ANALYTICAL REPORT

Job Number: 280-68269-2

Job Description: GSI - McConnell AFB, Kansas (SWMU 207)

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

Attention: Anna Zabierek

Approved for release.
Elaine M Walker
Project Manager II
5/1/2015 4:15 PM

Elaine M Walker, Project Manager II
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05/01/2015

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, Kansas (SWMU 207)
Report Number: 280-68269-2

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

Fourteen samples were received on 04/24/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.7°C.

Per discussions on Friday 04/24/2015, sample 54400-BH0201-0415 (280-68269-11) was logged for a 7 business day turnaround time. The results for this sample are reported in this SDG.

All other samples/analyses will be reported under separate cover in SDG 280-68269-1.

The Chain of Custody lists sample "54401-DUP01-0415", collected on 04/22/2015. Per instructions received on Friday 04/23/2015, this sample was logged as sample 54401-BH0201-0415 (280-68269-12) with a collection date/time of 04/22/2015 at 16:30.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Sample 54400-BH0201-0415 (280-68269-11) was analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 04/30/2015.

Methylene Chloride was detected in method blank MB 280-275238/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

Sample 54400-BH0201-0415 (280-68269-11) required a dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Instrument ID: VMS_G2 Analysis Batch Number: 274898

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

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

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

SAMPLE SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-68269-11	54400-BH0201-0415	Water	04/22/2015 1628	04/24/2015 0930

EXECUTIVE SUMMARY - Detections

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-68269-11	**54400-BH0201-0415**					
1,1-Dichloroethene		10	J	20	ug/L	8260B
cis-1,2-Dichloroethene		4300		200	ug/L	8260B
Methylene Chloride		8.7	J	100	ug/L	8260B
trans-1,2-Dichloroethene		20		20	ug/L	8260B
Trichloroethene		2400		200	ug/L	8260B
Vinyl chloride		100		30	ug/L	8260B

METHOD SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68269-2

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

Lab References:

TAL DEN = TestAmerica Denver

Method References:

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

METHOD / ANALYST SUMMARY

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Method	Analyst	Analyst ID
SW846 8260B	Ilczyszyn, Dennis P	DPI

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Client Sample ID: **54400-BH0201-0415**

Lab Sample ID: 280-68269-11

Client Matrix: Water

Date Sampled: 04/22/2015 1628

Date Received: 04/24/2015 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-275238	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3776.D
Dilution:	1.0			Initial Weight/Volume:	1 mL
Analysis Date:	04/30/2015 1318			Final Weight/Volume:	20 mL
Prep Date:	04/30/2015 1318				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	16	U	3.4	20
1,1,1-Trichloroethane	8.0	U	3.2	20
1,1,2,2-Tetrachloroethane	16	U	4.0	20
1,1,2-Trichloroethane	16	U	6.4	20
1,1-Dichloroethane	16	U	3.2	20
1,1-Dichloroethene	10	J	2.8	20
1,1-Dichloropropene	8.0	U	3.0	20
1,2,3-Trichlorobenzene	16	U	3.6	20
1,2,3-Trichloropropane	16	U	15	60
1,2,4-Trichlorobenzene	16	U	6.4	20
1,2,4-Trimethylbenzene	8.0	U	2.8	20
1,2-Dibromo-3-Chloropropane	32	U	16	100
1,2-Dibromoethane	8.0	U	3.6	20
1,2-Dichlorobenzene	8.0	U	2.6	20
1,2-Dichloroethane	8.0	U	2.6	20
1,2-Dichloropropane	8.0	U	2.6	20
1,3,5-Trimethylbenzene	8.0	U	2.8	20
1,3-Dichlorobenzene	8.0	U	3.2	20
1,3-Dichloropropane	16	U	3.0	20
1,4-Dichlorobenzene	8.0	U	3.2	20
2,2-Dichloropropane	8.0	U	4.0	20
2-Butanone (MEK)	80	U	37	120
2-Chlorotoluene	8.0	U	3.4	20
2-Hexanone	80	U	28	100
4-Chlorotoluene	16	U	3.4	20
4-Methyl-2-pentanone (MIBK)	64	U	21	100
Acetone	130	U	38	200
Benzene	8.0	U	3.2	20
Bromobenzene	8.0	U	3.4	20
Bromochloromethane	4.0	U	2.0	20
Bromodichloromethane	8.0	U	3.4	20
Bromoform	8.0	U	3.8	20
Bromomethane	16	U	4.2	40
Carbon disulfide	32	U	9.0	40
Carbon tetrachloride	8.0	U	3.8	40
Chlorobenzene	8.0	U	3.4	20
Chlorodibromomethane	8.0	U	3.4	20
Chloroethane	32	U	8.2	40
Chloroform	8.0	U	3.2	20
Chloromethane	16	U	6.0	40
cis-1,3-Dichloropropene	8.0	U	3.2	20
Dibromomethane	8.0	U	3.4	20
Dichlorodifluoromethane	16	U	6.2	40
Ethylbenzene	8.0	U	3.2	20
Hexachlorobutadiene	16	U	7.2	20
Isopropylbenzene	8.0	U	3.8	20

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Client Sample ID: **54400-BH0201-0415**

Lab Sample ID: 280-68269-11

Client Matrix: Water

Date Sampled: 04/22/2015 1628

Date Received: 04/24/2015 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-275238	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3776.D
Dilution:	1.0			Initial Weight/Volume:	1 mL
Analysis Date:	04/30/2015 1318			Final Weight/Volume:	20 mL
Prep Date:	04/30/2015 1318				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Methyl tert-butyl ether	16	U	5.0	100
Methylene Chloride	8.7	J	6.4	100
m-Xylene & p-Xylene	16	U	6.8	40
Naphthalene	16	U	4.4	20
n-Butylbenzene	16	U	6.4	20
N-Propylbenzene	8.0	U	3.2	20
o-Xylene	8.0	U	3.8	20
p-Isopropyltoluene	8.0	U	3.4	20
sec-Butylbenzene	8.0	U	3.4	20
Styrene	8.0	U	3.4	20
tert-Butyl alcohol	640	U	220	1000
tert-Butylbenzene	8.0	U	3.2	20
Tetrachloroethene	8.0	U	4.0	20
Toluene	8.0	U	3.4	20
trans-1,2-Dichloroethene	20		3.0	20
trans-1,3-Dichloropropene	8.0	U	3.8	20
Trichlorofluoromethane	16	U	5.8	40
Vinyl chloride	100		2.0	30

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		81 - 118
4-Bromofluorobenzene (Surr)	91		85 - 114
Dibromofluoromethane (Surr)	97		80 - 119
Toluene-d8 (Surr)	92		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Client Sample ID: **54400-BH0201-0415**

Lab Sample ID: 280-68269-11

Client Matrix: Water

Date Sampled: 04/22/2015 1628

Date Received: 04/24/2015 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-275238	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3777.D
Dilution:	1.0			Initial Weight/Volume:	0.1 mL
Analysis Date:	04/30/2015 1337	Run Type:	DL	Final Weight/Volume:	20 mL
Prep Date:	04/30/2015 1337				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
cis-1,2-Dichloroethene	4300		30	200
Trichloroethene	2400		32	200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		81 - 118
4-Bromofluorobenzene (Surr)	102		85 - 114
Dibromofluoromethane (Surr)	109		80 - 119
Toluene-d8 (Surr)	104		89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68269-2

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
280-68269-11	54400-BH0201-0415	97	95	92	91
280-68269-11 DL	54400-BH0201-0415 DL	109	107	104	102
MB 280-275238/5		99	96	101	100
LCS 280-275238/4		96	95	95	97

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: 280-68269-2

Method Blank - Batch: 280-275238

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-275238/5	Analysis Batch:	280-275238	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_3763.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/30/2015 0909	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	04/30/2015 0909				
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: 280-68269-2

Method Blank - Batch: 280-275238

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-275238/5	Analysis Batch:	280-275238	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_3763.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/30/2015 0909	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	04/30/2015 0909				
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	0.423	J	0.32	5.0
m-Xylene & p-Xylene	0.80	U	0.34	2.0
Naphthalene	0.80	U	0.22	1.0
n-Butylbenzene	0.80	U	0.32	1.0
N-Propylbenzene	0.40	U	0.16	1.0
o-Xylene	0.40	U	0.19	1.0
p-Isopropyltoluene	0.40	U	0.17	1.0
sec-Butylbenzene	0.40	U	0.17	1.0
Styrene	0.40	U	0.17	1.0
tert-Butyl alcohol	32	U	11	50
tert-Butylbenzene	0.40	U	0.16	1.0
Tetrachloroethene	0.40	U	0.20	1.0
Toluene	0.40	U	0.17	1.0
trans-1,2-Dichloroethene	0.40	U	0.15	1.0
trans-1,3-Dichloropropene	0.40	U	0.19	1.0
Trichloroethene	0.40	U	0.16	1.0
Trichlorofluoromethane	0.80	U	0.29	2.0
Vinyl chloride	0.20	U	0.10	1.5

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	81 - 118
4-Bromofluorobenzene (Surr)	100	85 - 114
Dibromofluoromethane (Surr)	99	80 - 119
Toluene-d8 (Surr)	101	89 - 112

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Lab Control Sample - Batch: 280-275238

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-275238/4	Analysis Batch:	280-275238	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_3762.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/30/2015 0850	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	04/30/2015 0850				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	5.00	4.92	98	78 - 124	
1,1,1-Trichloroethane	5.00	4.70	94	74 - 131	
1,1,2,2-Tetrachloroethane	5.00	4.95	99	71 - 121	
1,1,2-Trichloroethane	5.00	4.77	95	80 - 119	
1,1-Dichloroethane	5.00	5.12	102	77 - 125	
1,1-Dichloroethene	5.00	4.79	96	71 - 131	
1,1-Dichloropropene	5.00	5.41	108	79 - 125	
1,2,3-Trichlorobenzene	5.00	4.81	96	69 - 129	
1,2,3-Trichloropropane	5.00	4.83	97	73 - 122	
1,2,4-Trichlorobenzene	5.00	4.98	100	69 - 130	
1,2,4-Trimethylbenzene	5.00	5.00	100	76 - 124	
1,2-Dibromo-3-Chloropropane	5.00	4.54	91	62 - 128	J
1,2-Dibromoethane	5.00	4.95	99	77 - 121	
1,2-Dichlorobenzene	5.00	5.10	102	80 - 119	
1,2-Dichloroethane	5.00	4.89	98	73 - 128	
1,2-Dichloropropane	5.00	5.06	101	78 - 122	
1,3,5-Trimethylbenzene	5.00	5.13	103	75 - 124	
1,3-Dichlorobenzene	5.00	5.16	103	80 - 119	
1,3-Dichloropropane	5.00	4.97	99	80 - 119	
1,4-Dichlorobenzene	5.00	5.19	104	79 - 118	
2,2-Dichloropropane	5.00	4.81	96	60 - 139	
2-Butanone (MEK)	20.0	19.5	98	56 - 143	
2-Chlorotoluene	5.00	5.26	105	79 - 122	
2-Hexanone	20.0	17.7	89	57 - 139	
4-Chlorotoluene	5.00	5.17	103	78 - 122	
4-Methyl-2-pentanone (MIBK)	20.0	18.1	91	67 - 130	
Acetone	20.0	19.1	95	39 - 160	
Benzene	5.00	5.12	102	79 - 120	
Bromobenzene	5.00	5.27	105	80 - 120	
Bromochloromethane	5.00	5.14	103	78 - 123	
Bromodichloromethane	5.00	4.61	92	79 - 125	
Bromoform	5.00	4.56	91	66 - 130	
Bromomethane	5.00	4.49	90	53 - 141	
Carbon disulfide	5.00	5.11	102	64 - 133	
Carbon tetrachloride	5.00	4.90	98	72 - 136	
Chlorobenzene	5.00	5.09	102	82 - 118	
Chlorodibromomethane	5.00	4.88	98	74 - 126	
Chloroethane	5.00	4.62	92	60 - 138	
Chloroform	5.00	4.91	98	79 - 124	
Chloromethane	5.00	4.31	86	50 - 139	
cis-1,2-Dichloroethene	5.00	4.98	100	78 - 123	
cis-1,3-Dichloropropene	5.00	5.11	102	75 - 124	
Dibromomethane	5.00	4.89	98	79 - 123	
Dichlorodifluoromethane	5.00	4.25	85	32 - 152	
Ethylbenzene	5.00	5.04	101	79 - 121	
Hexachlorobutadiene	5.00	5.05	101	66 - 134	

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Lab Control Sample - Batch: 280-275238

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-275238/4	Analysis Batch:	280-275238	Instrument ID:	VMS_G2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	G2_3762.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/30/2015 0850	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	04/30/2015 0850				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Isopropylbenzene	5.00	5.16	103	72 - 131	
Methyl tert-butyl ether	5.00	4.92	98	71 - 124	J
Methylene Chloride	5.00	5.22	104	74 - 124	
m-Xylene & p-Xylene	5.00	5.04	101	80 - 121	
Naphthalene	5.00	4.33	87	61 - 128	
n-Butylbenzene	5.00	5.01	100	75 - 128	
N-Propylbenzene	5.00	5.17	103	76 - 126	
o-Xylene	5.00	5.08	102	78 - 122	
p-Isopropyltoluene	5.00	5.13	103	77 - 127	
sec-Butylbenzene	5.00	5.23	105	77 - 126	
Styrene	5.00	4.89	98	78 - 123	
tert-Butyl alcohol	50.0	46.9	94	68 - 129	J
tert-Butylbenzene	5.00	5.08	102	78 - 124	
Tetrachloroethene	5.00	5.12	102	74 - 129	
Toluene	5.00	5.05	101	80 - 121	
trans-1,2-Dichloroethene	5.00	5.07	101	75 - 124	
trans-1,3-Dichloropropene	5.00	5.26	105	73 - 127	
Trichloroethene	5.00	5.00	100	79 - 123	
Trichlorofluoromethane	5.00	4.34	87	65 - 141	
Vinyl chloride	5.00	4.44	89	58 - 137	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	81 - 118
4-Bromofluorobenzene (Surr)	97	85 - 114
Dibromofluoromethane (Surr)	96	80 - 119
Toluene-d8 (Surr)	95	89 - 112

DATA REPORTING QUALIFIERS

Client: GSI Environmental, Inc

Job Number: 280-68269-2

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

Client: GSI Environmental, Inc

Job Number: 280-68269-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-275238					
LCS 280-275238/4	Lab Control Sample	T	Water	8260B	
MB 280-275238/5	Method Blank	T	Water	8260B	
280-68269-11	54400-BH0201-0415	T	Water	8260B	
280-68269-11DL	54400-BH0201-0415	T	Water	8260B	

