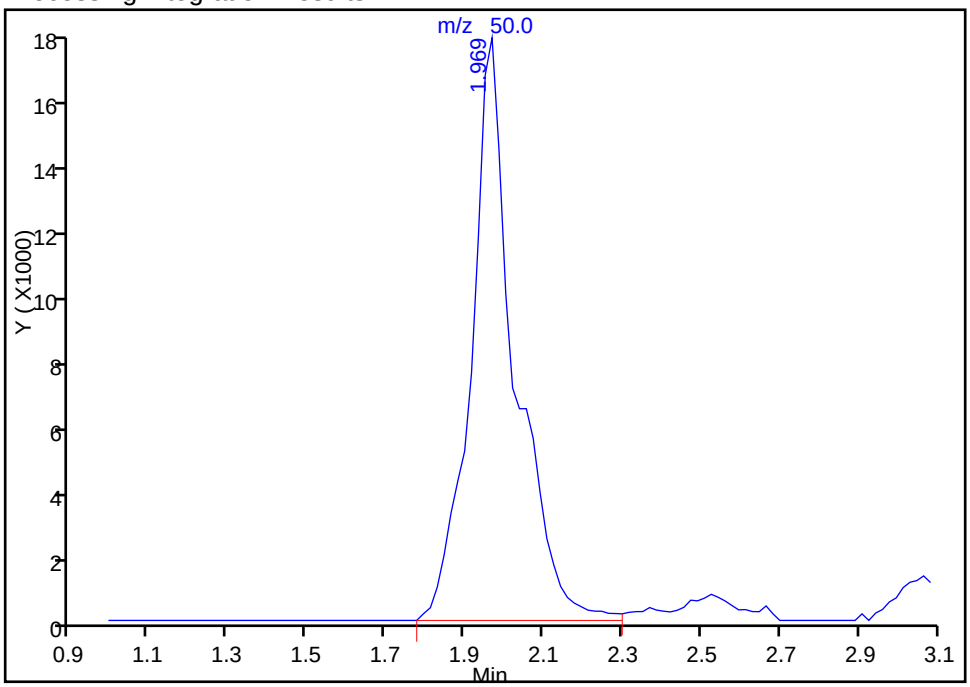
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7161.D				
Injection Date:	05-May-2015 21:09:30	Instrument ID:	VMS_Z		
Lims ID:	LCS				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	3	Worklist Smp#:	4
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

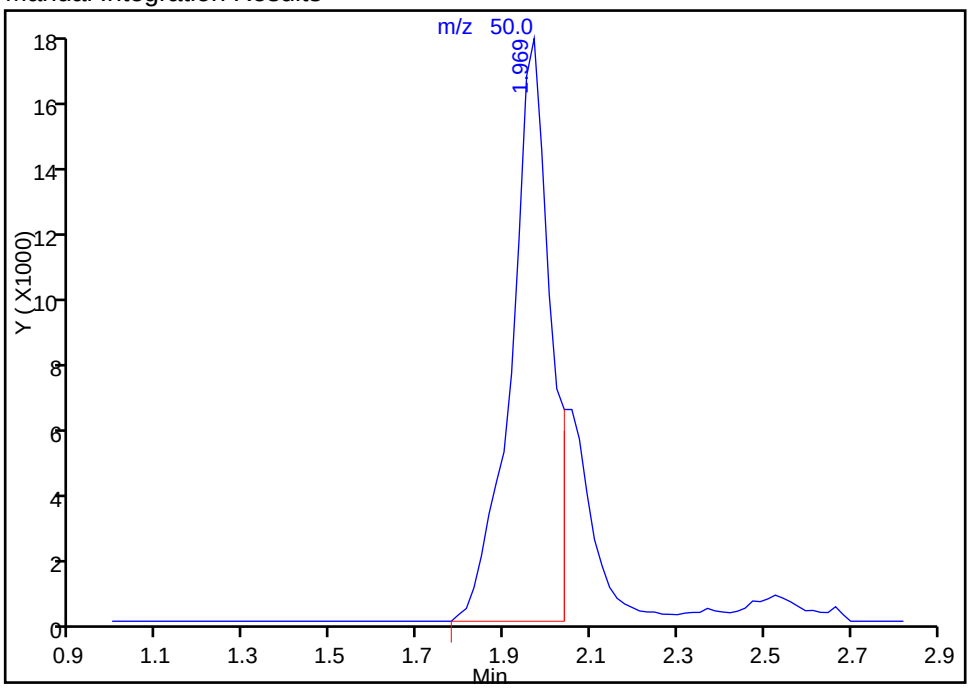
Processing Integration Results

RT: 1.97
Area: 138492
Amount: 6.877302
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 113002
Amount: 5.611508
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:46:40
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

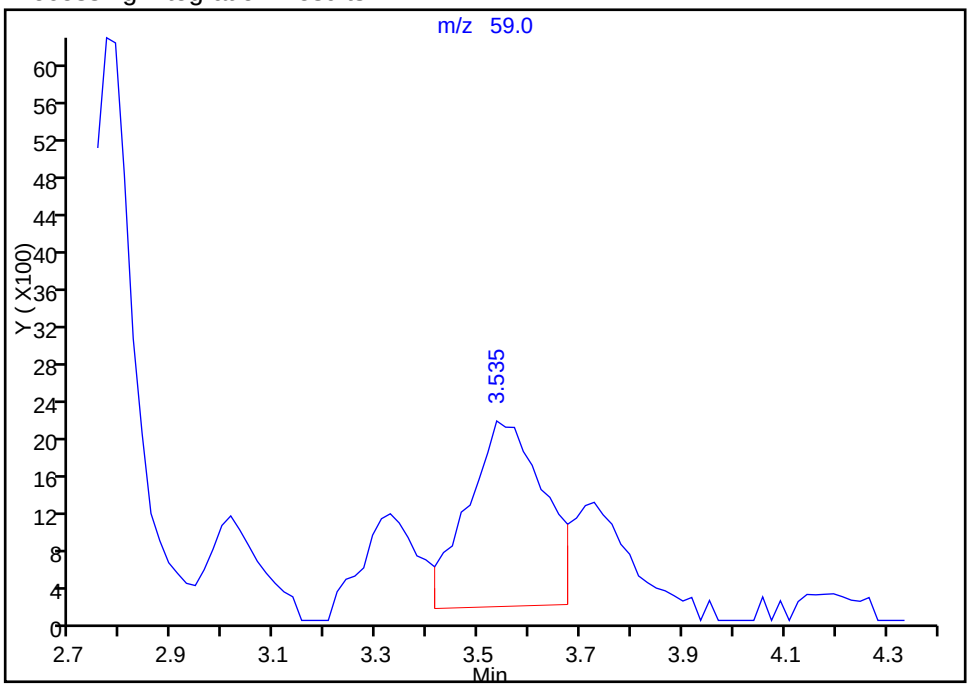
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150505-34699.b\Z7161.D				
Injection Date:	05-May-2015 21:09:30	Instrument ID:	VMS_Z		
Lims ID:	LCS				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	3	Worklist Smp#:	4
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