Report Basis

T = Total

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Laboratory Chronicle

Lab ID: **280-68269-11** **Client ID:** **54400-BH0201-0415**

Sample Date/Time: 04/22/2015 16:28 Received Date/Time: 04/24/2015 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-68269-A-11		280-275238		04/30/2015 13:18	1	TAL DEN	DPI
A:8260B	280-68269-A-11		280-275238		04/30/2015 13:18	1	TAL DEN	DPI
P:5030B	280-68269-A-11	DL	280-275238		04/30/2015 13:37	1	TAL DEN	DPI
A:8260B	280-68269-A-11	DL	280-275238		04/30/2015 13:37	1	TAL DEN	DPI

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 280-275238/5		280-275238		04/30/2015 09:09	1	TAL DEN	DPI
A:8260B	MB 280-275238/5		280-275238		04/30/2015 09:09	1	TAL DEN	DPI

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 280-275238/4		280-275238		04/30/2015 08:50	1	TAL DEN	DPI
A:8260B	LCS 280-275238/4		280-275238		04/30/2015 08:50	1	TAL DEN	DPI

Lab References:

TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68269-2

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_00043	10/09/15	04/09/15	P&T Methanol, Lot 85233	50 mL	MV-567650_00020	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00020	08/31/19	Restek, Lot A0105143			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-Gas/Ket A_00032	10/03/15	04/03/15	P&T Methanol, Lot 85233	10 mL	MV-567642_00018	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-567645_00019	200 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Dichlorofluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
					MV-567648_00029	800 uL	Cyclohexanone	1600 ug/mL
.MV-567642_00018	02/29/16	RESTEK, Lot A093365			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567645_00019	09/30/16	RESTEK, Lot A0105755			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.MV-567648_00029	12/31/17	RESTEK, Lot A0108012			(Purchased Reagent)		Cyclohexanone	20000 ug/mL
MV-Gas/Ket B_00017	07/07/15	01/07/15	P&T Methanol, Lot 62345	10 mL	MV-567642.sec_00015	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68269-2

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_00015	02/28/17	RESTEK, Lot A0101295			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567645.sec_00017	11/30/15	RESTEK, Lot A099261			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MV-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-trifluor oethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	800 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							3-Chloro-1-propene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							Acrylonitrile	400 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chlorodibromomethane	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Cyclohexane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethyl ether	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexane	40 ug/mL
							Iodomethane	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Isopropylbenzene	40 ug/mL
							m-Xylene & p-Xylene	40 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							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

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							p-Isopropyltoluene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butyl alcohol	20000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.MV-568034_00010	01/31/16	RESTEK, Lot A0104827			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							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

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chlorodibromomethane	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Isopropylbenzene	40 ug/mL
							m-Xylene & p-Xylene	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	2000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							p-Isopropyltoluene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butyl alcohol	20000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
MV-Supp A_00011	06/30/15	02/03/15	P&T Methanol, Lot 85233	10 mL	MV-568036_00007	400 uL	cis-1,4-Dichloro-2-butene	40 ug/mL
					mv-569725_00001	160 uL	1,2,3-Trimethylbenzene	40 ug/mL
							2-Chloro-1,3-butadiene	40 ug/mL
							2-Nitropropane	80 ug/mL
							Ethyl acetate	80 ug/mL
							Isopropyl alcohol	400 ug/mL
							Methacrylonitrile	400 ug/mL
							Methyl methacrylate	80 ug/mL
							n-Butanol	1000 ug/mL
					mv-569728_00001	200 uL	Acetonitrile	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethanol	2000 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
.MV-568036_00007	12/31/15	RESTEK, Lot A0104018			(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
.mv-569725_00001	07/31/15	Restek, Lot A0108219			(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Ethyl acetate	5000 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butanol	62500 ug/mL
.mv-569728_00001	01/31/17	RESTEK, Lot A0108216			(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Ethanol	100000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL

RESTEK

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Bellefonte, PA 16823-8812
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Reference Material Producer
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ilac-MRA

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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.

Catalog No. : 567641.sec – 0001D **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

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

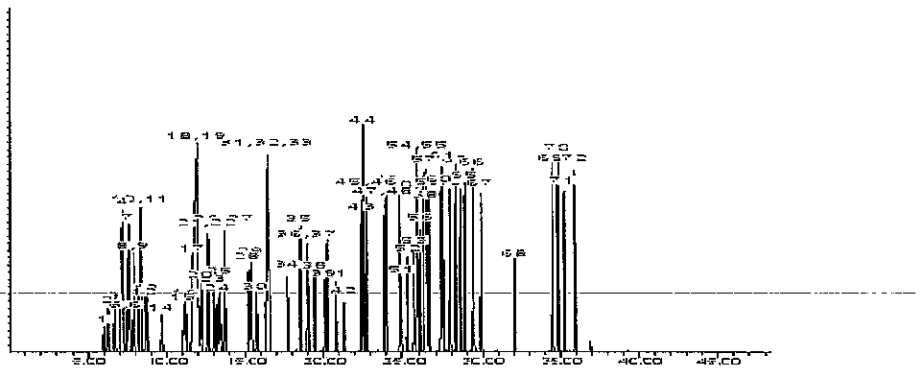
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

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

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

RESTEK

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

received 6/2/14

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

Description : 8260 List 1 / Std #1 MegaMix

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

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

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

CERTIFIED VALUES

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

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

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

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8260 List 1 / Std #2 Ketones

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

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

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

CERTIFIED VALUES

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

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

6x/mL
REC 1/6/15
Gm

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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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%

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

Catalog No. : 567645.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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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

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

Description : 8260 List 1 / Std #3 Gases

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

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

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

CERTIFIED VALUES

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

3x/mL REC 2/24/15
GM

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8260 List 2 / Std #3 Cyclohexanone

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

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

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

CERTIFIED VALUES

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

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

5 x 15mL
REC 12/29/14

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

Description : 8260 Surrogate Standard

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

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

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

CERTIFIED VALUES

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

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

8x/mL
REC 8/1/14

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

Description : Denver Main Add Ons Standard

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

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

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

CERTIFIED VALUES

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

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

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

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

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

Description : Denver Supp Add Ons Standard #2

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

received 6/18/14

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

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

CERTIFIED VALUES

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

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

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

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

Rec 3/2/15 GM
2x 1mL

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

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

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

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

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

CERTIFIED VALUES

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

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

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

4x/mL
REC 2/3/15 Gme

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

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

8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul

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

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

CERTIFIED VALUES

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

Certification Summary

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

TestAmerica Job ID: 280-68269-2

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.: 280-68269-2

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60.2 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
54400-BH0201-0415	280-68269-11	97	95	92	91
54400-BH0201-0415 DL	280-68269-11 DL	109	107	104	102
	MB 280-275238/5	99	96	101	100
	LCS 280-275238/4	96	95	95	97

	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.: 280-68269-2

SDG No.:

Matrix: Water Level: Low Lab File ID: G2_3762.D

Lab ID: LCS 280-275238/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.92	98	78-124	
1,1,1-Trichloroethane	5.00	4.70	94	74-131	
1,1,2,2-Tetrachloroethane	5.00	4.95	99	71-121	
1,1,2-Trichloroethane	5.00	4.77	95	80-119	
1,1-Dichloroethane	5.00	5.12	102	77-125	
1,1-Dichloroethene	5.00	4.79	96	71-131	
1,1-Dichloropropene	5.00	5.41	108	79-125	
1,2,3-Trichlorobenzene	5.00	4.81	96	69-129	
1,2,3-Trichloropropane	5.00	4.83	97	73-122	
1,2,4-Trichlorobenzene	5.00	4.98	100	69-130	
1,2,4-Trimethylbenzene	5.00	5.00	100	76-124	
1,2-Dibromo-3-Chloropropane	5.00	4.54 J	91	62-128	
1,2-Dibromoethane	5.00	4.95	99	77-121	
1,2-Dichlorobenzene	5.00	5.10	102	80-119	
1,2-Dichloroethane	5.00	4.89	98	73-128	
1,2-Dichloropropane	5.00	5.06	101	78-122	
1,3,5-Trimethylbenzene	5.00	5.13	103	75-124	
1,3-Dichlorobenzene	5.00	5.16	103	80-119	
1,3-Dichloropropane	5.00	4.97	99	80-119	
1,4-Dichlorobenzene	5.00	5.19	104	79-118	
2,2-Dichloropropane	5.00	4.81	96	60-139	
2-Butanone (MEK)	20.0	19.5	98	56-143	
2-Chlorotoluene	5.00	5.26	105	79-122	
2-Hexanone	20.0	17.7	89	57-139	
4-Chlorotoluene	5.00	5.17	103	78-122	
4-Methyl-2-pentanone (MIBK)	20.0	18.1	91	67-130	
Acetone	20.0	19.1	95	39-160	
Benzene	5.00	5.12	102	79-120	
Bromobenzene	5.00	5.27	105	80-120	
Bromochloromethane	5.00	5.14	103	78-123	
Bromodichloromethane	5.00	4.61	92	79-125	
Bromoform	5.00	4.56	91	66-130	
Bromomethane	5.00	4.49	90	53-141	
Carbon disulfide	5.00	5.11	102	64-133	
Carbon tetrachloride	5.00	4.90	98	72-136	
Chlorobenzene	5.00	5.09	102	82-118	
Chlorodibromomethane	5.00	4.88	98	74-126	
Chloroethane	5.00	4.62	92	60-138	
Chloroform	5.00	4.91	98	79-124	
Chloromethane	5.00	4.31	86	50-139	
cis-1,2-Dichloroethene	5.00	4.98	100	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.: 280-68269-2

SDG No.:

Matrix: Water Level: Low Lab File ID: G2_3762.D

Lab ID: LCS 280-275238/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromomethane	5.00	4.89	98	79-123	
Dichlorodifluoromethane	5.00	4.25	85	32-152	
Ethylbenzene	5.00	5.04	101	79-121	
Hexachlorobutadiene	5.00	5.05	101	66-134	
Isopropylbenzene	5.00	5.16	103	72-131	
Methyl tert-butyl ether	5.00	4.92 J	98	71-124	
Methylene Chloride	5.00	5.22	104	74-124	
m-Xylene & p-Xylene	5.00	5.04	101	80-121	
Naphthalene	5.00	4.33	87	61-128	
n-Butylbenzene	5.00	5.01	100	75-128	
N-Propylbenzene	5.00	5.17	103	76-126	
o-Xylene	5.00	5.08	102	78-122	
p-Isopropyltoluene	5.00	5.13	103	77-127	
sec-Butylbenzene	5.00	5.23	105	77-126	
Styrene	5.00	4.89	98	78-123	
tert-Butyl alcohol	50.0	46.9 J	94	68-129	
tert-Butylbenzene	5.00	5.08	102	78-124	
Tetrachloroethene	5.00	5.12	102	74-129	
Toluene	5.00	5.05	101	80-121	
trans-1,2-Dichloroethene	5.00	5.07	101	75-124	
trans-1,3-Dichloropropene	5.00	5.26	105	73-127	
Trichloroethene	5.00	5.00	100	79-123	
Trichlorofluoromethane	5.00	4.34	87	65-141	
Vinyl chloride	5.00	4.44	89	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.: 280-68269-2

SDG No.:

Lab File ID: G2_3763.D Lab Sample ID: MB 280-275238/5

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

Instrument ID: VMS_G2 Date Analyzed: 04/30/2015 09:09

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-275238/4	G2_3762.D	04/30/2015 08:50
54400-BH0201-0415	280-68269-11	G2_3776.D	04/30/2015 13:18
54400-BH0201-0415 DL	280-68269-11 DL	G2_3777.D	04/30/2015 13:37

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

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

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

Instrument ID: VMS_G2 BFB Injection Time: 13:12

Analysis Batch No.: 274898

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

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-274898/9	G2_3685.D	04/28/2015	13:46
	IC 280-274898/10	G2_3686.D	04/28/2015	14:06
	IC 280-274898/11	G2_3687.D	04/28/2015	14:25
	IC 280-274898/12	G2_3688.D	04/28/2015	14:44
	IC 280-274898/13	G2_3689.D	04/28/2015	15:03
	IC 280-274898/14	G2_3690.D	04/28/2015	15:22
	IC 280-274898/15	G2_3691.D	04/28/2015	15:41
	ICV 280-274898/16	G2_3692.D	04/28/2015	16:00
	IC 280-274898/17	G2_3693.D	04/28/2015	16:19
	IC 280-274898/18	G2_3694.D	04/28/2015	16:38
	IC 280-274898/19	G2_3695.D	04/28/2015	16:58
	ICIS 280-274898/20	G2_3696.D	04/28/2015	17:17
	IC 280-274898/21	G2_3697.D	04/28/2015	17:36
	IC 280-274898/22	G2_3698.D	04/28/2015	17:55
	ICV 280-274898/23	G2_3699.D	04/28/2015	18:14

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

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab File ID: G2_3759.D BFB Injection Date: 04/30/2015

Instrument ID: VMS_G2 BFB Injection Time: 07:47

Analysis Batch No.: 275238

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.7	
75	30.0 - 60.0 % of mass 95	47.5	
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	85.5	
175	5.0 - 9.0 % of mass 174	6.4	(7.5)1
176	95.0 - 101.0 % of mass 174	84.4	(98.8)1
177	5.0 - 9.0 % of mass 176	5.6	(6.7)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 280-275238/2	G2_3760.D	04/30/2015	08:11
	CCV 280-275238/3	G2_3761.D	04/30/2015	08:30
	LCS 280-275238/4	G2_3762.D	04/30/2015	08:50
	MB 280-275238/5	G2_3763.D	04/30/2015	09:09
54400-BH0201-0415	280-68269-11	G2_3776.D	04/30/2015	13:18
54400-BH0201-0415 DL	280-68269-11 DL	G2_3777.D	04/30/2015	13:37
	CCVC 280-275238/24	G2_3779.D	04/30/2015	14:15

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

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

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

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

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

Calibration ID: 22148

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		209686	5.57	1780246	7.53	372603	9.79
UPPER LIMIT		419372	6.07	3560492	8.03	745206	10.29
LOWER LIMIT		104843	5.07	890123	7.03	186302	9.29
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-274898/16		201835	5.57	1799355	7.53	380328	9.79
ICV 280-274898/23		184517	5.57	1646174	7.53	344955	9.79
CCV 280-275238/2		191190	5.57	1819388	7.53	381552	9.80
CCV 280-275238/3		161214	5.57	1584027	7.53	328566	9.79
LCS 280-275238/4		176908	5.57	1695401	7.53	360518	9.79
MB 280-275238/5		194005	5.57	1807849	7.53	374897	9.79
280-68269-11	54400-BH0201-0415	201619	5.57	1755355	7.53	373598	9.79
280-68269-11 DL	54400-BH0201-0415 DL	162872	5.57	1486690	7.53	320608	9.79
CCVC 280-275238/24		167989	5.57	1510770	7.53	328659	9.80

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.: 280-68269-2

SDG No.:

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

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

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

Calibration ID: 22148

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		483842	11.61				
UPPER LIMIT		967684	12.11				
LOWER LIMIT		241921	11.11				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-274898/16		498579	11.61				
ICV 280-274898/23		442019	11.61				
CCV 280-275238/2		501841	11.61				
CCV 280-275238/3		421893	11.61				
LCS 280-275238/4		465153	11.61				
MB 280-275238/5		473516	11.61				
280-68269-11	54400-BH0201-0415	482393	11.61				
280-68269-11 DL	54400-BH0201-0415 DL	408009	11.61				
CCVC 280-275238/24		442416	11.61				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68269-2

SDG No.:

Client Sample ID: 54400-BH0201-0415 | Lab Sample ID: 280-68269-11

Matrix: Water | Lab File ID: G2_3776.D

Analysis Method: 8260B | Date Collected: 04/22/2015 16:28

Sample wt/vol: 1(mL) | Date Analyzed: 04/30/2015 13:18

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 275238 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	16	U	20	16	3.4
71-55-6	1,1,1-Trichloroethane	8.0	U	20	8.0	3.2
79-34-5	1,1,2,2-Tetrachloroethane	16	U	20	16	4.0
79-00-5	1,1,2-Trichloroethane	16	U	20	16	6.4
75-34-3	1,1-Dichloroethane	16	U	20	16	3.2
75-35-4	1,1-Dichloroethene	10	J	20	16	2.8
563-58-6	1,1-Dichloropropene	8.0	U	20	8.0	3.0
87-61-6	1,2,3-Trichlorobenzene	16	U	20	16	3.6
96-18-4	1,2,3-Trichloropropane	16	U	60	16	15
120-82-1	1,2,4-Trichlorobenzene	16	U	20	16	6.4
95-63-6	1,2,4-Trimethylbenzene	8.0	U	20	8.0	2.8
96-12-8	1,2-Dibromo-3-Chloropropane	32	U	100	32	16
106-93-4	1,2-Dibromoethane	8.0	U	20	8.0	3.6
95-50-1	1,2-Dichlorobenzene	8.0	U	20	8.0	2.6
107-06-2	1,2-Dichloroethane	8.0	U	20	8.0	2.6
78-87-5	1,2-Dichloropropane	8.0	U	20	8.0	2.6
108-67-8	1,3,5-Trimethylbenzene	8.0	U	20	8.0	2.8
541-73-1	1,3-Dichlorobenzene	8.0	U	20	8.0	3.2
142-28-9	1,3-Dichloropropane	16	U	20	16	3.0
106-46-7	1,4-Dichlorobenzene	8.0	U	20	8.0	3.2
594-20-7	2,2-Dichloropropane	8.0	U	20	8.0	4.0
78-93-3	2-Butanone (MEK)	80	U	120	80	37
95-49-8	2-Chlorotoluene	8.0	U	20	8.0	3.4
591-78-6	2-Hexanone	80	U	100	80	28
106-43-4	4-Chlorotoluene	16	U	20	16	3.4
108-10-1	4-Methyl-2-pentanone (MIBK)	64	U	100	64	21
67-64-1	Acetone	130	U	200	130	38
71-43-2	Benzene	8.0	U	20	8.0	3.2
108-86-1	Bromobenzene	8.0	U	20	8.0	3.4
74-97-5	Bromochloromethane	4.0	U	20	4.0	2.0
75-27-4	Bromodichloromethane	8.0	U	20	8.0	3.4
75-25-2	Bromoform	8.0	U	20	8.0	3.8
74-83-9	Bromomethane	16	U	40	16	4.2
75-15-0	Carbon disulfide	32	U	40	32	9.0
56-23-5	Carbon tetrachloride	8.0	U	40	8.0	3.8
108-90-7	Chlorobenzene	8.0	U	20	8.0	3.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68269-2

SDG No.:

Client Sample ID: 54400-BH0201-0415 | Lab Sample ID: 280-68269-11

Matrix: Water | Lab File ID: G2_3776.D

Analysis Method: 8260B | Date Collected: 04/22/2015 16:28

Sample wt/vol: 1(mL) | Date Analyzed: 04/30/2015 13:18

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 275238 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	8.0	U	20	8.0	3.4
75-00-3	Chloroethane	32	U	40	32	8.2
67-66-3	Chloroform	8.0	U	20	8.0	3.2
74-87-3	Chloromethane	16	U	40	16	6.0
10061-01-5	cis-1,3-Dichloropropene	8.0	U	20	8.0	3.2
74-95-3	Dibromomethane	8.0	U	20	8.0	3.4
75-71-8	Dichlorodifluoromethane	16	U	40	16	6.2
100-41-4	Ethylbenzene	8.0	U	20	8.0	3.2
87-68-3	Hexachlorobutadiene	16	U	20	16	7.2
98-82-8	Isopropylbenzene	8.0	U	20	8.0	3.8
1634-04-4	Methyl tert-butyl ether	16	U	100	16	5.0
75-09-2	Methylene Chloride	8.7	J	100	16	6.4
179601-23-1	m-Xylene & p-Xylene	16	U	40	16	6.8
91-20-3	Naphthalene	16	U	20	16	4.4
104-51-8	n-Butylbenzene	16	U	20	16	6.4
103-65-1	N-Propylbenzene	8.0	U	20	8.0	3.2
95-47-6	o-Xylene	8.0	U	20	8.0	3.8
99-87-6	p-Isopropyltoluene	8.0	U	20	8.0	3.4
135-98-8	sec-Butylbenzene	8.0	U	20	8.0	3.4
100-42-5	Styrene	8.0	U	20	8.0	3.4
75-65-0	tert-Butyl alcohol	640	U	1000	640	220
98-06-6	tert-Butylbenzene	8.0	U	20	8.0	3.2
127-18-4	Tetrachloroethene	8.0	U	20	8.0	4.0
108-88-3	Toluene	8.0	U	20	8.0	3.4
156-60-5	trans-1,2-Dichloroethene	20		20	8.0	3.0
10061-02-6	trans-1,3-Dichloropropene	8.0	U	20	8.0	3.8
75-69-4	Trichlorofluoromethane	16	U	40	16	5.8
75-01-4	Vinyl chloride	100		30	4.0	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	91		85-114
1868-53-7	Dibromofluoromethane (Surr)	97		80-119
2037-26-5	Toluene-d8 (Surr)	92		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3776.D
Lims ID: 280-68269-A-11 Lab Sample ID: 280-68269-11
Client ID: 54400-BH0201-0415
Sample Type: Client
Inject. Date: 30-Apr-2015 13:18:30 ALS Bottle#: 26 Worklist Smp#: 21
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68269-A-11 pH2 1ml
Operator ID: ilczyszynd Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 01-May-2015 06:22:15 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: ilczyszynd Date: 01-May-2015 06:20:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	201619	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1755355	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.800	-0.007	86	373598	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	95	482393	12.5	
* 5 1,4-Dioxane-d8	96		0.000				ND	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	293896	9.66	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	240379	9.48	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	92	1435074	9.25	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	91	412416	9.08	
$ 10 Trifluorotoluene (Surr)	1		0.000				ND	
$ 11 BFB	95		4.579				ND	
12 Chlorotrifluoroethene	116		3.867				ND	
13 Dichlorodifluoromethane	85		3.895				ND	
15 1,2-Dichloro-1,1,2,2-tetra	85		4.077				ND	
14 Chloromethane	50		4.091				ND	
16 Vinyl chloride	62	4.244	4.244	0.000	98	274141	5.11	
138 Butadiene	54		4.258				ND	
17 2-Chloro-1,1,1-Trifluoroet	118		4.314				ND	
18 Ethylene oxide	43		4.524				ND	
19 Bromomethane	94		4.607				ND	
20 Chloroethane	64		4.663				ND	
21 Dichlorofluoromethane	67		4.803				ND	
22 Trichlorofluoromethane	101		4.887				ND	
23 Ethanol	45		4.901				ND	
25 Ethyl ether	59		5.068				ND	
24 1,2-Dichloro-1,1,2-trifluo	117		5.082				ND	
26 1,1,1-Trifluoro-2,2-dichlo	83		5.110				ND	
27 Propene oxide	58		5.152				ND	
28 Acrolein	56		5.194				ND	
29 Acetone	43		5.292				ND	
30 Isopropyl alcohol	45		5.306				ND	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	22739	0.5111	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
31 1,1,2-Trichloro-1,2,2-trif	151		5.334				ND	
34 Iodomethane	142		5.501				ND	
33 Acetonitrile	41		5.501				ND	
35 Methyl acetate	43		5.529				ND	
36 3-Chloro-1-propene	41		5.585				ND	
37 Carbon disulfide	76		5.613				ND	
38 2-Methyl-2-propanol	59		5.641				ND	
39 Methylene Chloride	84	5.669	5.669	0.000	92	16660	0.4343	
40 Acrylonitrile	53		5.808				ND	
41 Methyl tert-butyl ether	73		5.864				ND	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	99	47031	1.00	
43 Hexane	57		6.082				ND	
44 Vinyl acetate	43		6.154				ND	
45 Isopropyl ether	87		6.175				ND	
46 1,1-Dichloroethane	63		6.218				ND	
47 2-Chloro-1,3-butadiene	53		6.290				ND	
48 Tert-butyl ethyl ether	59		6.454				ND	
50 2-Butanone (MEK)	43		6.583				ND	
49 Ethyl acetate	43		6.583				ND	
52 sec-Butyl Alcohol	45		6.633				ND	
51 Propionitrile	54		6.633				ND	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	79	7507193	172.3	E
54 2,2-Dichloropropane	77		6.683				ND	
55 Methacrylonitrile	41		6.762				ND	
56 Chlorobromomethane	128		6.840				ND	
57 Chloroform	83		6.847				ND	
58 Tetrahydrofuran	42		6.876				ND	
59 Isobutyl alcohol	41		7.040				ND	
60 1,1,1-Trichloroethane	97		7.076				ND	
61 Cyclohexane	56	7.155	7.155	0.000	92	9471	0.1010	
62 1,1-Dichloropropene	75		7.176				ND	
63 Carbon tetrachloride	117		7.219				ND	
64 1,2-Dichloroethane	62		7.326				ND	
65 Tert-amyl methyl ether	73		7.348				ND	
66 Benzene	78		7.355				ND	
67 n-Heptane	43		7.448				ND	
68 n-Butanol	56		7.548				ND	
69 Trichloroethene	95	7.820	7.820	0.000	98	4570231	99.7	E
70 2-Pentanone	43		7.848				ND	
71 Methyl methacrylate	100		7.948				ND	
72 1,2-Dichloropropane	63		7.998				ND	
73 Methylcyclohexane	55	8.027	8.020	0.007	89	7582	0.1010	
74 1,4-Dioxane	88		8.056				ND	
75 Dibromomethane	93		8.099				ND	
76 Dichlorobromomethane	83		8.170				ND	
77 2-Nitropropane	41		8.306				ND	
78 2-Chloroethyl vinyl ether	63		8.313				ND	
79 cis-1,3-Dichloropropene	75		8.492				ND	
80 4-Methyl-2-pentanone (MIBK	43		8.549				ND	
81 Toluene	91		8.778				ND	
82 Ethyl methacrylate	69		8.864				ND	
83 trans-1,3-Dichloropropene	75		8.871				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 1,1,2-Trichloroethane	97		9.028				ND	
85 2-Hexanone	43		9.143				ND	
86 1,3-Dichloropropane	76		9.164				ND	
87 Tetrachloroethene	164		9.200				ND	
88 Chlorodibromomethane	129		9.357				ND	
89 Tetrahydrothiophene	60		9.400				ND	
90 Ethylene Dibromide	107		9.479				ND	
91 1-Chlorohexane	91		9.715				ND	
92 Chlorobenzene	112		9.822				ND	
130 Dicyclopentadiene TIC	66	9.793	9.850	-0.057	0	10101	0.3380	
132 1,3-Butadiene TIC	39	9.793	9.850	-0.057	0	8740	0.2924	
133 Propene TIC	41	9.808	9.850	-0.042	0	320	0.0107	
131 4-Ethyltoluene TIC	105		9.850				ND	
93 1,1,1,2-Tetrachloroethane	131		9.858				ND	
94 Ethylbenzene	106		9.865				ND	
95 m-Xylene & p-Xylene	106		9.936				ND	
97 o-Xylene	106		10.251				ND	
96 Styrene	104		10.251				ND	
98 Bromoform	173		10.444				ND	
99 Isopropylbenzene	105		10.508				ND	
100 cis-1,4-Dichloro-2-butene	53		10.523				ND	
101 Cyclohexanone	55		10.630				ND	
102 1,1,2,2-Tetrachloroethane	83		10.701				ND	
103 trans-1,4-Dichloro-2-buten	53		10.737				ND	
104 1,2,3-Trichloropropane	110		10.773				ND	
105 Bromobenzene	156		10.823				ND	
106 N-Propylbenzene	120		10.830				ND	
107 1,3,5-Trimethylbenzene	105		10.937				ND	
108 2-Chlorotoluene	126		10.944				ND	
109 4-Chlorotoluene	126		11.023				ND	
110 tert-Butylbenzene	119		11.230				ND	
111 1,2,4-Trimethylbenzene	105		11.259				ND	
112 sec-Butylbenzene	134		11.409				ND	
113 4-Isopropyltoluene	119		11.502				ND	
114 1,3-Dichlorobenzene	146		11.566				ND	
116 1,4-Dichlorobenzene	146		11.631				ND	
115 1,2,3-Trimethylbenzene	105		11.638				ND	
117 n-Butylbenzene	91		11.860				ND	
118 1,2-Dichlorobenzene	146		11.981				ND	
119 1,2-Dibromo-3-Chloropropan	157		12.710				ND	
120 1,3,5-Trichlorobenzene	180		12.932				ND	
121 1,2,4-Trichlorobenzene	180		13.647				ND	
122 Hexachlorobutadiene	225		13.804				ND	
123 Naphthalene	128		14.005				ND	
124 1,2,3-Trichlorobenzene	180		14.319				ND	
143 n-Nonyl Aldehyde	1		0.000				ND	
135 Benzyl chloride	126		0.000				ND	
136 3-Ethylpentane	1		0.000				ND	
145 Pentachloroethane	167		0.000				ND	
134 2-Methylnaphthalene	142		0.000				ND	
142 2,4-Dimethylpentane	1		0.000				ND	
125 2,3-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
137 2,2,3-Trimethylbutane	1		0.000				ND	
140 n-Butyl acetate	43		0.000				ND	
128 2,2-Dimethylpentane	1		0.000				ND	
126 Dimethyl disulfide	1		0.000				ND	
129 2-Methylhexane	1		0.000				ND	
127 2-Butoxyethanol TIC	1		0.000				ND	
144 Ethyl acrylate	55		0.000				ND	
139 3-Methylhexane	1		0.000				ND	
141 3,3-Dimethylpentane	1		0.000				ND	
147 Dichloroacetonitrile TIC	74		1.000				ND	
146 2,3-dichloro-1-propene TIC	75		1.000				ND	
148 Propene oxide TIC	58		5.334				ND	
S 149 1,2-Dichloroethene, Total	96				0		173.3	
S 153 1,3-Dichloropropene, Total	1		0.000				ND	
S 154 1,2-Dichloroethene, Total	1				0		173.3	
S 155 Xylenes, Total	106		0.000				ND	
S 150 Trihalomethanes, Total	1		0.000				ND	
S 151 Xylenes, Total (URS)	1		0.000				ND	
S 152 Total BTEX	1		0.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