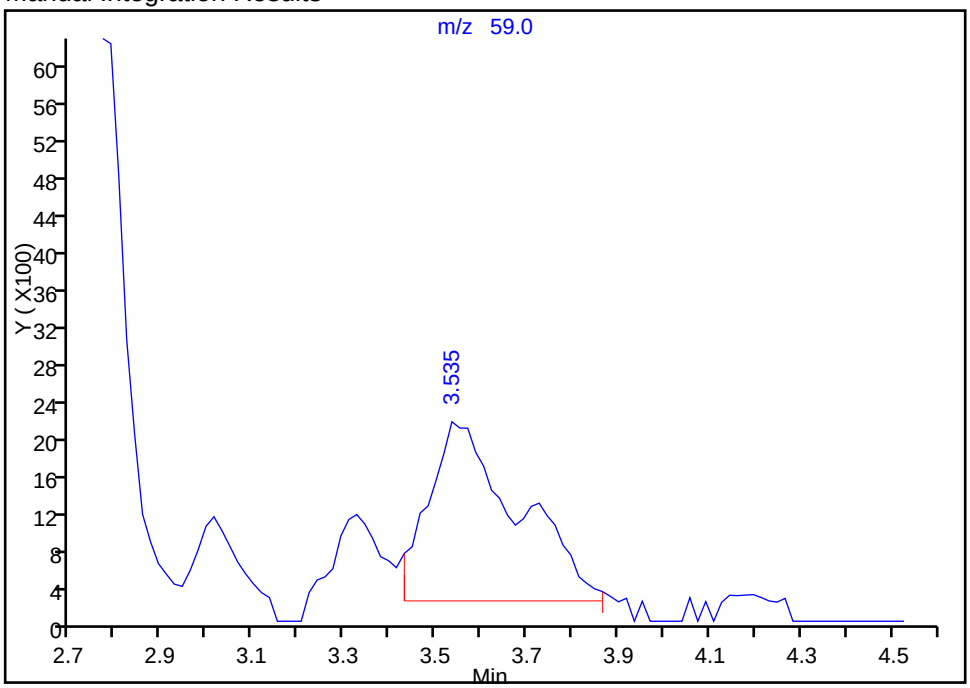
Processing Integration Results

RT: 3.54
Area: 20850
Amount: 28.378637
Amount Units: ug/l



Manual Integration Results

RT: 3.54
Area: 26021
Amount: 39.557290
Amount Units: ug/l



Reviewer: bergerb, 05-May-2015 21:46:40
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-276534/4
Matrix: Water | Lab File ID: Z7285.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 21:14
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.: 276534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	5.51		1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	5.16		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	5.11		1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	5.26		1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	5.03		1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	5.84		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	5.28		1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	5.15		1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	5.02		3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	5.50		1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	4.99		1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	6.03		5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	5.34		1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	5.37		1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	4.96		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	4.85		1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	5.10		1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	5.42		1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	4.88		1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	5.52		1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	5.30		1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	17.3		6.0	4.0	1.8
95-49-8	2-Chlorotoluene	5.27	M	1.0	0.40	0.17
591-78-6	2-Hexanone	16.6		5.0	4.0	1.4
106-43-4	4-Chlorotoluene	5.37		1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	17.3		5.0	3.2	1.0
67-64-1	Acetone	18.3		10	6.4	1.9
71-43-2	Benzene	5.20		1.0	0.40	0.16
108-86-1	Bromobenzene	5.52		1.0	0.40	0.17
74-97-5	Bromochloromethane	5.32		1.0	0.20	0.10
75-27-4	Bromodichloromethane	5.39		1.0	0.40	0.17
75-25-2	Bromoform	5.80		1.0	0.40	0.19
74-83-9	Bromomethane	5.05		2.0	0.80	0.21
75-15-0	Carbon disulfide	5.35		2.0	1.6	0.45
56-23-5	Carbon tetrachloride	5.46		2.0	0.40	0.19
108-90-7	Chlorobenzene	5.41		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68518-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-276534/4
Matrix: Water | Lab File ID: Z7285.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 20(mL) | Date Analyzed: 05/07/2015 21:14
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.: 276534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	5.52		1.0	0.40	0.17
75-00-3	Chloroethane	4.71		2.0	1.6	0.41
67-66-3	Chloroform	5.21		1.0	0.40	0.16
74-87-3	Chloromethane	4.86		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	5.56		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	5.07		1.0	0.40	0.16
74-95-3	Dibromomethane	5.02		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	5.41		2.0	0.80	0.31
100-41-4	Ethylbenzene	5.42		1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	5.74		1.0	0.80	0.36
98-82-8	Isopropylbenzene	5.20		1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	5.08		5.0	0.80	0.25
75-09-2	Methylene Chloride	5.88		5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	5.51		2.0	0.80	0.34
91-20-3	Naphthalene	4.90		1.0	0.80	0.22
104-51-8	n-Butylbenzene	5.06		1.0	0.80	0.32
103-65-1	N-Propylbenzene	5.29		1.0	0.40	0.16
95-47-6	o-Xylene	5.56		1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	5.27		1.0	0.40	0.17
135-98-8	sec-Butylbenzene	5.40		1.0	0.40	0.17
100-42-5	Styrene	5.31		1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	56.7	M	50	32	11
98-06-6	tert-Butylbenzene	5.08		1.0	0.40	0.16
127-18-4	Tetrachloroethene	5.91		1.0	0.40	0.20
108-88-3	Toluene	5.11		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	6.04		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	5.27		1.0	0.40	0.19
79-01-6	Trichloroethene	5.39		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	4.83		2.0	0.80	0.29
75-01-4	Vinyl chloride	4.84		1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68518-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-276534/4
Matrix: Water
Lab File ID: Z7285.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 05/07/2015 21:14
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.: 276534
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	105		80-119
2037-26-5	Toluene-d8 (Surr)	107		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7285.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-May-2015 21:14:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: bergerb Instrument ID: VMS_Z

Method: \\Denchrom\ChromData\VMS_Z\20150507-34807.b\AQ_VMSZ_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-May-2015 16:29:30 Calib Date: 02-May-2015 09:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_Z\20150502-34583.b\Z7043.D

Column 1 : DB-624 (75.53) (0.53 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: bergerb Date: 08-May-2015 16:29:37

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	3.488	3.489	-0.001	84	133527	250.0	250.0	
* 2 Fluorobenzene	96	6.394	6.378	0.016	98	737902	12.5	12.5	
* 4 Chlorobenzene-d5	119	11.023	11.024	-0.001	88	166253	12.5	12.5	
* 5 1,4-Dichlorobenzene-d4	152	15.130	15.130	0.000	96	320963	12.5	12.5	
$ 8 Dibromofluoromethane (Surr	111	5.472	5.473	-0.001	94	361313	10.5	11.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	5.907	5.908	-0.001	95	142952	10.5	10.4	
$ 10 Toluene-d8 (Surr)	98	8.709	8.709	0.000	93	696965	10.5	11.2	
$ 11 4-Bromofluorobenzene (Surr	95	13.059	13.060	-0.001	89	373345	10.5	10.6	
27 Dichlorodifluoromethane	85	1.922	1.923	-0.001	99	166320	5.00	5.41	
30 Chloromethane	50	1.992	1.993	-0.001	99	94035	5.00	4.86	
31 Butadiene	54	2.096	2.097	-0.001	87	64416	NC	NC	
32 Vinyl chloride	62	2.114	2.115	0.000	98	89320	5.00	4.84	
35 Bromomethane	94	2.340	2.341	-0.001	90	95512	5.00	5.05	
36 Chloroethane	64	2.392	2.393	-0.001	99	61023	5.00	4.71	
37 Dichlorofluoromethane	67	2.549	2.550	-0.001	97	230841	5.00	4.92	
38 Trichlorofluoromethane	101	2.601	2.602	-0.001	100	209362	5.00	4.83	
40 Ethyl ether	59	2.810	2.811	-0.001	92	43814	5.00	5.13	
44 Acrolein	56	2.914	2.915	-0.001	98	28025	50.0	62.4	
45 1,1-Dichloroethene	96	3.036	3.037	-0.001	99	112839	5.00	5.84	
48 Acetone	43	3.053	3.054	-0.001	29	20336	20.0	18.3	
46 1,1,2-Trichloro-1,2,2-trif	151	3.088	3.089	-0.001	97	170642	5.00	5.67	
49 Iodomethane	142	3.193	3.193	0.000	97	291576	5.00	5.92	
50 Carbon disulfide	76	3.280	3.280	0.000	99	382321	5.00	5.35	
52 3-Chloro-1-propene	41	3.349	3.350	-0.001	85	149662	5.00	4.47	
51 Methyl acetate	43	3.367	3.367	0.000	72	104129	25.0	23.7	
54 Methylene Chloride	84	3.471	3.472	-0.001	94	101592	5.00	5.88	
55 2-Methyl-2-propanol	59	3.558	3.559	-0.001	95	35169	50.0	56.7	M
58 Acrylonitrile	53	3.680	3.681	-0.001	98	69084	50.0	48.0	
57 trans-1,2-Dichloroethene	96	3.767	3.768	-0.001	99	124593	5.00	6.04	
56 Methyl tert-butyl ether	73	3.784	3.785	-0.001	96	149303	5.00	5.08	
59 Hexane	57	4.063	4.063	0.000	93	154704	5.00	5.29	
62 1,1-Dichloroethane	63	4.202	4.203	-0.001	96	194707	5.00	5.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 Vinyl acetate	43	4.237	4.220	0.017	96	211368	10.0	10.1	
67 2-Butanone (MEK)	43	4.863	4.881	-0.018	42	41840	20.0	17.3	
65 cis-1,2-Dichloroethene	96	4.881	4.881	0.000	83	110455	5.00	5.56	
66 2,2-Dichloropropane	77	4.898	4.916	-0.018	89	209571	5.00	5.30	
70 sec-Butyl Alcohol	45	5.107	5.125	-0.018	96	65960	150.0	147.6	
71 Chlorobromomethane	128	5.176	5.177	-0.001	94	50740	5.00	5.32	
74 Chloroform	83	5.263	5.264	-0.001	94	198012	5.00	5.21	
72 Tetrahydrofuran	42	5.281	5.264	0.017	40	13697	10.0	9.50	
75 1,1,1-Trichloroethane	97	5.559	5.560	-0.001	99	193696	5.00	5.16	
76 Cyclohexane	56	5.646	5.647	-0.001	90	170899	5.00	5.04	
78 1,1-Dichloropropene	75	5.751	5.751	0.000	97	169803	5.00	5.28	
77 Carbon tetrachloride	117	5.785	5.786	-0.001	97	183052	5.00	5.46	
80 Isobutyl alcohol	41	5.872	5.873	-0.001	76	18842	125.0	118.5	
82 1,2-Dichloroethane	62	6.012	6.012	0.000	89	72811	5.00	4.96	
81 Benzene	78	6.012	6.012	0.000	94	306273	5.00	5.20	
84 n-Heptane	43	6.412	6.412	0.000	94	187228	5.00	4.78	
85 Trichloroethene	95	6.916	6.917	-0.001	97	139195	5.00	5.39	
89 2-Pentanone	43	7.143	7.143	0.000	99	99675	20.0	20.5	
90 1,2-Dichloropropane	63	7.195	7.196	-0.001	94	99905	5.00	4.85	
87 Methylcyclohexane	55	7.230	7.213	0.017	92	147106	5.00	5.00	
92 Dibromomethane	93	7.386	7.370	0.016	95	59231	5.00	5.02	
94 Dichlorobromomethane	83	7.612	7.613	-0.001	100	157036	5.00	5.39	
96 2-Chloroethyl vinyl ether	63	8.065	8.048	0.017	92	32544	5.00	4.75	
97 cis-1,3-Dichloropropene	75	8.274	8.274	0.000	96	133757	5.00	5.07	
98 4-Methyl-2-pentanone (MIBK	43	8.535	8.535	0.000	97	130203	20.0	17.3	
99 Toluene	91	8.813	8.814	-0.001	99	333362	5.00	5.11	
100 trans-1,3-Dichloropropene	75	9.144	9.127	0.017	93	99517	5.00	5.27	
101 Ethyl methacrylate	69	9.335	9.336	-0.001	90	70597	5.00	5.25	
102 1,1,2-Trichloroethane	97	9.422	9.423	-0.001	90	59730	5.00	5.26	
104 1,3-Dichloropropane	76	9.683	9.684	-0.001	92	90951	5.00	4.88	
103 Tetrachloroethene	164	9.701	9.701	-0.001	99	133731	5.00	5.91	
105 2-Hexanone	43	9.857	9.858	-0.001	96	79316	20.0	16.6	
107 Chlorodibromomethane	129	10.066	10.049	0.017	90	97581	5.00	5.52	
109 Ethylene Dibromide	107	10.240	10.241	-0.001	98	75796	5.00	5.34	
110 1-Chlorohexane	91	11.075	11.076	-0.001	83	167342	5.00	5.24	
111 Chlorobenzene	112	11.075	11.076	-0.001	91	227909	5.00	5.41	
113 1,1,1,2-Tetrachloroethane	131	11.214	11.215	-0.001	93	111818	5.00	5.51	
112 Ethylbenzene	106	11.284	11.285	-0.001	99	112974	5.00	5.42	
114 m-Xylene & p-Xylene	106	11.493	11.493	0.000	99	155992	5.00	5.51	
115 o-Xylene	106	12.154	12.155	-0.001	98	134380	5.00	5.56	
116 Styrene	104	12.189	12.172	0.017	94	212995	5.00	5.31	
117 Bromoform	173	12.467	12.468	-0.001	97	51843	5.00	5.80	
118 Isopropylbenzene	105	12.833	12.816	0.017	96	430216	5.00	5.20	
119 Cyclohexanone	55	12.954	12.938	0.016	90	40095	200.0	222.5	
121 Bromobenzene	156	13.320	13.303	0.017	92	118925	5.00	5.52	
122 1,1,2,2-Tetrachloroethane	83	13.320	13.321	-0.001	95	77265	5.00	5.11	
124 1,2,3-Trichloropropane	110	13.372	13.373	-0.001	82	16962	5.00	5.02	
125 trans-1,4-Dichloro-2-buten	53	13.424	13.425	-0.001	78	15240	5.00	4.39	
123 N-Propylbenzene	120	13.563	13.547	0.016	99	112196	5.00	5.29	
126 2-Chlorotoluene	126	13.685	13.669	0.016	57	92549	5.00	5.27	a
128 4-Chlorotoluene	126	13.859	13.860	-0.001	99	110163	5.00	5.37	
127 1,3,5-Trimethylbenzene	105	13.894	13.877	0.017	95	324764	5.00	5.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 tert-Butylbenzene	119	14.468	14.452	0.016	93	367414	5.00	5.08	
130 1,2,4-Trimethylbenzene	105	14.555	14.539	0.016	96	311509	5.00	4.99	
131 sec-Butylbenzene	134	14.869	14.852	0.016	94	107769	5.00	5.40	
132 1,3-Dichlorobenzene	146	15.008	15.008	0.000	98	203905	5.00	5.42	
133 4-Isopropyltoluene	119	15.130	15.130	0.000	96	431421	5.00	5.27	
134 1,4-Dichlorobenzene	146	15.182	15.165	0.017	95	248907	5.00	5.52	
138 1,2-Dichlorobenzene	146	15.826	15.809	0.017	98	175223	5.00	5.37	
137 n-Butylbenzene	91	15.860	15.844	0.016	97	394566	5.00	5.06	
139 1,2-Dibromo-3-Chloropropan	157	16.939	16.940	-0.001	89	12962	5.00	6.03	
141 1,2,4-Trichlorobenzene	180	17.879	17.862	0.017	95	121164	5.00	5.50	
142 Hexachlorobutadiene	225	18.070	18.071	-0.001	96	127603	5.00	5.74	
143 Naphthalene	128	18.105	18.106	-0.001	97	106252	5.00	4.90	
144 1,2,3-Trichlorobenzene	180	18.349	18.349	0.000	96	88085	5.00	5.15	
93 1,4-Dioxane	88		18.432				ND	ND	
S 145 1,2-Dichloroethene, Total	1				0		10.0	11.6	
S 146 Xylenes, Total	106				0		10.0	11.1	
S 147 1,2-Dichloroethene, Total	96				0		10.0	11.6	
S 148 1,3-Dichloropropene, Total	1				0		10.0	10.3	
S 149 Trihalomethanes, Total	1				0		20.0	21.9	
S 150 Xylenes, Total (URS)	1				0		10.0	11.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

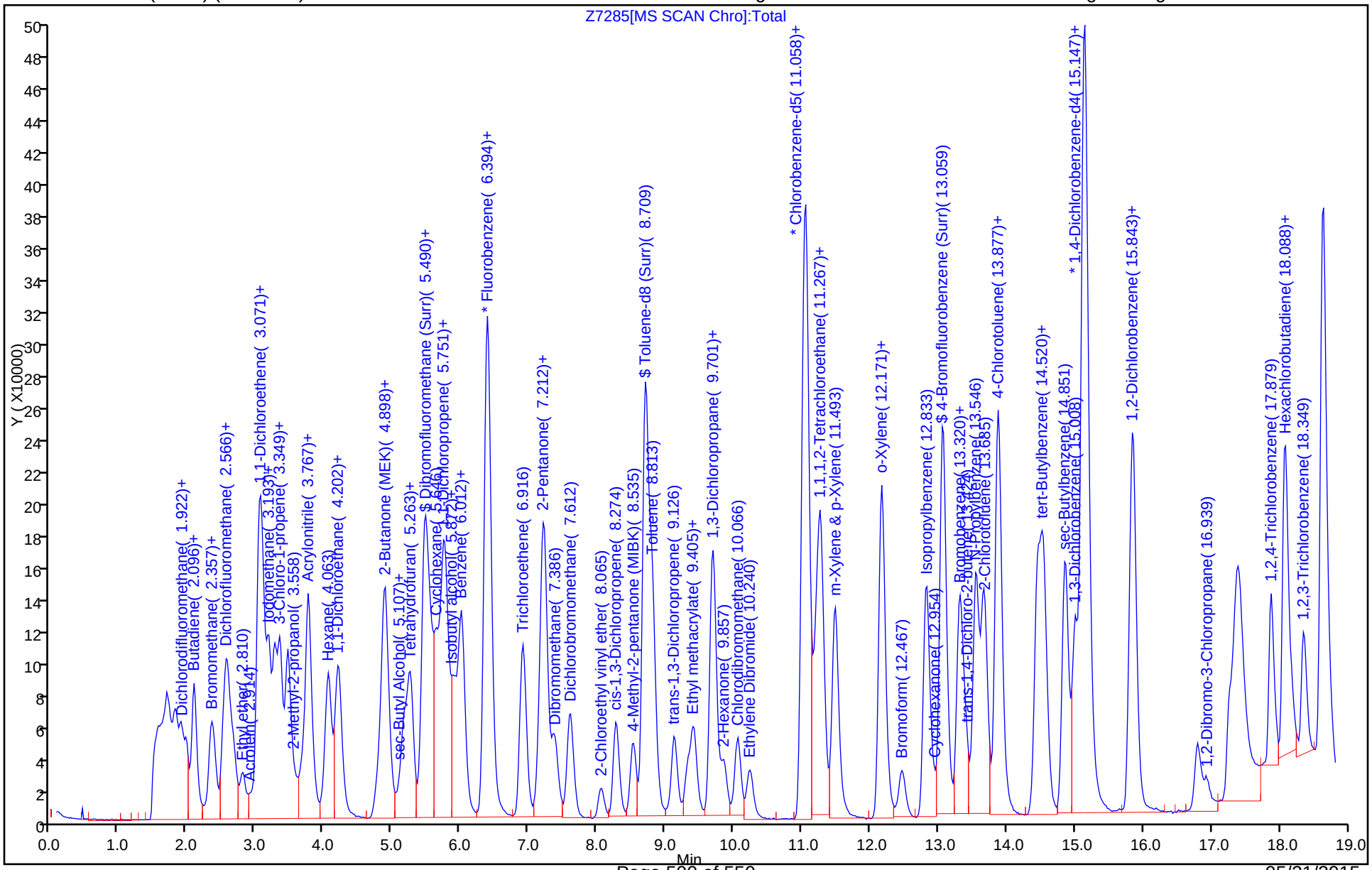
MV-Main B_00009	Amount Added:	2.50	Units: uL	
MV-Gas/Ket B_00019	Amount Added:	2.50	Units: uL	
MV-SS 2-Cleve_00020	Amount Added:	2.50	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00042	Amount Added:	0.84	Units: uL	Run Reagent

Report Date: 08-May-2015 16:29:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7285.D				
Injection Date:	07-May-2015 21:14:30	Instrument ID:	VMS_Z	Operator ID:	bergerb
Lims ID:	LCS			Worklist Smp#:	4
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