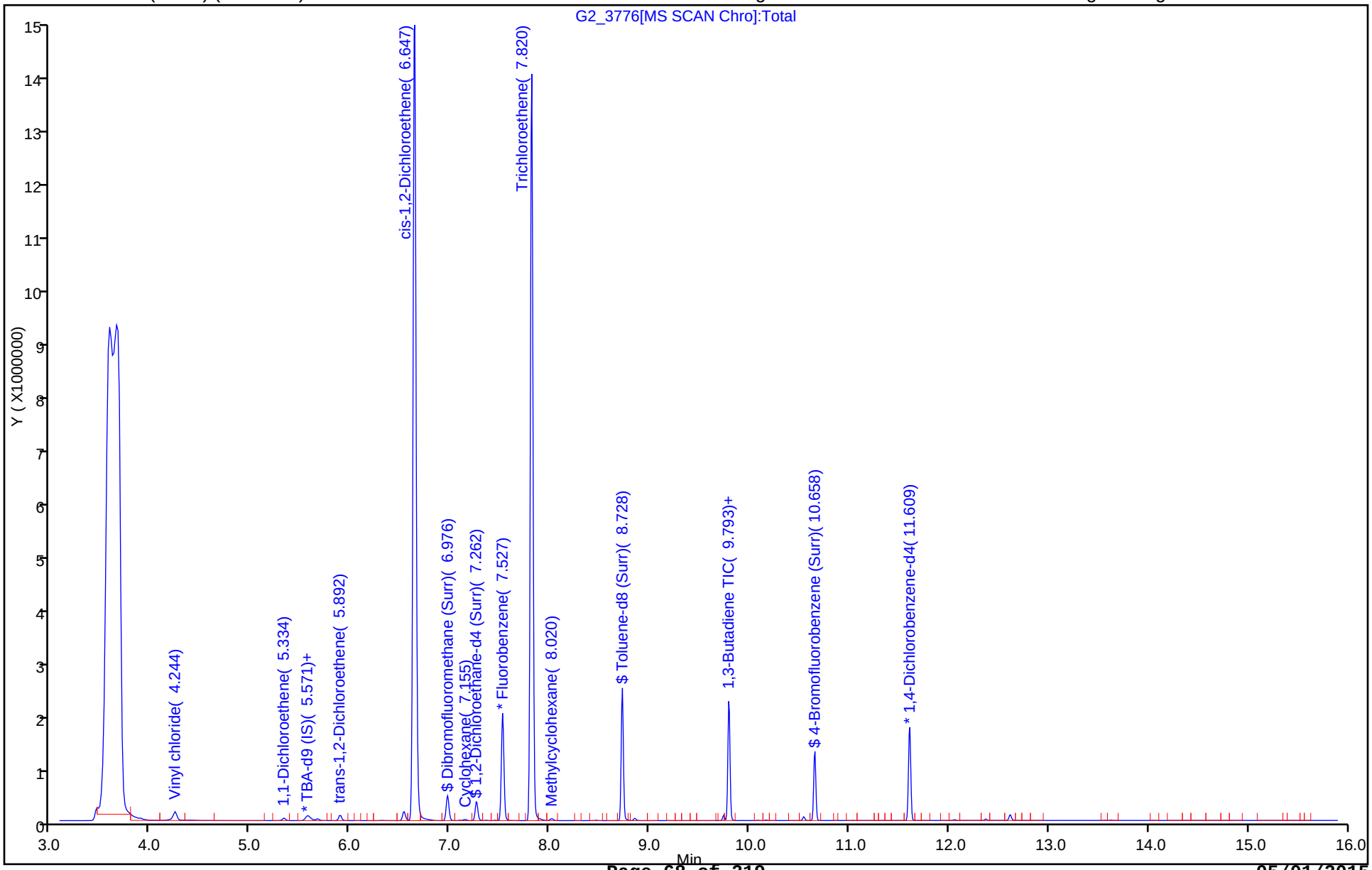
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 01-May-2015 06:23:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3776.D				
Injection Date:	30-Apr-2015 13:18:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11	Worklist Smp#:	21
Client ID:	54400-BH0201-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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

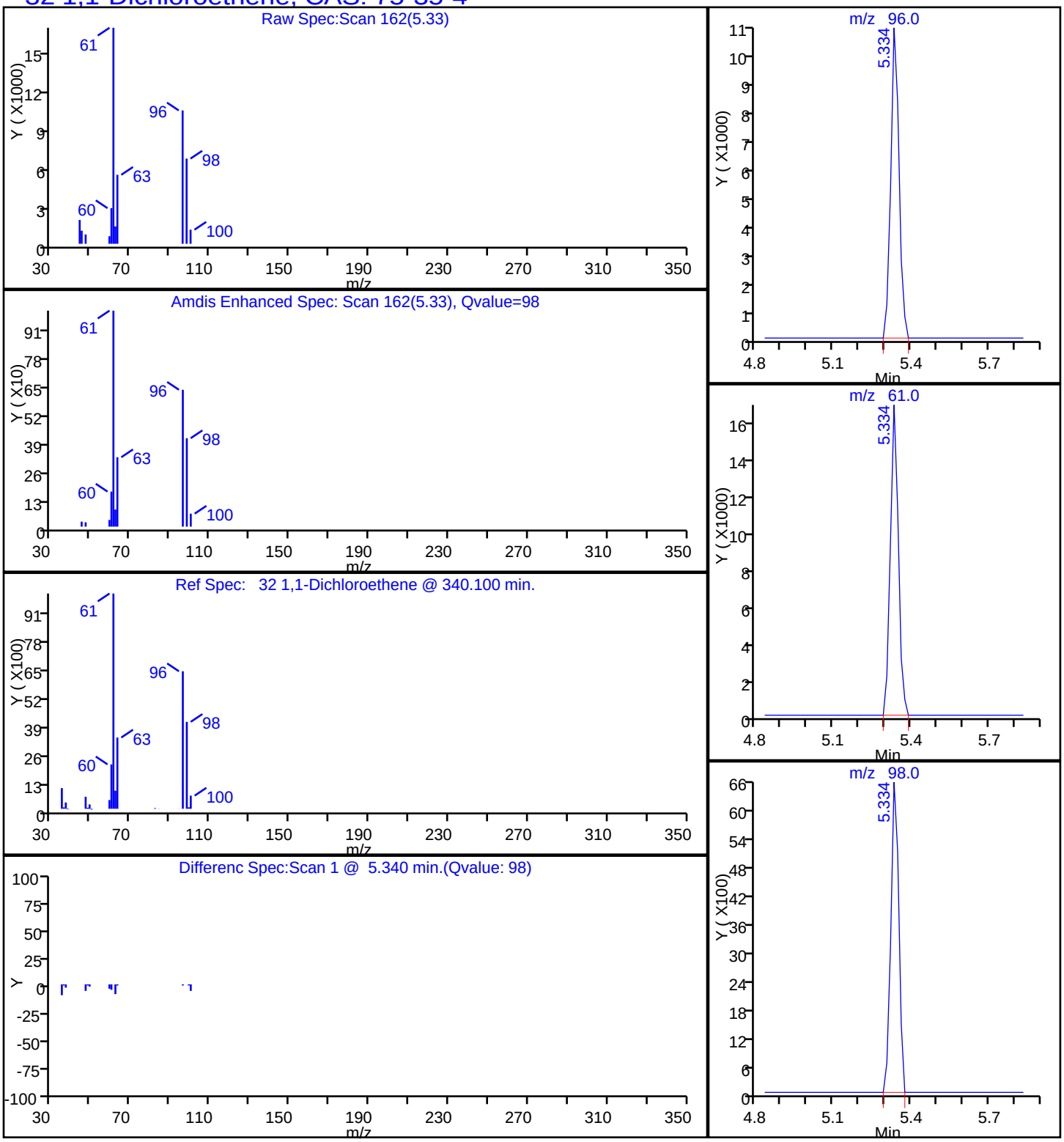


Report Date: 01-May-2015 06:23:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3776.D				
Injection Date:	30-Apr-2015 13:18:30	Instrument ID:	VMS_G2		
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11		
Client ID:	54400-BH0201-0415				
Operator ID:	ilczyszynd	ALS Bottle#:	26	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

32 1,1-Dichloroethene, CAS: 75-35-4



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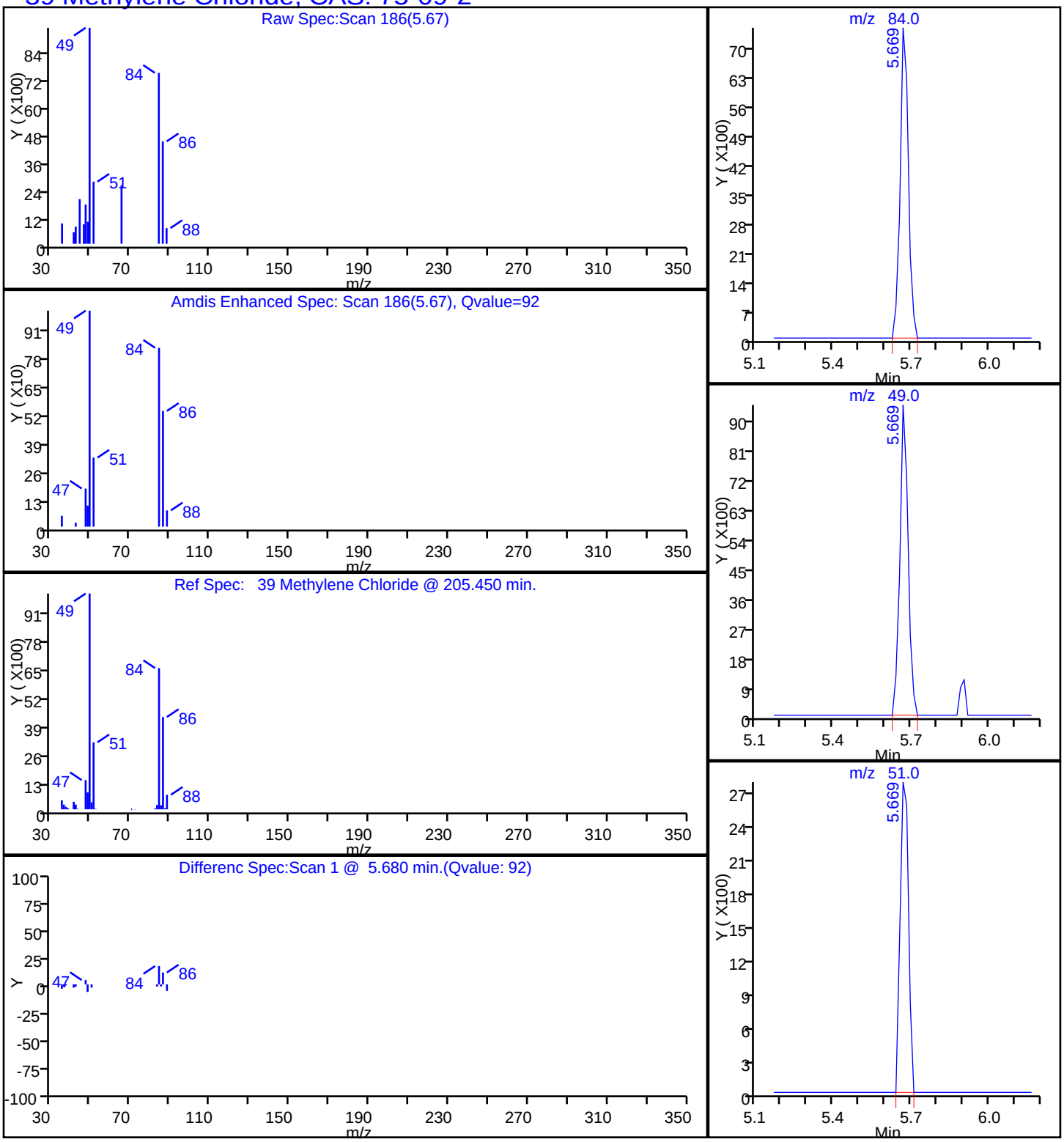
TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3776.D				
Injection Date:	30-Apr-2015 13:18:30	Instrument ID:	VMS_G2		
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11		
Client ID:	54400-BH0201-0415				
Operator ID:	ilczyszynd	ALS Bottle#:	26	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

39 Methylene Chloride, CAS: 75-09-2

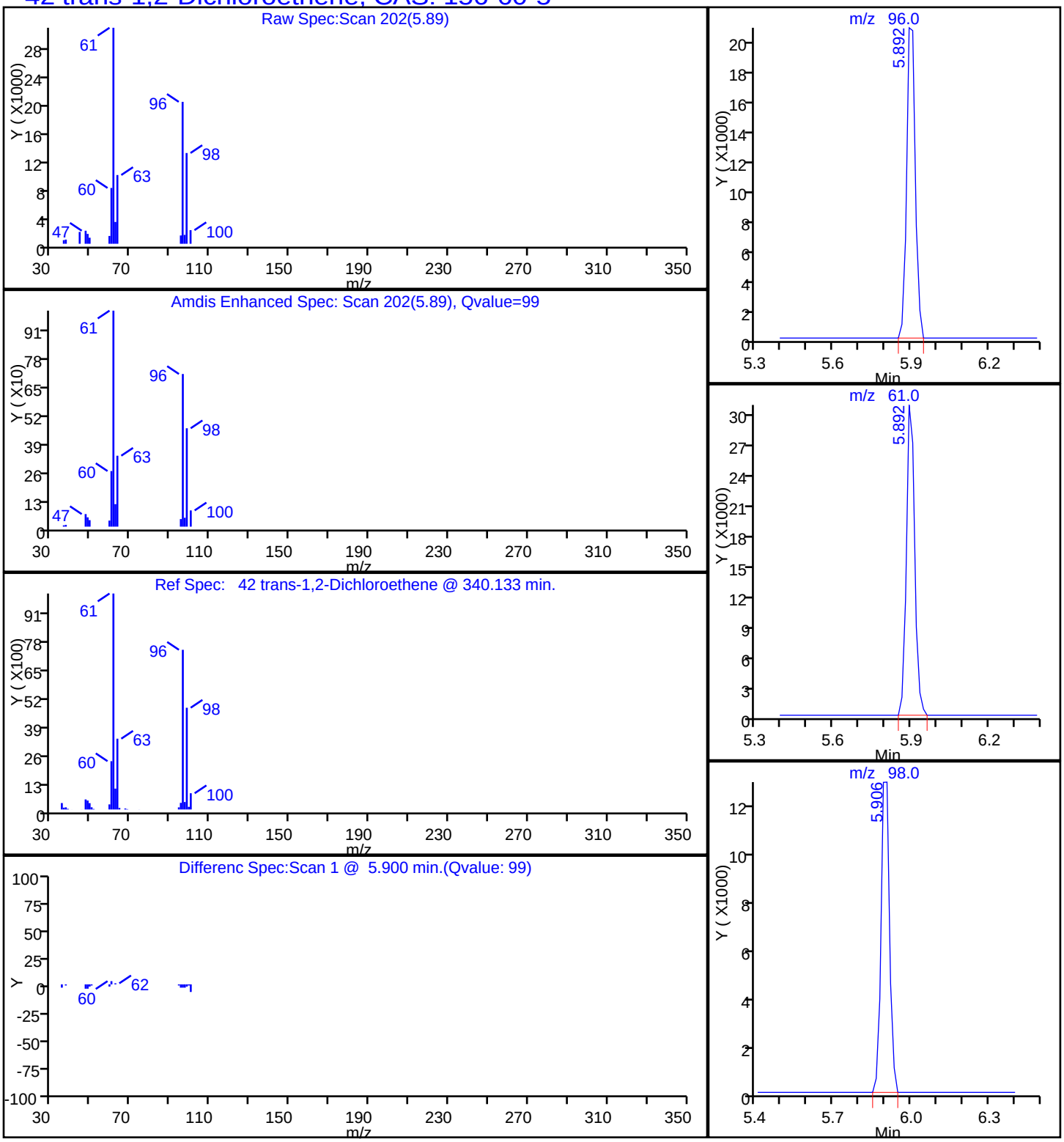


Report Date: 01-May-2015 06:23:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3776.D				
Injection Date:	30-Apr-2015 13:18:30	Instrument ID:	VMS_G2		
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11		
Client ID:	54400-BH0201-0415				
Operator ID:	ilczyszynd	ALS Bottle#:	26	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