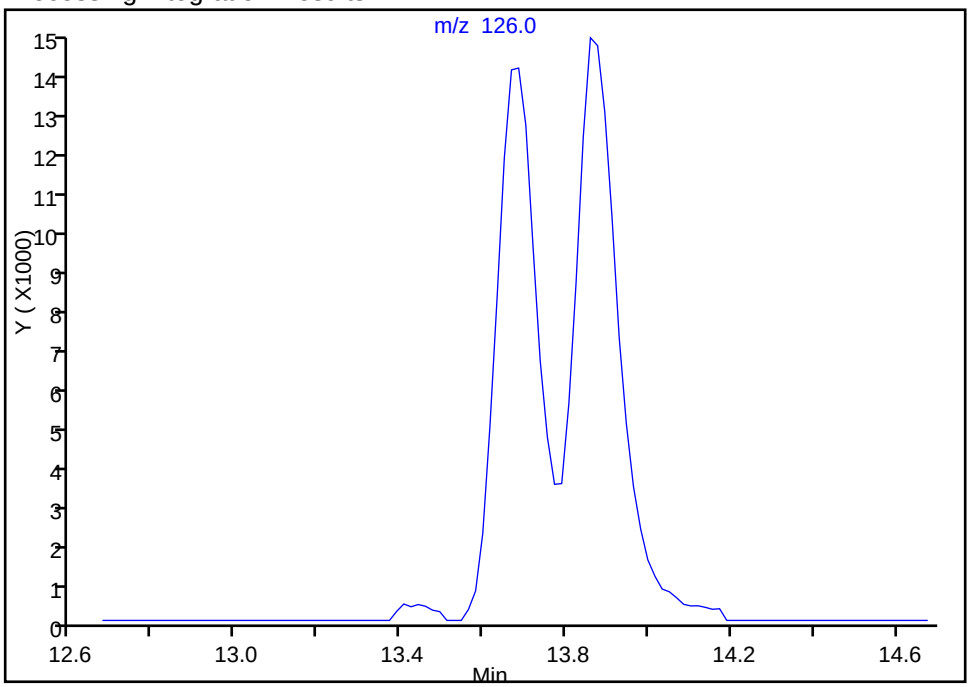
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7285.D				
Injection Date:	07-May-2015 21:14:30	Instrument ID:	VMS_Z		
Lims ID:	LCS				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	3	Worklist Smp#:	4
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

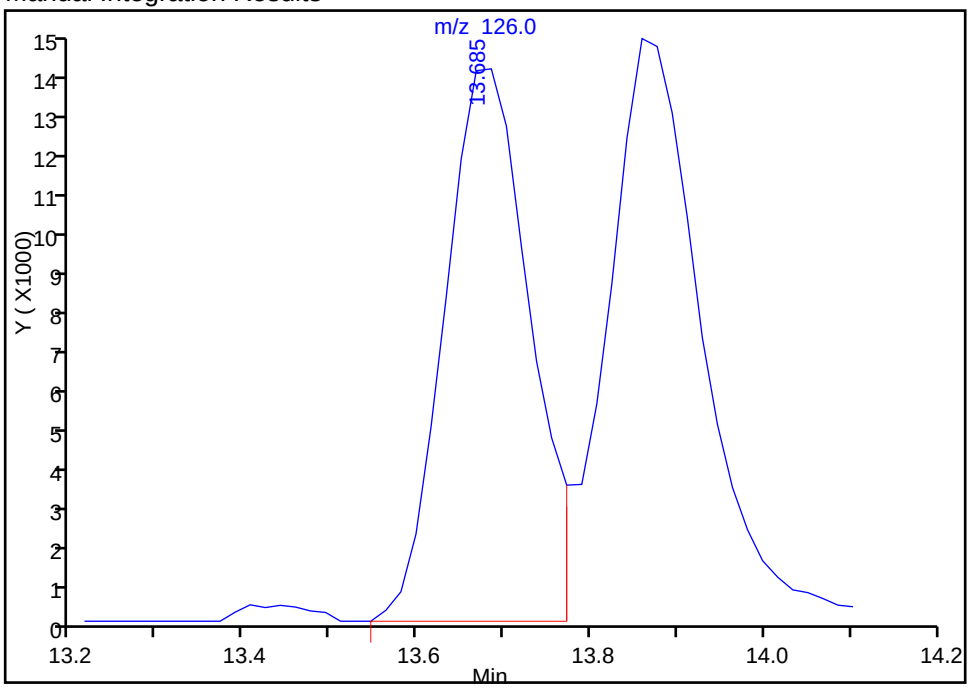
Not Detected
Expected RT: 13.67

Processing Integration Results



Manual Integration Results

RT:	13.69
Area:	92549
Amount:	5.269472
Amount Units:	ug/l



Reviewer: bergerb, 07-May-2015 21:39:46
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

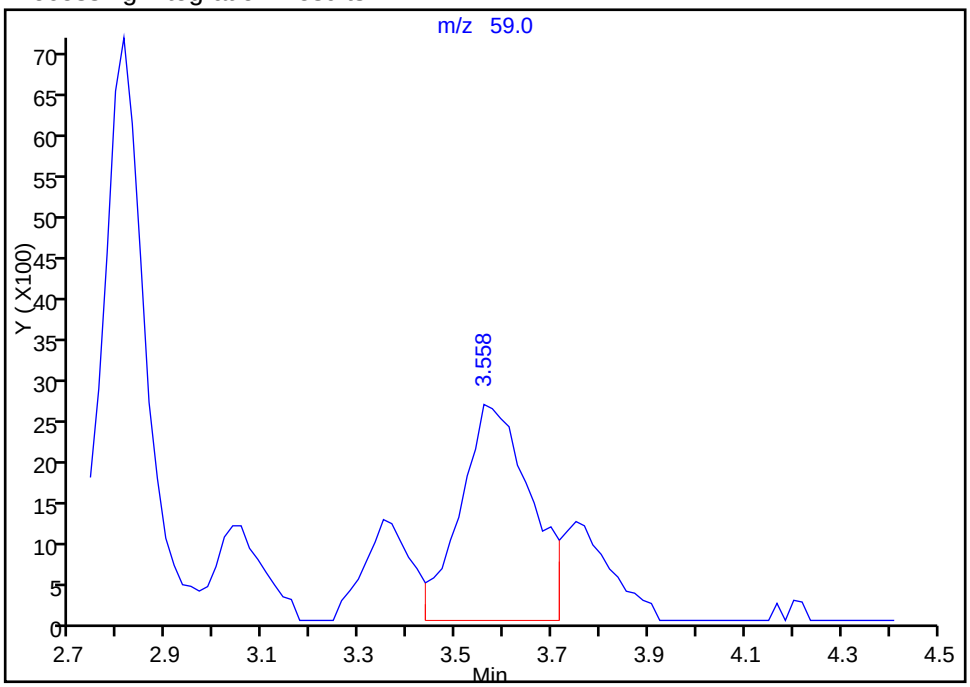
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_Z\20150507-34807.b\Z7285.D				
Injection Date:	07-May-2015 21:14:30	Instrument ID:	VMS_Z		
Lims ID:	LCS				
Client ID:					
Operator ID:	bergerb	ALS Bottle#:	3	Worklist Smp#:	4
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

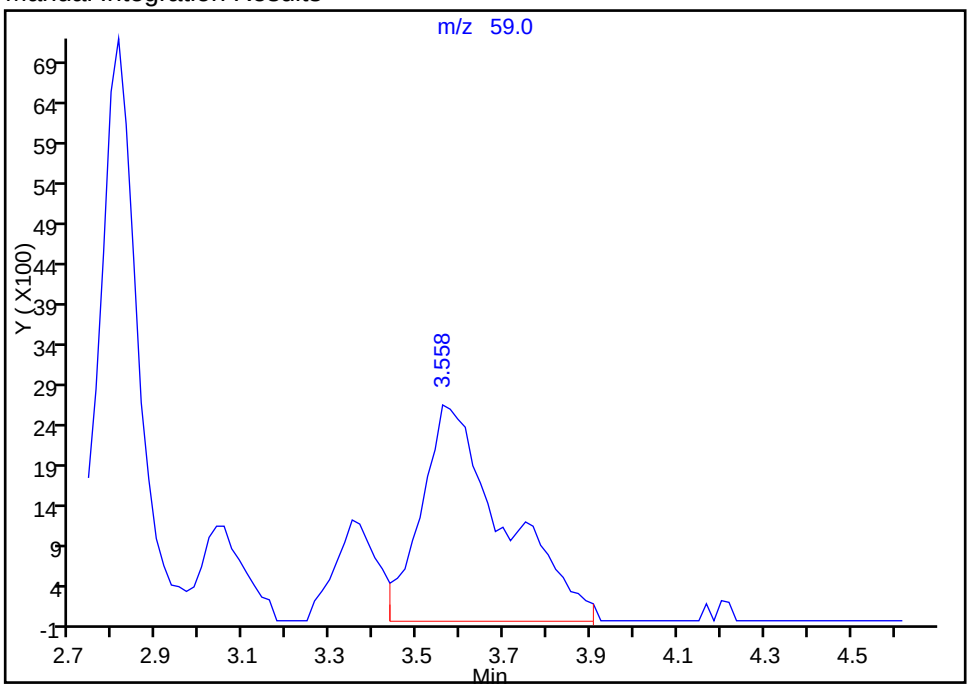
Processing Integration Results

RT: 3.56
Area: 27167
Amount: 40.032591
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 35169
Amount: 56.741570
Amount Units: ug/l



Reviewer: bergerb, 07-May-2015 21:39:46
Audit Action: Manually Integrated
Audit Reason: Split Peak

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68518-1

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	Z6764.D	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	Z6765.D	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	Z6766.D	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	Z6767.D	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	Z6768.D	DB-624 (75.53) 0.53(mm)
IC 280-274661/15		04/27/2015 09:53	1	Z6769.D	DB-624 (75.53) 0.53(mm)
IC 280-274661/16		04/27/2015 10:16	1	Z6770.D	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.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Start Date: 04/30/2015 06:12