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

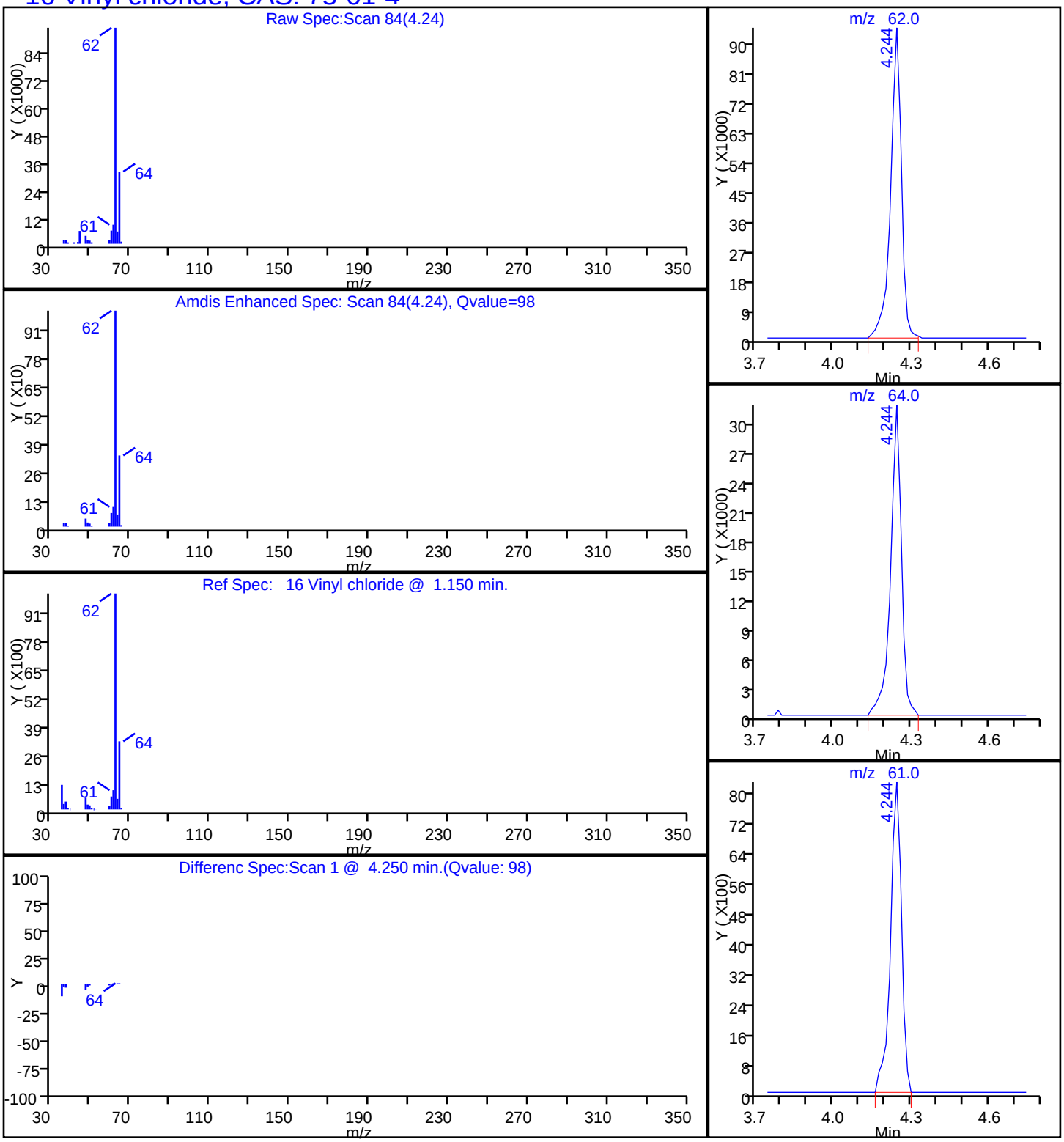


Report Date: 01-May-2015 06:23:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3776.D				
Injection Date:	30-Apr-2015 13:18:30	Instrument ID:	VMS_G2		
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11		
Client ID:	54400-BH0201-0415				
Operator ID:	ilczyszynd	ALS Bottle#:	26	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

16 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68269-2

SDG No.:

Client Sample ID: 54400-BH0201-0415 DL | Lab Sample ID: 280-68269-11 DL

Matrix: Water | Lab File ID: G2_3777.D

Analysis Method: 8260B | Date Collected: 04/22/2015 16:28

Sample wt/vol: 0.1(mL) | Date Analyzed: 04/30/2015 13:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 275238 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
156-59-2	cis-1,2-Dichloroethene	4300		200	80	30
79-01-6	Trichloroethene	2400		200	80	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		81-118
460-00-4	4-Bromofluorobenzene (Surr)	102		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_G2\20150430-34492.b\G2_3777.D
Lims ID: 280-68269-A-11 Lab Sample ID: 280-68269-11
Client ID: 54400-BH0201-0415
Sample Type: Client
Inject. Date: 30-Apr-2015 13:37:30 ALS Bottle#: 27 Worklist Smp#: 22
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-68269-A-11 pH2 0.1ml
Operator ID: ilczyszynd Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 01-May-2015 06:22:15 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: ilczyszynd Date: 01-May-2015 06:20:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	162872	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1486690	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.800	-0.007	86	320608	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	95	408009	12.5	
* 5 1,4-Dioxane-d8	96		0.000				ND	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	281677	10.9	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	229518	10.7	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1379793	10.4	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	91	391777	10.2	
$ 10 Trifluorotoluene (Surr)	1		0.000				ND	
$ 11 BFB	95		4.579				ND	
12 Chlorotrifluoroethene	116		3.867				ND	
13 Dichlorodifluoromethane	85		3.895				ND	
15 1,2-Dichloro-1,1,2,2-tetra	85		4.077				ND	
14 Chloromethane	50		4.091				ND	
16 Vinyl chloride	62	4.230	4.244	-0.014	96	27056	0.5954	
138 Butadiene	54		4.258				ND	
17 2-Chloro-1,1,1-Trifluoroet	118		4.314				ND	
18 Ethylene oxide	43		4.524				ND	
19 Bromomethane	94		4.607				ND	
20 Chloroethane	64		4.663				ND	
21 Dichlorofluoromethane	67		4.803				ND	
22 Trichlorofluoromethane	101		4.887				ND	
23 Ethanol	45		4.901				ND	
25 Ethyl ether	59		5.068				ND	
24 1,2-Dichloro-1,1,2-trifluo	117		5.082				ND	
26 1,1,1-Trifluoro-2,2-dichlo	83		5.110				ND	
27 Propene oxide	58		5.152				ND	
28 Acrolein	56		5.194				ND	
29 Acetone	43		5.292				ND	
30 Isopropyl alcohol	45		5.306				ND	
32 1,1-Dichloroethene	96		5.334				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
31 1,1,2-Trichloro-1,2,2-trif	151		5.334				ND	
34 Iodomethane	142		5.501				ND	
33 Acetonitrile	41		5.501				ND	
35 Methyl acetate	43		5.529				ND	
36 3-Chloro-1-propene	41		5.585				ND	
37 Carbon disulfide	76		5.613				ND	
38 2-Methyl-2-propanol	59		5.641				ND	
39 Methylene Chloride	84	5.669	5.669	0.000	92	17011	0.5236	
40 Acrylonitrile	53		5.808				ND	
41 Methyl tert-butyl ether	73		5.864				ND	
42 trans-1,2-Dichloroethene	96		5.892				ND	
43 Hexane	57		6.082				ND	
44 Vinyl acetate	43		6.154				ND	
45 Isopropyl ether	87		6.175				ND	
46 1,1-Dichloroethane	63		6.218				ND	
47 2-Chloro-1,3-butadiene	53		6.290				ND	
48 Tert-butyl ethyl ether	59		6.454				ND	
50 2-Butanone (MEK)	43		6.583				ND	
49 Ethyl acetate	43		6.583				ND	
52 sec-Butyl Alcohol	45		6.633				ND	
51 Propionitrile	54		6.633				ND	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	80	797936	21.6	
54 2,2-Dichloropropane	77		6.683				ND	
55 Methacrylonitrile	41		6.762				ND	
56 Chlorobromomethane	128		6.840				ND	
57 Chloroform	83		6.847				ND	
58 Tetrahydrofuran	42		6.876				ND	
59 Isobutyl alcohol	41		7.040				ND	
60 1,1,1-Trichloroethane	97		7.076				ND	
61 Cyclohexane	56		7.155				ND	
62 1,1-Dichloropropene	75		7.176				ND	
63 Carbon tetrachloride	117		7.219				ND	
64 1,2-Dichloroethane	62		7.326				ND	
65 Tert-amyl methyl ether	73		7.348				ND	
66 Benzene	78		7.355				ND	
67 n-Heptane	43		7.448				ND	
68 n-Butanol	56		7.548				ND	
69 Trichloroethene	95	7.820	7.820	0.000	98	469872	12.1	
70 2-Pentanone	43		7.848				ND	
71 Methyl methacrylate	100		7.948				ND	
72 1,2-Dichloropropane	63		7.998				ND	
73 Methylcyclohexane	55		8.020				ND	
74 1,4-Dioxane	88		8.056				ND	
75 Dibromomethane	93		8.099				ND	
76 Dichlorobromomethane	83		8.170				ND	
77 2-Nitropropane	41		8.306				ND	
78 2-Chloroethyl vinyl ether	63		8.313				ND	
79 cis-1,3-Dichloropropene	75		8.492				ND	
80 4-Methyl-2-pentanone (MIBK	43		8.549				ND	
81 Toluene	91		8.778				ND	
82 Ethyl methacrylate	69		8.864				ND	
83 trans-1,3-Dichloropropene	75		8.871				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 1,1,2-Trichloroethane	97		9.028				ND	
85 2-Hexanone	43		9.143				ND	
86 1,3-Dichloropropane	76		9.164				ND	
87 Tetrachloroethene	164		9.200				ND	
88 Chlorodibromomethane	129		9.357				ND	
89 Tetrahydrothiophene	60		9.400				ND	
90 Ethylene Dibromide	107		9.479				ND	
91 1-Chlorohexane	91		9.715				ND	
92 Chlorobenzene	112		9.822				ND	
130 Dicyclopentadiene TIC	66	9.793	9.850	-0.057	0	8743	0.3409	
132 1,3-Butadiene TIC	39	9.793	9.850	-0.057	0	7156	0.2790	
133 Propene TIC	41	9.808	9.850	-0.042	0	637	0.0248	
131 4-Ethyltoluene TIC	105		9.850				ND	
93 1,1,1,2-Tetrachloroethane	131		9.858				ND	
94 Ethylbenzene	106		9.865				ND	
95 m-Xylene & p-Xylene	106		9.936				ND	
97 o-Xylene	106		10.251				ND	
96 Styrene	104		10.251				ND	
98 Bromoform	173		10.444				ND	
99 Isopropylbenzene	105		10.508				ND	
100 cis-1,4-Dichloro-2-butene	53		10.523				ND	
101 Cyclohexanone	55		10.630				ND	
102 1,1,2,2-Tetrachloroethane	83		10.701				ND	
103 trans-1,4-Dichloro-2-buten	53		10.737				ND	
104 1,2,3-Trichloropropane	110		10.773				ND	
105 Bromobenzene	156		10.823				ND	
106 N-Propylbenzene	120		10.830				ND	
107 1,3,5-Trimethylbenzene	105		10.937				ND	
108 2-Chlorotoluene	126		10.944				ND	
109 4-Chlorotoluene	126		11.023				ND	
110 tert-Butylbenzene	119		11.230				ND	
111 1,2,4-Trimethylbenzene	105		11.259				ND	
112 sec-Butylbenzene	134		11.409				ND	
113 4-Isopropyltoluene	119		11.502				ND	
114 1,3-Dichlorobenzene	146		11.566				ND	
116 1,4-Dichlorobenzene	146		11.631				ND	
115 1,2,3-Trimethylbenzene	105		11.638				ND	
117 n-Butylbenzene	91		11.860				ND	
118 1,2-Dichlorobenzene	146		11.981				ND	
119 1,2-Dibromo-3-Chloropropan	157		12.710				ND	
120 1,3,5-Trichlorobenzene	180		12.932				ND	
121 1,2,4-Trichlorobenzene	180		13.647				ND	
122 Hexachlorobutadiene	225		13.804				ND	
123 Naphthalene	128		14.005				ND	
124 1,2,3-Trichlorobenzene	180		14.319				ND	
143 n-Nonyl Aldehyde	1		0.000				ND	
135 Benzyl chloride	126		0.000				ND	
136 3-Ethylpentane	1		0.000				ND	
145 Pentachloroethane	167		0.000				ND	
134 2-Methylnaphthalene	142		0.000				ND	
142 2,4-Dimethylpentane	1		0.000				ND	
125 2,3-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
137 2,2,3-Trimethylbutane	1		0.000				ND	
140 n-Butyl acetate	43		0.000				ND	
128 2,2-Dimethylpentane	1		0.000				ND	
126 Dimethyl disulfide	1		0.000				ND	
129 2-Methylhexane	1		0.000				ND	
127 2-Butoxyethanol TIC	1		0.000				ND	
144 Ethyl acrylate	55		0.000				ND	
139 3-Methylhexane	1		0.000				ND	
141 3,3-Dimethylpentane	1		0.000				ND	
147 Dichloroacetonitrile TIC	74		1.000				ND	
146 2,3-dichloro-1-propene TIC	75		1.000				ND	
148 Propene oxide TIC	58		5.334				ND	
S 149 1,2-Dichloroethene, Total	96				0		21.6	
S 153 1,3-Dichloropropene, Total	1		0.000				ND	
S 154 1,2-Dichloroethene, Total	1				0		21.6	
S 155 Xylenes, Total	106		0.000				ND	
S 150 Trihalomethanes, Total	1		0.000				ND	
S 151 Xylenes, Total (URS)	1		0.000				ND	
S 152 Total BTEX	1		0.000				ND	