Analysis Batch Number: 275227 End Date: 04/30/2015 16:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-275227/1		04/30/2015 06:12	1	Z6919.D	DB-624 (75.53) 0.53(mm)
CCV 280-275227/2		04/30/2015 06:18	1		DB-624 (75.53) 0.53(mm)
CCV 280-275227/3		04/30/2015 06:41	1		DB-624 (75.53) 0.53(mm)
ICV 280-275227/4		04/30/2015 07:04	1	Z6922.D	DB-624 (75.53) 0.53(mm)
CCV 280-275227/10		04/30/2015 07:27	1		DB-624 (75.53) 0.53(mm)
CCV 280-275227/11		04/30/2015 07:49	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 08:12	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 08:35	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 08:59	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 09:22	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 09:45	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 10:08	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 10:30	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 10:53	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 11:15	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 11:38	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 12:01	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 12:23	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 12:46	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 13:09	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 13:32	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 13:55	4		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 14:18	40		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 14:41	4		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 15:03	40		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 15:26	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 15:49	4		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 16:12	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 16:34	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		04/30/2015 16:57	1		DB-624 (75.53) 0.53(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Start Date: 05/02/2015 05:53

Analysis Batch Number: 275642 End Date: 05/02/2015 17:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-275642/1		05/02/2015 05:53	1	Z7033.D	DB-624 (75.53) 0.53(mm)
CCV 280-275642/2		05/02/2015 06:26	1		DB-624 (75.53) 0.53(mm)
CCV 280-275642/3		05/02/2015 06:49	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 07:11	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 07:34	1		DB-624 (75.53) 0.53(mm)
IC 280-275642/10		05/02/2015 07:56	1	Z7039.D	DB-624 (75.53) 0.53(mm)
IC 280-275642/11		05/02/2015 08:19	1	Z7040.D	DB-624 (75.53) 0.53(mm)
IC 280-275642/12		05/02/2015 08:41	1	Z7041.D	DB-624 (75.53) 0.53(mm)
IC 280-275642/13		05/02/2015 09:04	1	Z7042.D	DB-624 (75.53) 0.53(mm)
IC 280-275642/14		05/02/2015 09:27	1	Z7043.D	DB-624 (75.53) 0.53(mm)
ICV 280-275642/15		05/02/2015 09:50	1	Z7044.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 10:13	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 10:35	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 11:00	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 11:23	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 11:45	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 12:08	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 12:31	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 12:54	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 13:17	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 13:39	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 14:02	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 14:25	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 14:48	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 15:11	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 15:34	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 15:56	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 16:19	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 16:41	10		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 17:04	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/02/2015 17:27	1		DB-624 (75.53) 0.53(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Start Date: 05/05/2015 20:05

Analysis Batch Number: 276091 End Date: 05/06/2015 07:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-276091/1		05/05/2015 20:05	1	Z7158.D	DB-624 (75.53) 0.53(mm)
CCV 280-276091/2		05/05/2015 20:22	1	Z7159.D	DB-624 (75.53) 0.53(mm)
CCV 280-276091/3		05/05/2015 20:45	1	Z7160.D	DB-624 (75.53) 0.53(mm)
LCS 280-276091/4		05/05/2015 21:09	1	Z7161.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		05/05/2015 21:32	1		DB-624 (75.53) 0.53(mm)
MB 280-276091/6		05/05/2015 22:18	1	Z7164.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		05/05/2015 22:40	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/05/2015 23:03	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/05/2015 23:26	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/05/2015 23:49	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 00:11	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 00:34	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 00:57	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 01:19	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 01:42	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 02:05	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 02:27	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 02:50	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 03:13	1		DB-624 (75.53) 0.53(mm)
280-68518-1	54403-TB08-0415	05/06/2015 03:36	1	Z7178.D	DB-624 (75.53) 0.53(mm)
280-68518-2	54400-MW69-0415	05/06/2015 03:58	1	Z7179.D	DB-624 (75.53) 0.53(mm)
280-68518-3	54400-BH0206S-0415	05/06/2015 04:21	1	Z7180.D	DB-624 (75.53) 0.53(mm)
280-68518-4	54400-MW223-0415	05/06/2015 04:44	1	Z7181.D	DB-624 (75.53) 0.53(mm)
280-68518-5	54400-MW224-0415	05/06/2015 05:07	1	Z7182.D	DB-624 (75.53) 0.53(mm)
280-68518-6	54400-MW45D-0415	05/06/2015 05:29	1	Z7183.D	DB-624 (75.53) 0.53(mm)
280-68518-7	54400-MW45S-0415	05/06/2015 05:52	1	Z7184.D	DB-624 (75.53) 0.53(mm)
280-68518-8	54400-MW42-0415	05/06/2015 06:15	1	Z7185.D	DB-624 (75.53) 0.53(mm)
280-68518-9	54400-MW67-0415	05/06/2015 06:38	1	Z7186.D	DB-624 (75.53) 0.53(mm)
CCVC 280-276091/33		05/06/2015 07:01	1	Z7187.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		05/06/2015 07:23	1		DB-624 (75.53) 0.53(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: VMS_Z Start Date: 05/07/2015 20:08

Analysis Batch Number: 276534 End Date: 05/08/2015 07:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-276534/1		05/07/2015 20:08	1	Z7282.D	DB-624 (75.53) 0.53(mm)
CCV 280-276534/2		05/07/2015 20:29	1	Z7283.D	DB-624 (75.53) 0.53(mm)
CCV 280-276534/3		05/07/2015 20:52	1	Z7284.D	DB-624 (75.53) 0.53(mm)
LCS 280-276534/4		05/07/2015 21:14	1	Z7285.D	DB-624 (75.53) 0.53(mm)
MB 280-276534/6		05/07/2015 22:22	1	Z7287.D	DB-624 (75.53) 0.53(mm)
280-68518-10	54400-MW178-0415	05/07/2015 22:45	1	Z7288.D	DB-624 (75.53) 0.53(mm)
280-68518-10 DL	54400-MW178-0415 DL	05/07/2015 23:07	1	Z7289.D	DB-624 (75.53) 0.53(mm)
280-68518-11	54400-BH0202S-0415	05/07/2015 23:30	1	Z7290.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		05/07/2015 23:53	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 00:16	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 00:38	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 01:01	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 01:24	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 01:46	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 02:09	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 02:32	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 02:54	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 03:17	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 03:40	1		DB-624 (75.53) 0.53(mm)
280-68518-12	54400-MW182-0415	05/08/2015 04:02	1	Z7302.D	DB-624 (75.53) 0.53(mm)
CCVC 280-276534/25		05/08/2015 04:25	1	Z7303.D	DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 04:47	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 05:10	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 05:33	10		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 05:56	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 06:19	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 06:42	1		DB-624 (75.53) 0.53(mm)
ZZZZZ		05/08/2015 07:05	10		DB-624 (75.53) 0.53(mm)

8260B

GC/MS VOA Continuing Calibration Review Checklist *TestAmerica Denver*

Instrument ID and Date: Z 05/05/15 pm Work List 34699

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?	✓			✓	2butanone 2methyl2propanol chloromethane
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	Tert-amyl methyl ether isobutyl alcohol
9. Does this CCV pass Q4 criteria?	✓			✓	

1st Level Reviewer: [signature] Date: 5/5/15

2nd Level Reviewer: [signature] Date: 05/06/14

Revision 2
4/2/2013
R:\QA\Edit\FORMS\Data Review\MS VOA\GCMS VOA CCV Rev2.doc

Sequence Name: C:\HPCHEM\1\SEQUENCE\050515pm.S
Comment:
Operator: bergerb
Data Path: C:\HPCHEM\1\data\050515pm\
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: 2005
Lims Batch: 276091

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	Z7158	BFB	bfb 2005		
2	Sample	1	Z7159	8260	ccv m	888	
3	Sample	2	Z7160	8260	ccv s		
4	Sample	3	Z7161	8260	lcs	5/6/15	
5	Sample	4	Z7162	8260	lcs In2		
6	Sample	5	Z7163	8260	blank		
7	Sample	6	Z7164	8260	mb af		
8	Sample	7	Z7165	8260	560-54290-C-1	pH<2 af	
9	Sample	8	Z7166	8260	560-54290-C-2	pH<2 af	
10	Sample	9	Z7167	8260 DNR	560-54290-C-3	pH<2 af	E
11	Sample	10	Z7168	8260	280-68373-V-1	pH<2	E
12	Sample	11	Z7169	8260	280-68373-V-1	pH<2 ms	E
13	Sample	12	Z7170	8260	280-68373-V-1	pH<2 msd	E
14	Sample	13	Z7171	8260	280-68373-V-1	pH<2 2ml	DL
15	Sample	14	Z7172	8260	280-68373-G-2	pH<2 10ml	E
16	Sample	15	Z7173	8260	280-68373-G-2	pH<2 1ml	DL
17	Sample	16	Z7174	8260	280-68373-G-3	pH<2	
18	Sample	17	Z7175	8260	280-68373-G-4	pH<2	
19	Sample	18	Z7176	8260	280-68373-A-5	pH<2	
20	Sample	19	Z7177	8260	280-68373-A-6	pH<2	
21	Sample	20	Z7178	8260	280-68518-A-1	pH<2	
22	Sample	22	Z7179	8260	280-68518-A-2	pH<2	
23	Sample	23	Z7180	8260	280-68518-A-3	pH<2	
24	Sample	24	Z7181	8260	280-68518-C-4	pH<2	
25	Sample	25	Z7182	8260	280-68518-A-5	pH<2	
26	Sample	26	Z7183	8260	280-68518-C-6	pH<2	
27	Sample	27	Z7184	8260	280-68518-C-7	pH<2	
28	Sample	28	Z7185	8260	280-68518-C-8	pH<2	
29	Sample	29	Z7186	8260	280-68518-C-9	pH<2	
30	Sample	30	Z7187	8260	ccvc		
31	Sample	31	Z7188	8260	560-54290-C-3	pH<2 10ml	

TestAmerica Laboratories
Worklist Report

Worklist Name: 050515pm
Worklist Number: 34699
Instrument Name: VMS_Z
Chrom Method: AQ_VMSZ_8260
Purge Volume: 20.00
Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_Z\20150505-34699.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
280-0034699-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034699-002	# 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
280-0034699-003	# 3 CCV	MV-Supp A_00011	CCV		voaWater	20.00	mL	1.000000
280-0034699-004	# 4 LCS	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020	LCS		voaWater	20.00	mL	1.000000
280-0034699-005	# 5 LCS	MV-Supp B_00005	LCS		voaWater	20.00	mL	1.000000
280-0034699-006	# 6 MB		MB		voaWater	20.00	mL	1.000000
280-0034699-007	# 7 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034699-008	# 8 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034699-009	# 9 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034699-010	#10 560-54290-C-1		Client		voaWater	20.00	mL	1.000000
280-0034699-011	#11 560-54290-C-2		Client		voaWater	20.00	mL	1.000000
280-0034699-012	#12 560-54290-C-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
280-0034699-013	#13 280-68373-V-1		Client		voaWater	20.00	mL	1.000000
280-0034699-014	#14 280-68373-V-1 MS	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020 mv-LCS add-on_00001	MS		voaWater	20.00	mL	1.000000
280-0034699-015	#15 280-68373-V-1 MSD	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020 mv-LCS add-on_00001	MSD		voaWater	20.00	mL	1.000000
280-0034699-016	#16 280-68373-V-1		Client		voaWater	2.000000	mL	1.000000
280-0034699-017	#17 280-68373-G-2		Client		voaWater	10.00	mL	1.000000
280-0034699-018	#18 280-68373-G-2		Client		voaWater	1.000000	mL	1.000000
280-0034699-019	#19 280-68373-G-3		Client		voaWater	20.00	mL	1.000000
280-0034699-020	#20 280-68373-G-4		Client		voaWater	20.00	mL	1.000000
280-0034699-021	#21 280-68373-A-5		Client		voaWater	20.00	mL	1.000000
280-0034699-022	#22 280-68373-A-6		Client		voaWater	20.00	mL	1.000000
280-0034699-023	#23 280-68518-A-1		Client		voaWater	20.00	mL	1.000000
280-0034699-024	#24 280-68518-A-2		Client		voaWater	20.00	mL	1.000000
280-0034699-025	#25 280-68518-A-3		Client		voaWater	20.00	mL	1.000000
280-0034699-026	#26 280-68518-C-4		Client		voaWater	20.00	mL	1.000000
280-0034699-027	#27 280-68518-A-5		Client		voaWater	20.00	mL	1.000000
280-0034699-028	#28 280-68518-C-6		Client		voaWater	20.00	mL	1.000000
280-0034699-029	#29 280-68518-C-7		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
280-0034699-030	#30 280-68518-C-8		Client		voaWater	20.00	mL	1.000000
280-0034699-031	#31 280-68518-C-9		Client		voaWater	20.00	mL	1.000000
280-0034699-032	#32 280-68518-C-10		Client		voaWater	20.00	mL	1.000000
280-0034699-033	#33 280-68518-C-10		Client		voaWater	5.000000	mL	1.000000
280-0034699-034	#34 Samp 34		Client		voaWater	20.00	mL	1.000000

GC/MS VOA Continuing Calibration Review Checklist *TestAmerica Denver*

Instrument ID and Date: Z 05/07/15 pm Work List 34807

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?	✓			✓	Chloromethane 2methyl2propanol
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	2-Chlorotoluene
9. Does this CCV pass Q4 criteria?	✓			✓	

1st Level Reviewer: [signature] Date: 5/7/15

2nd Level Reviewer: [signature] Date: 05/07/15

Revision 2
4/2/2013
R:\QA\Edit\FORMS\Data Review\MS VOA\GCMS VOA CCV Rev2.doc

Sequence Name: C:\HPCHEM\1\SEQUENCE\050715pm.S
Comment:
Operator: bergerb
Data Path: C:\HPCHEM\1\data\050715pm\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: 7
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/6mL/5g) (Circle)
Tune Time: 2008
Lime Batch: 276534

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	Z7282	BFB	bfb 2008		RR
2	Sample	1	Z7283	8260	ccv m		
3	Sample	2	Z7284	8260	ccv s		5/8/15
4	Sample	3	Z7285	8260	lcs		
5	Sample	4	Z7286	8260	blank		
6	Sample	5	Z7287	8260	mb af		
7	Sample	6	Z7288	8260	280-68518-B-10	pH<2	E
8	Sample	7	Z7289	8260	280-68518-B-10	pH<2 2ml	DL
9	Sample	8	Z7290	8260	280-68518-A-11	pH<2	
10	Sample	9	Z7291	8260 DNR	280-68518-A-12	pH<2	SSII
11	Sample	10	Z7292	8260	280-68601-B-1	pH<2	
12	Sample	11	Z7293	8260	280-68601-H-2	pH<2	
13	Sample	12	Z7294	8260	280-68601-J-3	pH<2	
14	Sample	13	Z7295	8260	280-68601-B-4	pH<2	E
15	Sample	14	Z7296	8260	280-68601-B-5	pH<2	
16	Sample	15	Z7297	8260	280-68601-B-6	pH<2	
17	Sample	16	Z7298	8260	280-68650-F-1	pH<2	
18	Sample	17	Z7299	8260	280-68650-F-2	pH<2	
19	Sample	18	Z7300	8260	280-68650-D-4	pH<2	
20	Sample	19	Z7301	8260	280-68650-B-7	pH<2	
21	Sample	20	Z7302	8260	280-68518-A-12	pH<2	
22	Sample	22	Z7303	8260	ccvc		
23	Sample	23	Z7304	8260	280-68658-A-1	pH<2	
24	Sample	24	Z7305	8260	280-68658-C-2	pH<2	E
25	Sample	25	Z7306	8260	280-68658-C-2	pH<2 2ml	DL
26	Sample	26	Z7307	8260	280-68658-C-3	pH<2	
27	Sample	27	Z7308	8260	280-68658-C-4	pH<2	
28	Sample	28	Z7309	8260	280-68658-C-5	pH<2	E
29	Sample	29	Z7310	8260	280-68658-C-5	pH<2 2ml	DL

TestAmerica Laboratories
Worklist Report

Worklist Name: 050715pm
Worklist Number: 34807
Instrument Name: VMS_Z
Chrom Method: AQ_VMSZ_8260
Purge Volume: 20.00
Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_Z\20150507-34807.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
280-0034807-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034807-002	# 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
280-0034807-003	# 3 CCV	MV-Supp A_00011	CCV		voaWater	20.00	mL	1.000000
280-0034807-004	# 4 LCS	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020	LCS		voaWater	20.00	mL	1.000000
280-0034807-005	# 5 LCSD	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020	LCSD		voaWater	20.00	mL	1.000000
280-0034807-006	# 6 MB		MB		voaWater	20.00	mL	1.000000
280-0034807-007	# 7 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034807-008	# 8 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034807-009	# 9 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034807-010	#10 280-68518-B-10		Client		voaWater	20.00	mL	1.000000
280-0034807-011	#11 280-68518-B-10		Client		voaWater	2.000000	mL	1.000000
280-0034807-012	#12 280-68518-A-11		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
280-0034807-013	#13 280-68518-A-12		Client		voaWater	20.00	mL	1.000000
280-0034807-014	#14 280-68601-B-1		Client		voaWater	20.00	mL	1.000000
280-0034807-015	#15 280-68601-H-2		Client		voaWater	20.00	mL	1.000000
280-0034807-016	#16 280-68601-J-3		Client		voaWater	20.00	mL	1.000000
280-0034807-017	#17 280-68601-B-4		Client		voaWater	20.00	mL	1.000000
280-0034807-018	#18 280-68601-B-5		Client		voaWater	20.00	mL	1.000000
280-0034807-019	#19 280-68601-B-6		Client		voaWater	20.00	mL	1.000000
280-0034807-020	#20 280-68650-F-1		Client		voaWater	20.00	mL	1.000000
280-0034807-021	#21 280-68650-F-2		Client		voaWater	20.00	mL	1.000000
280-0034807-022	#22 280-68650-D-4		Client		voaWater	20.00	mL	1.000000
280-0034807-023	#23 280-68650-B-7		Client		voaWater	20.00	mL	1.000000
280-0034807-024	#24 ccvc	MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	CCVC		voaWater	20.00	mL	1.000000
280-0034807-025	#25 280-68658-A-1		Client		voaWater	20.00	mL	1.000000
280-0034807-026	#26 280-68658-C-2		Client		voaWater	20.00	mL	1.000000
280-0034807-027	#27 280-68658-C-2		Client		voaWater	20.00	mL	10.00
280-0034807-028	#28 280-68658-C-3		Client		voaWater	20.00	mL	1.000000
280-0034807-029	#29 280-68658-C-4		Client		voaWater	20.00	mL	1.000000
280-0034807-030	#30 280-68658-C-5		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
280-0034807-031	#31 280-68658-C-5		Client		voaWater	20.00	mL	10.00
280-0034807-032	#32 Samp 32		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 Main/Gas ICAL Batch/ICV lines: 274661 ~~Icv 17~~. MM 4-30-15
Calibration Event 22132 Work List 34370 2nd Day Batch/ICV lines 275227 ICV4

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. 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?	✓			✓	Chloromethane, 2-methyl-2-propanol, 2-chlorotoluene
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.	✓			✓	~~Dichlorodifluoromethane -27.01%D~~ ~~Chloromethane -21.99%D~~ MM 4-30-15