Reagents:

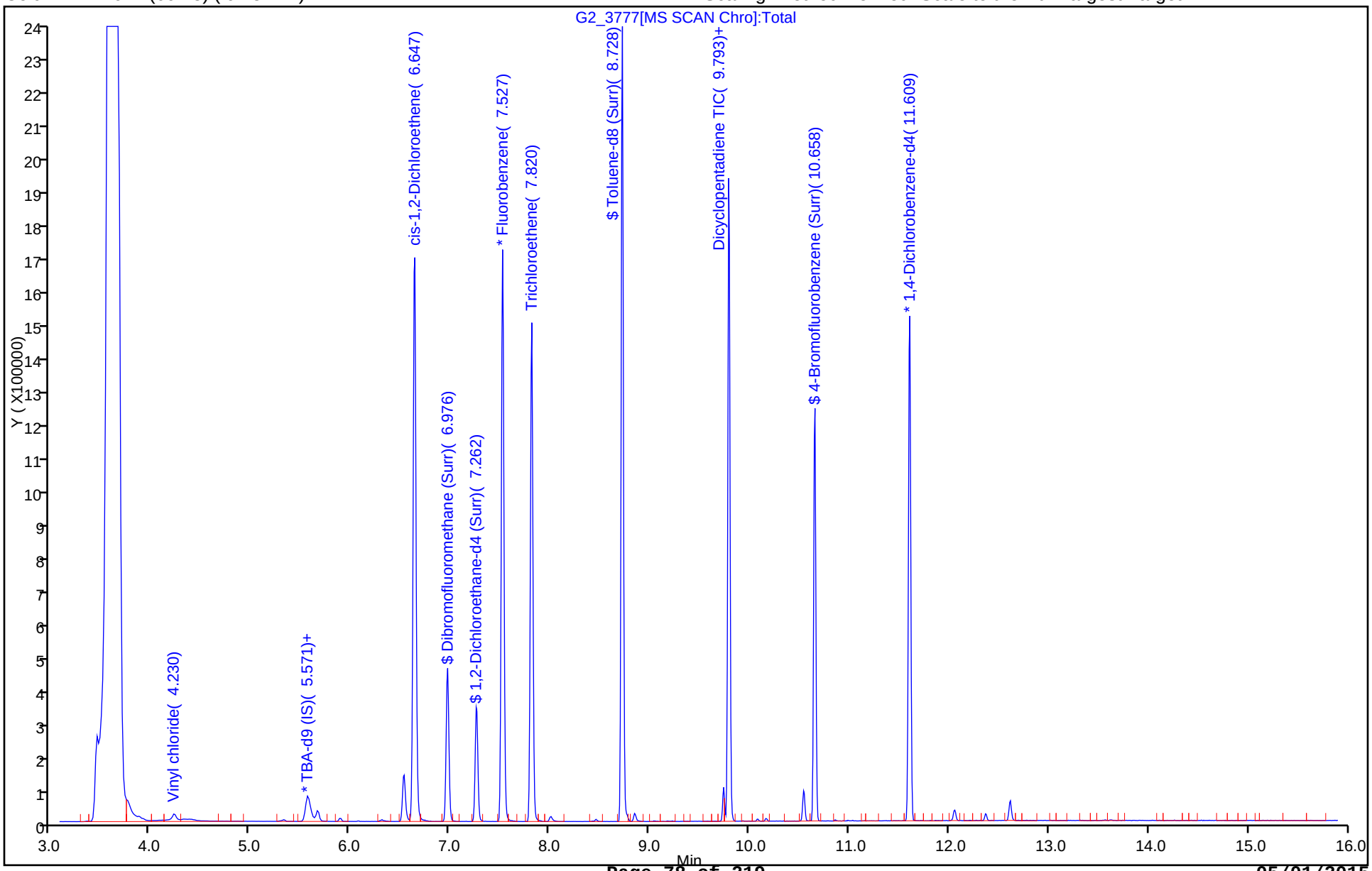
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 01-May-2015 06:23:17 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3777.D				
Injection Date:	30-Apr-2015 13:37:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11	Worklist Smp#:	22
Client ID:	54400-BH0201-0415				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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

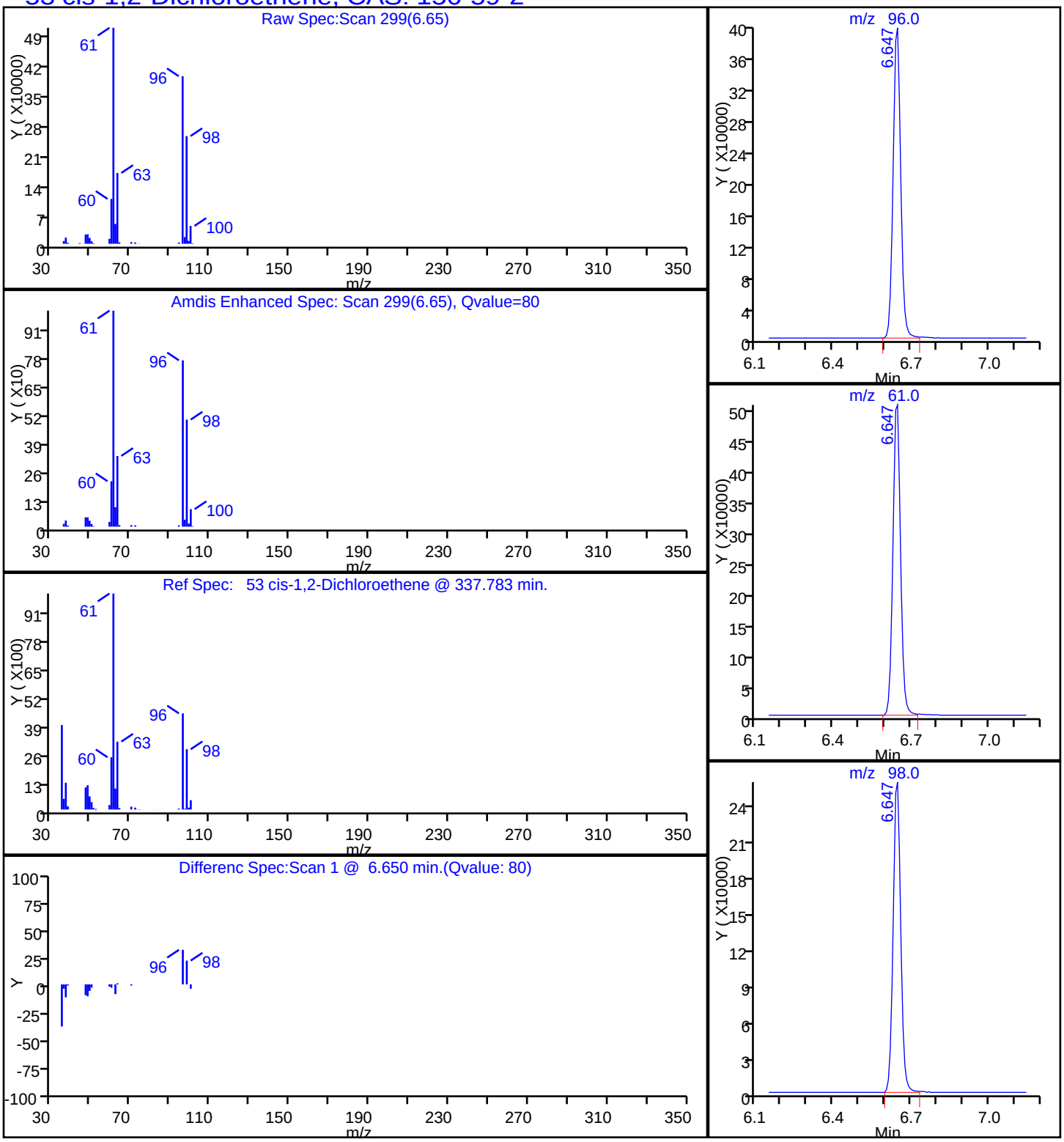


Report Date: 01-May-2015 06:23:17 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3777.D				
Injection Date:	30-Apr-2015 13:37:30	Instrument ID:	VMS_G2		
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11		
Client ID:	54400-BH0201-0415				
Operator ID:	ilczyszynd	ALS Bottle#:	27	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

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

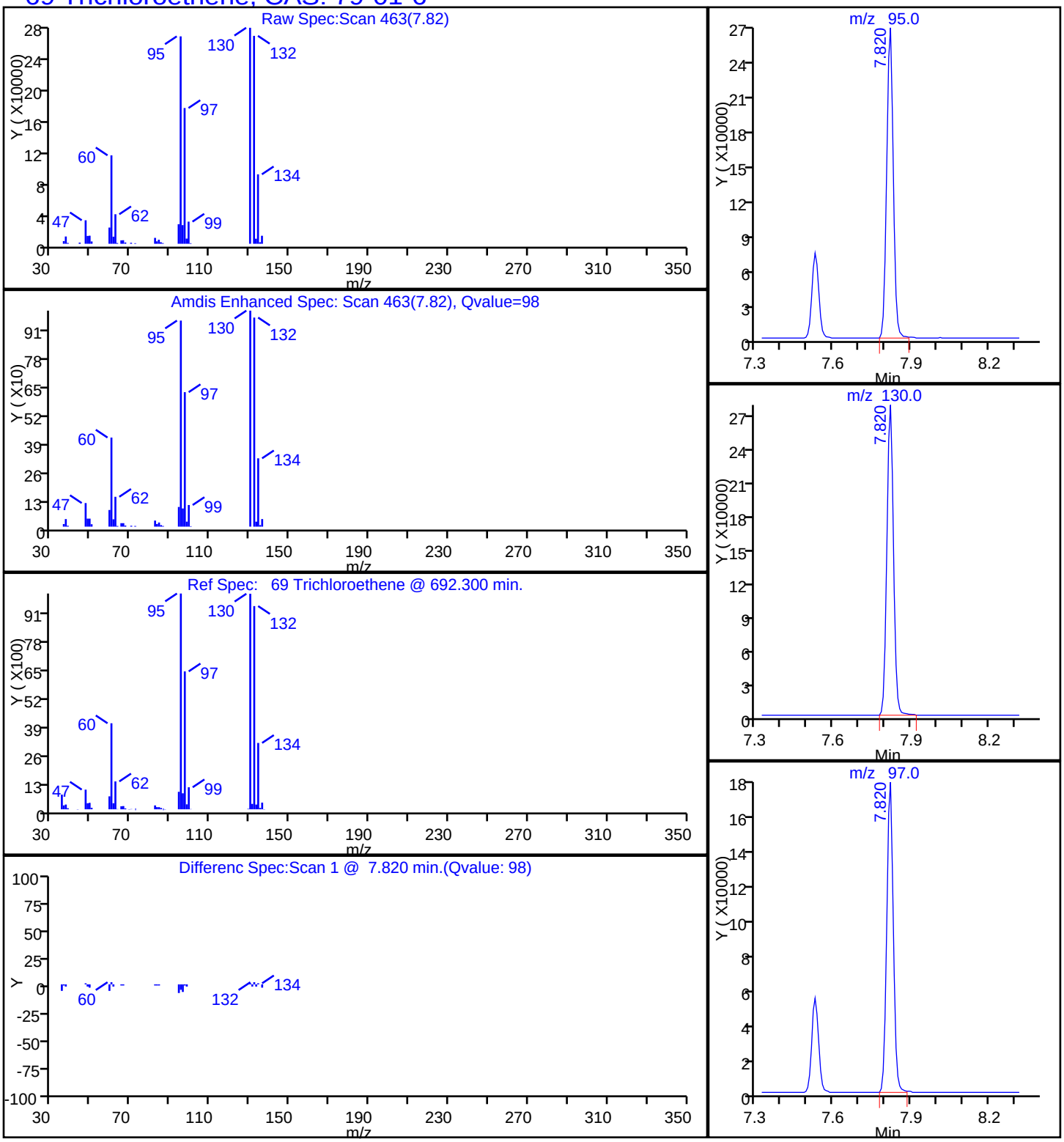


Report Date: 01-May-2015 06:23:17 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3777.D				
Injection Date:	30-Apr-2015 13:37:30	Instrument ID:	VMS_G2		
Lims ID:	280-68269-A-11	Lab Sample ID:	280-68269-11		
Client ID:	54400-BH0201-0415				
Operator ID:	ilczyszynd	ALS Bottle#:	27	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