1st Level Reviewer: [signature] Date: 4/27/15

2nd Level Reviewer: [signature] Date: 4-27-15

Revision 4
03/27/2013
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Not Calibrated
1,4-Dioxane

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
OV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 631
Lime 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 4/27/15
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

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

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
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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

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

TestAmerica Denver **surrogate only** M 5-6-15

GC/MS Initial Calibration Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Instrument ID and Date: Z 5/2/15 ICAL Batch/ICV lines ~~271383~~ 275642 **ICV 15**
Calibration Event 22178 Work List 34583 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			✓	
2. ICAL date and instrument ID verified?	X			✓	
3. Does the Form VI match the data in the Chrom source method?	X			✓	
4. Sufficient number of calibration points used?	X			✓	
5. Reasons for removal of points documented?			X	✓	
6. %RSD or correlation coefficient within method limits?	X			✓	
7. Response factors meet criteria?	X			✓	
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			✓	
9. Data checked for detector saturation?	X			✓	
10. Label number of standards used recorded?	X			✓	
11. Manual integrations documented and checked?			X	✓	
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			✓	

1st Level Reviewer: M Date: 5-2-15

2nd Level Reviewer: Date: 5/4/15

Revision 4
03/27/2013
C:\Users\moanm\Desktop\GCMS VOA ICAL Rev 4.doc

Sequence Name: C:\HPCHEM\1\SEQUENCE\050215am.S
Comment:
Operator: moanm
Data Path: C:\HPCHEM\1\data\050215am\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: 3
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 5:53 - 17:27
Line Number: 235642
by 34583

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	Z7033	BFB	bfb
2	Sample	1	Z7034	8260	blk
3	Sample	2	Z7035	8260	ccv
4	Sample	3	Z7036	8260	ccv
5	Sample	4	Z7037	8260	lcs
6	Sample	5	Z7038	8260	mb
7	Sample	6	Z7039	8260	ic
8	Sample	7	Z7040	8260	ic
9	Sample	8	Z7041	8260	ic
10	Sample	9	Z7042	8260	ic
11	Sample	10	Z7043	8260	ic
12	Sample	11	Z7044	8260	icv
13	Sample	12	Z7045	8260	lcs
14	Sample	13	Z7046	8260	mb
15	Sample	14	Z7047	8260	280-68228-I-1 ph<2
16	Sample	15	Z7048	8260	280-68228-J-2 ph<2
17	Sample	16	Z7049	8260	280-68228-J-1 ph<2 MS
18	Sample	17	Z7050	8260	280-68228-J-1 ph<2 MSD
19	Sample	18	Z7051	8260	280-68228-I-3 ph<2
20	Sample	19	Z7052	8260	280-68228-H-4 ph<2
21	Sample	20	Z7053	8260	280-68233-A-14 ph<2
22	Sample	22	Z7054	8260	280-68330-B-1 ph<2
23	Sample	23	Z7055	8260	280-68330-A-2 ph<2
24	Sample	24	Z7056	8260	280-68330-B-3 ph<2
25	Sample	25	Z7057	8260	280-68330-A-4 ph<2
26	Sample	26	Z7058	8260	280-68330-C-5 ph<2
27	Sample	27	Z7059	8260	280-68330-A-6 ph<2
28	Sample	28	Z7060	8260	280-68488-H-1 ph~7
29	Sample	29	Z7061	8260	280-68488-B-6 ph~7
30	Sample	30	Z7062	8260	280-68488-B-6 ph~7 2mL-DW not needed
31	Sample	31	Z7063	8260	280-68488-C-7 ph~7
32	Sample	32	Z7064	8260	280-68488-A-8 ph~7

TestAmerica Laboratories
Worklist Report

Worklist Name: 050215 Worklist Number: 34583
Instrument Name: VMS_Z Chrom Method: AQ_VMSZ_8260
Purge Volume: 20.00 Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_Z\20150502-34583.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
280-0034583-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034583-002	# 2 CCV	MV-567649-D_00001 MV-Main A_00022 MV-2cleve+AVA_00009 MV-Gas/Ket A_00032	CCV		voaWater	20.00	mL	1.000000
280-0034583-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034583-005	# 5 LCS	MV-Main B_00009 MV-SS 2-Cleve_00020 MV-Gas/Ket B_00019	LCS		voaWater	20.00	mL	1.000000
280-0034583-006	# 6 MB		MB		voaWater	20.00	mL	1.000000
280-0034583-007	# 7 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034583-008	# 8 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034583-009	# 9 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034583-010	#10 ic	MV-567649-D_00001 MV-ARCH SS A_00042	IC	3	voaWater	20.00	mL	1.000000
280-0034583-011	#11 ic	MV-567649-D_00001 MV-ARCH SS A_00042	IC	4	voaWater	20.00	mL	1.000000
280-0034583-012	#12 ic	MV-567649-D_00001 MV-ARCH SS A_00042	IC	5	voaWater	20.00	mL	1.000000
280-0034583-013	#13 ic	MV-567649-D_00001 MV-ARCH SS A_00042	IC	6	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
280-0034583-014	#14 ic	MV-567649-D_00001 MV-ARCH SS A_00042	IC	7	voaWater	20.00	mL	1.000000
280-0034583-015	#15 icv	MV-567649-D_00001 MV-ARCH SS A_00042	ICV		voaWater	20.00	mL	1.000000
280-0034583-016	#16 lcs	MV-Main B_00009 MV-Gas/Ket B_00019 MV-SS 2-Cleve_00020	LCS		voaWater	20.00	mL	1.000000
280-0034583-017	#17 mb		MB		voaWater	20.00	mL	1.000000
280-0034583-018	#18 Samp 18		Client		voaWater	20.00	mL	1.000000

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-68518-1

SDG No.:

Project: GSI - McConnell AFB (SWMU 207)

Client Sample ID	Lab Sample ID
54401-SB46-0415-41	280-68518-13
54401-SB46-0415-54	280-68518-14

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 54401-SB46-0415-41
Lab Sample ID: 280-68518-13
Lab Name: TestAmerica Denver
Job No.: 280-68518-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/24/2015 09:15
Reporting Basis: WET
Date Received: 04/29/2015 07:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	3.4	4.0	3.4	1.7	g/Kg	U		1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 54401-SB46-0415-54
Lab Sample ID: 280-68518-14
Lab Name: TestAmerica Denver
Job No.: 280-68518-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/24/2015 13:40
Reporting Basis: WET
Date Received: 04/29/2015 07:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	3.4	4.0	3.4	1.7	g/Kg	U		1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Analyst: ELJ Batch Start Date: 05/19/2015

Reporting Units: g/Kg Analytical Batch No.: 278201

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	11:35	Total Organic Carbon	121	120	101	90-110		STOC ICV Std_00002
2	ICB	11:37	Total Organic Carbon	0.00050				U	
11	CCV	11:57	Total Organic Carbon	121	120	101	90-110		STOC CAL 3_00014
12	CCB	11:59	Total Organic Carbon	0.00050				U	
17	CCV	14:17	Total Organic Carbon	125	120	104	90-110		STOC CAL 3_00014
18	CCB	14:19	Total Organic Carbon	0.00050				U	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 278201 Date: 05/19/2015 11:41							
9060A	MB 280-278201/4	Total Organic Carbon	3.4	U	g/Kg	4.0	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 278201	Date: 05/19/2015 11:39										
						LCS Source: STOC LCS Std_00009					
9060A	LCS 280-278201/3	Total Organic Carbon	116		g/Kg	123	95	46-130			

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-68518-1

SDG Number:

Matrix: Solid Instrument ID: WC_Leco

Method: 9060A DL Date: 05/05/2011 09:17

Analyte	Wavelength/ Mass	LOQ (g/Kg)	DL (g/Kg)
Total Organic Carbon		4	1.7

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-68518-1

SDG Number:

Matrix: Solid Instrument ID: WC_Leco

Method: 9060A XMDL Date: 03/24/2010 14:20

Analyte	Wavelength/ Mass	XRL (g/Kg)	XMDL (g/Kg)
Total Organic Carbon		4	1.7

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Instrument ID: WC_Leco Method: 9060A

Start Date: 05/19/2015 11:35 End Date: 05/19/2015 14:19

Lab Sample ID	D/F	Type	Time	Analytes																			
				TOC																			
ICV 280-278201/1	1		11:35	X																			
ICB 280-278201/2	1		11:37	X																			
LCS 280-278201/3	1	T	11:39	X																			
MB 280-278201/4	1	T	11:41	X																			
ZZZZZZ			11:42																				
ZZZZZZ			11:46																				
ZZZZZZ			11:48																				
ZZZZZZ			11:50																				
ZZZZZZ			11:52																				
ZZZZZZ			11:54																				
CCV 280-278201/11	1		11:57	X																			
CCB 280-278201/12	1		11:59	X																			
ZZZZZZ			13:40																				
ZZZZZZ			13:43																				
280-68518-14	1	T	13:45	X																			
280-68518-13	1	T	14:14	X																			
CCV 280-278201/17	1		14:17	X																			
CCB 280-278201/18	1		14:19	X																			

Prep Types

T = Total/NA

TOC Solid

Stock Standards

ICV	FISHER	12.0%C STOC ICV STD_00002 Exp. 3/19
CAL/CCV MS/MSD	LECO	12.0%C STOC CAL 3_00014 Exp. 01/05/25
LCS	LECO	12260mg/kg STOC LCS STD_00009 Exp. 1/17