69 Trichloroethene, CAS: 79-01-6



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

Lab Name: TestAmerica Denver Job No.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274898/9	G2_3685.D
Level 2	IC 280-274898/10	G2_3686.D
Level 3	IC 280-274898/11	G2_3687.D
Level 4	IC 280-274898/12	G2_3688.D
Level 5	IC 280-274898/13	G2_3689.D
Level 6	IC 280-274898/14	G2_3690.D
Level 7	IC 280-274898/15	G2_3691.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	0.4252 0.3460	0.3643 0.3214	0.3747	0.4031	0.3465	Ave		0.3687				9.7		15.0			
Chloromethane	0.4872 0.3463	0.4545 0.3441	0.3732	0.4032	0.3595	Ave		0.3954			0.1000	14.2		15.0			
Vinyl chloride	0.4188 0.3439	0.4457 0.3318	0.3744	0.3999	0.3599	Ave		0.3821				10.8		30.0			
Bromomethane	0.3019 0.2319	0.3029 0.2267	0.2507	0.2706	0.2440	Ave		0.2613				12.0		15.0			
Chloroethane	0.2740 0.2331	0.3049 0.2279	0.2445	0.2693	0.2460	Ave		0.2571				10.6		15.0			
Dichlorofluoromethane	0.6392 0.5536	0.6975 0.5582	0.5661	0.6258	0.5626	Ave		0.6004				9.2		15.0			
Trichlorofluoromethane	0.4819 0.4245	0.5424 0.4122	0.4437	0.4881	0.4368	Ave		0.4614				9.8		15.0			
Ethyl ether	0.1272 0.1289	0.1473 0.1398	0.1252	0.1433	0.1315	Ave		0.1347				6.4		15.0			
Acrolein	0.0117 0.0106	0.0122 0.0111	0.0102	0.0136	0.0107	Ave		0.0114				10.3		15.0			
Acetone	+++++ 0.0236	0.0326 0.0251	0.0250	0.0265	0.0243	Ave		0.0262				12.5		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2321 0.2206	0.2853 0.2556	0.2249	0.2804	0.2513	Ave		0.2500				10.3		15.0			
1,1-Dichloroethene	0.3418 0.2747	0.3746 0.3042	0.2852	0.3350	0.3024	Ave		0.3168				11.1		30.0			
Iodomethane	0.4706 0.4357	0.5317 0.4746	0.4312	0.4965	0.4535	Ave		0.4706				7.5		15.0			
Methyl acetate	0.0524 0.0569	0.0707 0.0615	0.0549	0.0639	0.0575	Ave		0.0597				10.4		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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.5250 0.5087	0.6453 0.5447	0.5303	0.5957	0.5323	Ave		0.5546				8.7		15.0			
Carbon disulfide	1.4481 1.1726	1.5631 1.2749	1.2291	1.4207	1.2837	Ave		1.3417				10.3		15.0			
tert-Butyl alcohol	0.0083 0.0078	0.0086 0.0084	0.0071	0.0087	0.0077	Ave		0.0081				7.2		15.0			
Methylene Chloride	+++++ 0.2432	+++++ 0.2608	0.3103	0.2970	0.2543	Ave		0.2731				10.6		15.0			
Acrylonitrile	0.0370 0.0296	0.0366 0.0319	0.0298	0.0340	0.0305	Ave		0.0328				9.6		15.0			
Methyl tert-butyl ether	0.3855 0.4008	0.4496 0.4355	0.3801	0.4526	0.4040	Ave		0.4154				7.2		15.0			
trans-1,2-Dichloroethene	0.3627 0.2990	0.3855 0.3280	0.3035	0.3428	0.3154	Ave		0.3338				9.5		15.0			
Hexane	3.1655 2.2829	3.2260 2.5859	2.5714	2.8266	2.6745	Ave		2.7618				12.3		15.0			
Vinyl acetate	0.2014 0.1921	0.2476 0.2046	0.1880	0.2134	0.2054	Ave		0.2075				9.5		15.0			
1,1-Dichloroethane	0.5246 0.5126	0.6357 0.5582	0.5116	0.5820	0.5294	Ave		0.5506			0.1000	8.3		15.0			
2-Butanone (MEK)	+++++ 0.0398	0.0455 0.0425	0.0413	0.0449	0.0413	Ave		0.0426				5.2		15.0			
sec-Butyl Alcohol	0.0076 0.0059	0.0060 0.0063	0.0051	0.0064	0.0055	Ave		0.0061				13.0		15.0			
cis-1,2-Dichloroethene	0.3216 0.2847	0.3524 0.3097	0.2873	0.3207	0.2950	Ave		0.3102				7.7		15.0			
2,2-Dichloropropane	0.5379 0.4219	0.5705 0.4669	0.4310	0.4983	0.4500	Ave		0.4824				11.6		15.0			
Bromochloromethane	0.0827 0.0933	0.1066 0.1018	0.0910	0.1033	0.0933	Ave		0.0960				8.7		15.0			
Chloroform	0.4562 0.4219	0.5290 0.4585	0.4226	0.4717	0.4348	Ave		0.4564				8.2		30.0			
Tetrahydrofuran	+++++ 0.0232	+++++ 0.0248	0.0223	0.0244	0.0231	Ave		0.0236				4.3		15.0			
Isobutyl alcohol	0.0023 0.0023	0.0031 0.0026	0.0021	0.0025	0.0023	Ave		0.0025				13.8		15.0			
1,1,1-Trichloroethane	0.5113 0.4039	0.5441 0.4528	0.4022	0.4733	0.4338	Ave		0.4602				11.6		15.0			
Cyclohexane	0.6913 0.5758	0.7844 0.6459	0.5968	0.7272	0.6540	Ave		0.6679				10.9		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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.4395 0.3919	0.5191 0.4346	0.3963	0.4644	0.4280	Ave		0.4391				9.9		15.0			
Carbon tetrachloride	0.3682 0.3418	0.4370 0.3903	0.3348	0.3981	0.3683	Ave		0.3769				9.3		15.0			
1,2-Dichloroethane	0.2142 0.2192	0.2513 0.2409	0.2138	0.2439	0.2217	Ave		0.2293				6.8		15.0			
Benzene	1.2270 1.1381	1.4506 1.2252	1.1638	1.3112	1.1992	Ave		1.2450				8.5		15.0			
Trichloroethene	0.3361 0.2980	0.3734 0.3311	0.2960	0.3389	0.3123	Ave		0.3265				8.3		15.0			
2-Pentanone	0.0680 0.0661	0.0723 0.0727	0.0639	0.0743	0.0664	Ave		0.0691				5.8		15.0			
1,2-Dichloropropane	0.2751 0.2581	0.3187 0.2785	0.2625	0.2925	0.2665	Ave		0.2788				7.5		30.0			
Methylcyclohexane	0.5900 0.4548	0.6343 0.5152	0.4706	0.5605	0.5157	Ave		0.5344				12.0		15.0			
1,4-Dioxane	+++++ 0.0008	0.0007 0.0009	0.0006	0.0009	0.0008	Ave		0.0008				14.9		15.0			
Dibromomethane	0.0754 0.0844	0.0962 0.0930	0.0847	0.0952	0.0847	Ave		0.0877				8.5		15.0			
Bromodichloromethane	0.3191 0.2751	0.3252 0.3058	0.2642	0.3005	0.2766	Ave		0.2952				8.0		15.0			
2-Chloroethyl vinyl ether	+++++ 0.0205	0.0093 +++++	0.0104	0.0151	0.0164	Lin1	-0.016	0.0200							0.9910		0.9900
cis-1,3-Dichloropropene	1.6703 1.6445	1.9015 1.8001	1.6334	1.7796	1.6773	Ave		1.7295				5.8		15.0			
4-Methyl-2-pentanone (MIBK)	0.0859 0.0810	0.0956 0.0857	0.0766	0.0888	0.0816	Ave		0.0850				7.2		15.0			
Toluene	1.4527 1.2234	1.6199 1.3003	1.2571	1.4320	1.2977	Ave		1.3690				10.2		30.0			
Ethyl methacrylate	0.6890 0.7378	0.9134 0.7983	0.7345	0.8233	0.7411	Ave		0.7768				9.6		15.0			
trans-1,3-Dichloropropene	0.2436 0.2444	0.2751 0.2720	0.2286	0.2647	0.2440	Ave		0.2532				6.9		15.0			
1,1,2-Trichloroethane	0.1485 0.1276	0.1496 0.1398	0.1271	0.1453	0.1284	Ave		0.1380				7.4		15.0			
2-Hexanone	0.3183 0.2577	0.2980 0.2719	0.2463	0.2778	0.2533	Ave		0.2747				9.4		15.0			
1,3-Dichloropropane	1.0890 1.1056	1.3026 1.2065	1.1137	1.2280	1.1435	Ave		1.1698				6.7		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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	1.3132 1.1668	1.5574 1.3111	1.2237	1.3545	1.2801	Ave		1.3153				9.4		15.0			
Chlorodibromomethane	0.6349 0.7063	0.7662 0.7949	0.6258	0.7369	0.7009	Ave		0.7094				8.9		15.0			
1,2-Dibromoethane	0.5321 0.5411	0.6130 0.6011	0.5309	0.5957	0.5596	Ave		0.5676				6.2		15.0			
1-Chlorohexane	2.7410 2.0945	2.9343 2.3735	2.1836	2.5523	2.3665	Ave		2.4637				12.2		15.0			
Chlorobenzene	3.7323 3.4542	4.3219 3.7552	3.5012	3.9033	3.6177	Ave		3.7551			0.3000	7.8		15.0			
1,1,1,2-Tetrachloroethane	1.0221 1.0128	1.1891 1.1028	0.9833	1.0992	1.0374	Ave		1.0638				6.6		15.0			
Ethylbenzene	2.3962 2.1127	2.7041 2.3180	2.1233	2.4263	2.2564	Ave		2.3339				8.7		30.0			
m-Xylene & p-Xylene	2.8226 2.6145	3.3367 2.8941	2.6120	2.9750	2.7741	Ave		2.8613				8.7		15.0			
Styrene	3.7166 3.7147	4.3521 3.9473	3.5625	4.1427	3.8596	Ave		3.8994				7.0		15.0			
o-Xylene	2.5761 2.3628	2.9966 2.5065	2.3564	2.6939	2.4957	Ave		2.5697				8.6		15.0			
Bromoform	+++++ 0.3450	0.3392 0.3954	0.2863	0.3431	0.3279	Ave		0.3395			0.1000	10.3		15.0			
Isopropylbenzene	6.0088 4.7832	6.7395 4.9509	5.1436	5.7576	5.2741	Ave		5.5225				12.5		15.0			
Cyclohexanone	0.0148 0.0119	0.0132 0.0128	0.0109	0.0127	0.0115	Ave		0.0125				10.4		15.0			
1,1,2,2-Tetrachloroethane	0.6069 0.4157	0.5791 0.4485	0.4341	0.4820	0.4369	Lin2	0.0537	0.4464			0.3000				0.9900		0.9900
trans-1,4-Dichloro-2-butene	+++++ 0.1162	0.1335 0.1273	0.1106	0.1210	0.1144	Ave		0.1205				7.1		15.0			
1,2,3-Trichloropropane	0.1267 0.1115	0.1425 0.1203	0.1115	0.1279	0.1139	Ave		0.1220				9.3		15.0			
Bromobenzene	0.9957 0.8943	1.1359 0.9543	0.8991	1.0214	0.9371	Ave		0.9768				8.6		15.0			
N-Propylbenzene	1.5935 1.3471	1.8495 1.4829	1.3783	1.6074	1.4730	Ave		1.5331				11.1		15.0			
1,3,5-Trimethylbenzene	4.4653 3.7972	5.1059 4.0221	3.9244	4.4857	4.0907	Ave		4.2702				10.6		15.0			
2-Chlorotoluene	1.2443 1.0608	1.4186 1.1209	1.0971	1.2422	1.1347	Ave		1.1884				10.4		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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	1.1898 1.0753	1.3718 1.1833	1.0748	1.2365	1.1247	Ave		1.1795				8.8		15.0			
tert-Butylbenzene	4.7629 3.9017	5.3632 4.2004	4.0833	4.6512	4.2429	Ave		4.4580				11.3		15.0			
1,2,4-Trimethylbenzene	4.4129 3.7905	4.9286 4.0667	3.8492	4.4079	4.0035	Ave		4.2085				9.5		15.0			
sec-Butylbenzene	1.2466 1.0684	1.4608 1.1862	1.0778	1.2722	1.1567	Ave		1.2098				11.1		15.0			
p-Isopropyltoluene	5.0328 4.3067	5.8149 4.6389	4.4022	5.1942	4.7081	Ave		4.8711				10.7		15.0			
1,3-Dichlorobenzene	1.9928 1.8504	2.3408 2.0356	1.8727	2.1058	1.9294	Ave		2.0182				8.3		15.0			
1,4-Dichlorobenzene	1.9306 1.7705	2.2326 1.9399	1.7968	2.0078	1.8208	Ave		1.9284				8.3		15.0			
n-Butylbenzene	4.8652 3.8694	5.2893 4.2991	3.9725	4.7501	4.2793	Ave		4.4750				11.5		15.0			
1,2-Dichlorobenzene	1.5440 1.4710	1.8072 1.6058	1.4503	1.6802	1.4995	Ave		1.5797				8.1		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0632	0.0547 0.0694	0.0560	0.0667	0.0592	Ave		0.0615				9.6		15.0			
1,2,4-Trichlorobenzene	0.9643 0.9424	1.0909 1.0674	0.9017	1.0839	0.9536	Ave		1.0006				7.8		15.0			
Hexachlorobutadiene	0.8532 0.7114	0.9629 0.8332	0.7139	0.8701	0.7693	Ave		0.8163				11.2		15.0			
Naphthalene	1.2908 1.1147	1.1377 1.2396	0.9873	1.2118	1.0760	Ave		1.1511				9.0		15.0			
1,2,3-Trichlorobenzene	0.7966 0.6903	0.7600 0.7725	0.6362	0.7877	0.6784	Lin2	0.0236	0.7142							0.9920		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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-274898/9	G2_3685.D
Level 2	IC 280-274898/10	G2_3686.D
Level 3	IC 280-274898/11	G2_3687.D
Level 4	IC 280-274898/12	G2_3688.D
Level 5	IC 280-274898/13	G2_3689.D
Level 6	IC 280-274898/14	G2_3690.D
Level 7	IC 280-274898/15	G2_3691.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	17137 1429516	44754 2467805	103366	233940	476763	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloromethane	FB	Ave	19638 1430469	55837 2642322	102970	234000	494685	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	16882 1420788	54759 2548103	103282	232090	495297	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromomethane	FB	Ave	12167 958212	37217 1741029	69172	157011	335813	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloroethane	FB	Ave	11044 962805	37460 1750315	67451	156300	338546	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	25764 2286969	85691 4286316	156186	363160	774238	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	19425 1753830	66637 3165692	122410	283248	601121	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl ether	FB	Ave	5126 532388	18102 1073688	34540	83144	180960	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acrolein	FB	Ave	4718 435969	14991 852785	28092	79074	147822	3.00 300	10.00 600	20.0	50.0	100.0
Acetone	FB	Ave	+++++ 390486	16002 770476	27578	61521	133678	+++++ 120	4.00 240	8.00	20.0	40.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	9357 911447	35047 1962998	62056	162713	345798	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloroethene	FB	Ave	13778 1134743	46019 2335910	78683	194428	416087	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Iodomethane	FB	Ave	18970 1799931	65325 3644761	118960	288130	624102	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methyl acetate	FB	Ave	10556 1175623	43413 2360174	75670	185339	395710	1.50 150	5.00 300	10.0	25.0	50.0
3-Chloro-1-propene	FB	Ave	21161 2101327	79281 4182515	146312	345664	732456	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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Carbon disulfide	FB	Ave	58367 4844103	192047 9790197	339086	824452	1766534	0.300 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butyl alcohol	FB	Ave	3339 324117	10593 644190	19531	50659	106302	3.00 300	10.0 600	20.0	50.0	100
Methylene Chloride	FB	Ave	+++++ 1004878	+++++ 2002911	85621	172365	349928	+++++ 30.0	+++++ 60.0	2.00	5.00	10.0
Acrylonitrile	FB	Ave	14931 1221838	45002 2450889	82274	197046	419233	3.00 300	10.0 600	20.0	50.0	100
Methyl tert-butyl ether	FB	Ave	15540 1655590	55238 3344217	104861	262649	555910	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	14621 1235207	47361 2518405	83722	198930	433983	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexane	CBZ	Ave	26275 2022153	83362 4280393	146799	355726	776761	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl acetate	FB	Ave	16233 1587037	60838 3142864	103741	247628	565417	0.600 60.0	2.00 120	4.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	21144 2117655	78103 4286145	141136	337746	728531	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	+++++ 658360	22366 1304838	45620	104230	227595	+++++ 120	4.00 240	8.00	20.0	40.0
sec-Butyl Alcohol	FB	Ave	9180 733092	21949 1452630	41921	110924	229090	9.00 900	30.0 1800	60.0	150	300
cis-1,2-Dichloroethene	FB	Ave	12961 1176096	43299 2378230	79258	186089	405884	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	21682 1742758	70096 3585240	118914	289150	619180	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromochloromethane	FB	Ave	3335 385300	13094 781904	25114	59946	128345	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloroform	FB	Ave	18387 1742931	64997 3520669	116593	273711	598309	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 191879	+++++ 380424	12300	28284	63584	+++++ 60.0	+++++ 120	4.00	10.0	20.0
Isobutyl alcohol	FB	Ave	2318 236985	9673 498102	14540	35550	79467	7.50 750	25.0 1500	50.0	125	250
1,1,1-Trichloroethane	FB	Ave	20607 1668422	66848 3477099	110959	274681	596939	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	27863 2378595	96372 4960124	164660	421999	899930	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	17715 1618893	63776 3337257	109340	269512	588920	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Ave	14840 1412086	53689 2997507	92368	231005	506830	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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