HCL used for digestion 1:1 HCL Sol_00098 Exp. 05/19/16

Calibration Curve Information								Instrument Information		
					Conc.(%)		ABS.			
	Mass	Calculated Carbon %	Std Weight (g)	Area	CURVE MADE:			Instrument:	LECO	
Std. 1	0.0527	12.179	0.6418333	0.4383						
Std. 2	0.0757	12.033	0.9108981	0.6058				Parameter:	TOC	
Std. 3	0.1003	11.733	1.1768199	0.7715				Linear	Equal	1/X
Std. 4	0.1503	11.999	1.8034497	1.1618	MDL =	1.7 g/kg		Slope:	1.60561	1.6055965
Std. 5	0.2513	12.057	3.0299241	1.9256	RL =	4.0 g/kg		Intercept:	-0.06186	-0.06185
	0.6303	60.001	7.5629251	4.90296				CC(R)	1.000	1.000
								COD (R^2)	1.000	1.000

TOC Soil Calibration Revision 1
JM 12/16/2010

SC632

Name	Description	Mass	Method	Analysis Date	Carbon %	Location
501-034 12.0		0.0527	NEW 9060	5/19/2015 11:18:20 AM	12.18	A07
501-034 12.0		0.0757	NEW 9060	5/19/2015 11:20:56 AM	12.03	A08
501-034 12.0		0.1003	NEW 9060	5/19/2015 11:23:37 AM	11.73	A09
501-034 12.0		0.1503	NEW 9060	5/19/2015 11:26:36 AM	12.00	A10
501-034 12.0		0.2513	NEW 9060	5/19/2015 11:29:50 AM	12.06	A01
ICV		0.2125	NEW 9060	5/19/2015 11:35:23 AM	12.12	A02
ICB		0.3581	NEW 9060	5/19/2015 11:37:15 AM	-0.1871	A03
LCS		0.2071	NEW 9060	5/19/2015 11:39:08 AM	11.61	A04
MB		0.3333	NEW 9060	5/19/2015 11:41:01 AM	-0.01817	A05
200-27837-A-1		0.2017	NEW 9060	5/19/2015 11:42:54 AM	7.106	A06
200-27837-A-1 MS		0.2044	NEW 9060	5/19/2015 11:46:05 AM	17.41	A07
200-27837-A-1 MSD		0.2093	NEW 9060	5/19/2015 11:48:56 AM	17.08	A08
200-27837-A-2		0.2103	NEW 9060	5/19/2015 11:50:49 AM	3.957	A09
200-27837-A-3		0.2176	NEW 9060	5/19/2015 11:52:42 AM	4.195	A10
200-27837-A-4		0.2141	NEW 9060	5/19/2015 11:54:35 AM	0.2236	A01
CCV		0.2031	NEW 9060	5/19/2015 11:57:46 AM	12.06	A02
CCB		0.3339	NEW 9060	5/19/2015 11:59:31 AM	-0.1025	A03
200-27792-A-1		0.2092	NEW 9060	5/19/2015 1:40:10 PM	-0.05156	A04
200-27792-A-2		0.2030	NEW 9060	5/19/2015 1:43:21 PM	-0.2199	A05
280-68518-A-14		0.2034	NEW 9060	5/19/2015 1:45:44 PM	0.01460	A06
280-68518-A-13		0.2079	NEW 9060	5/19/2015 2:14:30 PM	-0.1709	A07
CCV		0.2114	NEW 9060	5/19/2015 2:17:49 PM	12.46	A08
CCB		0.5176	NEW 9060	5/19/2015 2:19:42 PM	-0.03346	A09

Element	Average	Std. Deviation	RSD	Count
Mass	0.2212	0.10	43.59	23
Carbon %	6.846	6.4081	93.61	23

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-68518-1

SDG No.:

Batch Number: 278201 Batch Start Date: 05/19/15 11:35 Batch Analyst: Janssen, Elizabeth L

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	STOC CAL 3 00014	STOC ICV Std 00002	STOC LCS Std 00009		
ICV 280-278201/1		9060A		0.2125 mL		0.2125 mL			
ICB 280-278201/2		9060A		0.3581 mL					
LCS 280-278201/3		9060A		0.2071 mL			0.2071 g		
MB 280-278201/4		9060A		0.3333 mL					
CCV 280-278201/11		9060A		0.2031 mL	0.2031 g				
CCB 280-278201/12		9060A		0.3339 mL					
280-68518-A-14	54401-SB46-0415-54	9060A	T	0.2034 mL					
280-68518-A-13	54401-SB46-0415-41	9060A	T	0.2079 mL					
CCV 280-278201/17		9060A		0.2114 mL	0.2114 g				
CCB 280-278201/18		9060A		0.5176 mL					

Batch Notes	
Lot # of hydrochloric acid	HCL Sol_00098
HCl Vendor	Macron

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

280-68518 Chain of Custody

testAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Zabierek	Lab PM: Walker, Elaine M	Carrier Tracking No(s): Fex # 807774436775 cooler 1
Client Contact: Anna Zabierek	Phone: 512-346-4474	E-Mail: elaine.walker@testamericainc.com	COC No:
Company: GSI Environmental, Inc			Page: Page 1 of 2
Address: 9600 Great Hills Trail, Ste 350E	Due Date Requested:		Job #: 3969-211
City: Austin	TAT Requested (days): STD TAT		
State, Zip: TX, 78759			
Phone: 512-346-4474(Tel)	PO #: Purchase Order Requested		
Email: alw@gsi-net.com	WO #:		
Project Name: GSI - McConnell Air Force Base, Kansas	Project #: 28013169 3969-211		
Site: SWMU 207	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Preservation Code:	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_DOD5 - VOCs - Water	6010C_DOD5 - Total Fe, Ca, K, Mg, Na - Water	6010B - Dissolved Fe (Field Filtered) - Water	9056 28D - Sulfate/Chloride, 9056 48HR - Nitrate/Nitrite - W	SM4500SO3_B - Sulfite - Water	365.1 - Phosphate - Water	2320B - Alkalinity - Water	2540C_Calcd - TDS - Water	7196A - Hexavalent Chromium - Water	RSK_175 - Dissolved Gases (Methane/Ethane/Ethene) - W		8260_AFCEE - VOCs (Terracores) - Soil	9060A - Total Organic Carbon - Soil	Percent Moisture - Soil	Total Number of containers	Special Instructions/Note:
							A	D	D	N	N	S	N	N	N	A		E/F	N	N		
544Ø3-TBØ8-Ø415	4.27.15	X	A	W			X															Short Holds: Hex. Chromium (24 hr), Nitrate/Nitrite, Sulfite(48 hr)
44ØØ-MW69-Ø415	4.27.15	1720																				
544ØØ-BHØ2Ø6S-Ø415	4.28.15	0959																				
544ØØ-MW223-Ø415	4.28.15	1156																				
544ØØ-MW224-Ø415	4.28.15	1035																				
544ØØ-MW45D-Ø415	4.28.15	1230																				
544ØØ-MW45S-Ø415	4.28.15	1835																				
544ØØ-MW42-Ø415	4.28.15	0920																				
544ØØ-MW67-Ø415	4.27.15	1755																				
544ØØ-MW179-Ø415	4.28.15	1523																				
544ØØ-BHØ2Ø2S-Ø415	4.27.15	1503																				

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: FED EX 4/29/15	
Relinquished by:	Date/Time: 4.28.15 / 1945	Company	Received by:	Date/Time: 4/29/15 ~~9:15~~ 7:00	Company TA
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: 1.2 IRS +0.2 Transferred by FED EX 4/29/15

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: A. Zabierek	Lab PM: Walker, Elaine M	Carrier Tracking No(s): ~~fed-ex~~ 807774436775 Cooler 1	COC No:
Client Contact: Anna Zabierek	Phone: 512-346-4474	E-Mail: elaine.walker@testamericainc.com		Page: Page 2 of 2
Company: GSI Environmental, Inc				Job #: 3969-211
Address: 9600 Great Hills Trail, Ste 350E	Due Date Requested:			
City: Austin	TAT Requested (days): STD TAT			
State, Zip: TX, 78759				
Phone: 512-346-4474(Tel)	PO #: Purchase Order Requested			
Email: alw@gsi-net.com	WO #:			
Project Name: GSI - McConnell Air Force Base, Kansas	Project #: 28013169 3969-211			
Site: SWMU 207	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Preservation Code:	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_DOD5 - VOCs - Water (A)	6010C_DOD5 - Total Fe, Ca, K, Mg, Na - Water (D)	6010B - Dissolved Fe (Field Filtered) - Water (D)	9056 28D - Sulfate/Chloride, 9056 48HR - Nitrate/Nitrite - W (N)	SM4500SO3_B - Sulfite - Water (N)	365.1 - Phosphate - Water (S)	2320B - Alkalinity - Water (N)	2540C_Calcd - TDS - Water (N)	7196A - Hexavalent Chromium - Water (N)	RSK_175 - Dissolved Gases (Methane/Ethane/Ethene) - W (A)		8260_AFCEE - VOCs (Terracores) - Soil (E/F)	9060A - Total Organic Carbon - Soil (N)	Percent Moisture - Soil (N)	Total Number of containers	Special Instructions/Note:
54400-MW182-0415	4.28.15	1350	A	W			X															Short Holds: Hex. Chromium (24 hr), Nitrate/Nitrite, Sulfite(48 hr)
54401-SB46-0415-41	4.24.15	0915	N	S															X			
54401-SB46-0415-54	4.24.15	1340	N	S															X			

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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:	Company	Received by:	Date/Time:	Company
[signature]	4.28.15 / 1945		[signature]	4/29/15 7:00	TA
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:

Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 280-68518-1

Login Number: 68518
List Number: 1
Creator: Dedio, Michael T

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.	N/A	Preservation labels on samples match COC
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	