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	8633 905695	30870 1850179	58979	141537	305039	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Benzene	FB	Ave	49456 4701730	178222 9408627	321071	760905	1650174	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	13549 1231108	45879 2542626	81670	196641	429701	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Pentanone	FB	Ave	10968 1091782	35528 2233314	70477	172501	365716	1.20 120	4.00 240	8.00	20.0	40.0
1,2-Dichloropropane	FB	Ave	11088 1066230	39161 2138373	72420	169721	366713	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methylcyclohexane	FB	Ave	23780 1878961	77926 3956362	129821	325251	709658	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dioxane	FB	Ave	+++++ 69646	1754 143412	3509	10973	22993	+++++ 600	20.0 1200	40.0	100	200
Dibromomethane	FB	Ave	3040 348719	11825 714305	23359	55223	116534	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromodichloromethane	FB	Ave	12861 1136457	39958 2348386	72897	174387	380606	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Lin1	+++++ 84563	1145 +++++	2858	8772	22511	+++++ 30.0	1.00 +++++	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBZ	Ave	13864 1456650	49136 2979699	93252	223957	487147	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	13848 1338356	46985 2632317	84579	206076	448931	1.20 120	4.00 240	8.00	20.0	40.0
Toluene	FB	Ave	58554 5053920	199016 9984860	346819	831019	1785826	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl methacrylate	CBZ	Ave	5719 653489	23602 1321370	41934	103612	215225	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	FB	Ave	9817 1009566	33795 2088407	63055	153627	335706	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloroethane	FB	Ave	5985 527246	18377 1073298	35060	84319	176647	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Hexanone	CBZ	Ave	10568 913197	30803 1800011	56236	139854	294215	1.20 120	4.00 240	8.00	20.0	40.0
1,3-Dichloropropane	CBZ	Ave	9039 979288	33659 1997174	63579	154541	332094	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrachloroethene	CBZ	Ave	10900 1033549	40243 2170291	69860	170464	371782	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chlorodibromomethane	CBZ	Ave	5270 625609	19800 1315773	35728	92738	203563	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromoethane	CBZ	Ave	4417 479285	15840 994939	30308	74970	162525	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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1-Chlorohexane	CBZ	Ave	22752 1855256	75824 3928882	124661	321209	687298	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chlorobenzene	CBZ	Ave	30980 3059629	111679 6215990	199881	491221	1050678	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	8484 897092	30727 1825486	56134	138333	301284	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylbenzene	CBZ	Ave	19890 1871327	69874 3837060	121221	305346	655335	0.300 30.0	1.00 60.0	2.00	5.00	10.0
m-Xylene & p-Xylene	CBZ	Ave	23429 2315817	86223 4790561	149119	374398	805691	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Styrene	CBZ	Ave	30850 3290395	112461 6533948	203382	521350	1120939	0.300 30.0	1.00 60.0	2.00	5.00	10.0
o-Xylene	CBZ	Ave	21383 2092916	77433 4149089	134528	339023	724820	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromoform	CBZ	Ave	+++++ 305558	8766 654449	16346	43184	95240	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Isopropylbenzene	DCB	Ave	62843 5767001	220611 11430222	376854	963548	2056788	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexanone	CBZ	Ave	4930 421195	13695 847822	24782	63820	133535	12.0 1200	40.0 2400	80.0	200	400
1,1,2,2-Tetrachloroethane	DCB	Lin2	6347 501225	18957 1035546	31805	80667	170386	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 140040	4369 293931	8101	20252	44607	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCB	Ave	1325 134462	4666 277651	8166	21408	44419	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromobenzene	DCB	Ave	10414 1078229	37181 2203308	65870	170943	365441	0.300 30.0	1.00 60.0	2.00	5.00	10.0
N-Propylbenzene	DCB	Ave	16666 1624118	60542 3423503	100981	268996	574437	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCB	Ave	46701 4578233	167138 9285971	287523	750694	1595283	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chlorotoluene	DCB	Ave	13014 1278953	46438 2587802	80380	207887	442493	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Chlorotoluene	DCB	Ave	12444 1296468	44903 2731876	78746	206934	438623	0.300 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butylbenzene	DCB	Ave	49813 4704140	175560 9697592	299170	778402	1654617	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCB	Ave	46153 4570136	161334 9388912	282013	737672	1561284	0.300 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butylbenzene	DCB	Ave	13038 1288103	47818 2738594	78967	212911	451075	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.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2015 13:46 Calibration End Date: 04/28/2015 15:41 Calibration ID: 22147

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	52636 5192470	190346 10709986	322532	869260	1836039	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCB	Ave	20842 2230991	76625 4699612	137207	352410	752419	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCB	Ave	20191 2134700	73083 4478762	131646	336014	710065	0.300 30.0	1.00 60.0	2.00	5.00	10.0
n-Butylbenzene	DCB	Ave	50883 4665264	173139 9925435	291052	794952	1668828	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCB	Ave	16148 1773520	59156 3707266	106260	281189	584752	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	+++++ 76158	1790 160328	4104	11159	23097	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trichlorobenzene	DCB	Ave	10085 1136231	35710 2464268	66067	181394	371890	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexachlorobutadiene	DCB	Ave	8923 857736	31521 1923721	52305	145607	300010	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Naphthalene	DCB	Ave	13500 1343987	37243 2861992	72332	202797	419626	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCB	Lin2	8331 832218	24877 1783384	46610	131818	264542	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_G2\20150428-34428.b\G2_3685.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Apr-2015 13:46:30 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub88

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:48 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: meierg Date: 28-Apr-2015 14:29:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	179929	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1679437	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.793	0.007	86	345855	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	95	435774	12.5	12.5	
13 Dichlorodifluoromethane	85	3.881	3.895	-0.014	96	17137	0.3000	0.3459	
14 Chloromethane	50	4.091	4.091	0.001	98	19638	0.3000	0.3696	
16 Vinyl chloride	62	4.230	4.244	-0.014	96	16882	0.3000	0.3289	
138 Butadiene	54	4.244	4.258	-0.014	0	14419	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	85	12167	0.3000	0.3466	
20 Chloroethane	64	4.663	4.663	0.000	97	11044	0.3000	0.3197	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	95	25764	0.3000	0.3194	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	96	19425	0.3000	0.3134	
25 Ethyl ether	59	5.054	5.068	-0.014	90	5126	0.3000	0.2832	
28 Acrolein	56	5.194	5.194	0.000	97	4718	3.00	3.07	
29 Acetone	43	5.292	5.292	0.000	92	6984	1.20	1.99	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.320	0.000	89	9357	0.3000	0.2785	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	96	13778	0.3000	0.3237	
34 Iodomethane	142	5.501	5.501	0.000	95	18970	0.3000	0.3001	
35 Methyl acetate	43	5.529	5.529	0.000	94	10556	1.50	1.32	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	82	21161	0.3000	0.2840	
37 Carbon disulfide	76	5.599	5.613	-0.014	99	58367	0.3000	0.3238	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	91	3339	3.00	3.07	
39 Methylene Chloride	84	5.669	5.669	0.000	94	30880	0.3000	0.8414	
40 Acrylonitrile	53	5.808	5.808	0.000	97	14931	3.00	3.39	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	15540	0.3000	0.2784	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	96	14621	0.3000	0.3260	
43 Hexane	57	6.082	6.082	0.000	93	26275	0.3000	0.3438	
44 Vinyl acetate	43	6.154	6.154	0.000	96	16233	0.6000	0.5823	
46 1,1-Dichloroethane	63	6.211	6.218	-0.007	95	21144	0.3000	0.2858	
50 2-Butanone (MEK)	43		6.583				ND	ND	
52 sec-Butyl Alcohol	45	6.626	6.633	-0.007	46	9180	9.00	11.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.640	6.647	-0.007	79	12961	0.3000	0.3110	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	89	21682	0.3000	0.3346	
56 Chlorobromomethane	128	6.840	6.840	0.000	52	3335	0.3000	0.2586	
57 Chloroform	83	6.847	6.847	0.000	93	18387	0.3000	0.2999	
58 Tetrahydrofuran	42	6.876	6.876	0.000	63	2005	0.6000	0.6336	
59 Isobutyl alcohol	41	7.048	7.040	0.008	96	2318	7.50	7.02	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	97	20607	0.3000	0.3333	
61 Cyclohexane	56	7.155	7.155	0.000	92	27863	0.3000	0.3105	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	94	17715	0.3000	0.3003	
63 Carbon tetrachloride	117	7.219	7.219	0.000	95	14840	0.3000	0.2930	
64 1,2-Dichloroethane	62	7.319	7.326	-0.007	97	8633	0.3000	0.2802	
66 Benzene	78	7.355	7.355	0.000	96	49456	0.3000	0.2957	
67 n-Heptane	43	7.448	7.448	0.000	93	26988	0.3000	0.3256	
69 Trichloroethene	95	7.820	7.820	0.000	98	13549	0.3000	0.3088	
70 2-Pentanone	43	7.848	7.848	0.000	96	10968	1.20	1.18	
72 1,2-Dichloropropane	63	7.999	7.998	0.000	91	11088	0.3000	0.2960	
73 Methylcyclohexane	55	8.020	8.020	0.000	94	23780	0.3000	0.3312	
74 1,4-Dioxane	88		8.056				ND	ND	
75 Dibromomethane	93	8.099	8.099	0.000	95	3040	0.3000	0.2581	
76 Dichlorobromomethane	83	8.170	8.170	0.000	97	12861	0.3000	0.3242	
78 2-Chloroethyl vinyl ether	63		8.313				ND	ND	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	94	13864	0.3000	0.2897	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	95	13848	1.20	1.21	
81 Toluene	91	8.778	8.778	0.000	98	58554	0.3000	0.3183	
82 Ethyl methacrylate	69	8.864	8.856	0.008	55	5719	0.3000	0.2661	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	96	9817	0.3000	0.2886	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	85	5985	0.3000	0.3227	
85 2-Hexanone	43	9.143	9.143	0.001	92	10568	1.20	1.39	
86 1,3-Dichloropropane	76	9.164	9.157	0.007	92	9039	0.3000	0.2793	
87 Tetrachloroethene	164	9.200	9.200	0.000	97	10900	0.3000	0.2995	
88 Chlorodibromomethane	129	9.350	9.350	0.000	87	5270	0.3000	0.2685	
90 Ethylene Dibromide	107	9.479	9.479	0.000	97	4417	0.3000	0.2812	
91 1-Chlorohexane	91	9.715	9.715	0.000	97	22752	0.3000	0.3338	
92 Chlorobenzene	112	9.822	9.822	0.000	96	30980	0.3000	0.2982	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.850	0.000	80	8484	0.3000	0.2882	
94 Ethylbenzene	106	9.858	9.858	0.000	98	19890	0.3000	0.3080	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	99	23429	0.3000	0.2959	
97 o-Xylene	106	10.251	10.251	0.000	87	21383	0.3000	0.3007	
96 Styrene	104	10.251	10.251	0.000	86	30850	0.3000	0.2859	
98 Bromoform	173		10.444				ND	ND	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	62843	0.3000	0.3264	
101 Cyclohexanone	55	10.630	10.623	0.007	92	4930	12.0	14.2	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	88	6347	0.3000	0.2875	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.730	0.007	48	2184	0.3000	0.5200	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	71	1325	0.3000	0.3114	
106 N-Propylbenzene	120	10.830	10.823	0.007	99	16666	0.3000	0.3118	
105 Bromobenzene	156	10.823	10.823	0.000	96	10414	0.3000	0.3058	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	46701	0.3000	0.3137	
108 2-Chlorotoluene	126	10.944	10.944	0.000	97	13014	0.3000	0.3141	
109 4-Chlorotoluene	126	11.023	11.016	0.007	97	12444	0.3000	0.3026	
110 tert-Butylbenzene	119	11.230	11.230	0.000	94	49813	0.3000	0.3205	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	95	46153	0.3000	0.3146	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	13038	0.3000	0.3091	
113 4-Isopropyltoluene	119	11.502	11.495	0.007	97	52636	0.3000	0.3100	
114 1,3-Dichlorobenzene	146	11.566	11.559	0.007	95	20842	0.3000	0.2962	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	93	20191	0.3000	0.3003	
117 n-Butylbenzene	91	11.860	11.852	0.008	98	50883	0.3000	0.3262	
118 1,2-Dichlorobenzene	146	11.988	11.981	0.007	94	16148	0.3000	0.2932	
119 1,2-Dibromo-3-Chloropropan	157		12.703				ND	ND	
121 1,2,4-Trichlorobenzene	180	13.654	13.640	0.014	91	10085	0.3000	0.2891	
122 Hexachlorobutadiene	225	13.812	13.797	0.015	95	8923	0.3000	0.3136	
123 Naphthalene	128	14.005	13.990	0.015	95	13500	0.3000	0.3364	
124 1,2,3-Trichlorobenzene	180	14.319	14.312	0.007	93	8331	0.3000	0.3016	
S 149 1,2-Dichloroethene, Total	96				0		0.6000	0.6370	
S 153 1,3-Dichloropropene, Total	1				0		0.6000	0.5783	
S 154 1,2-Dichloroethene, Total	1				0		0.6000	0.6370	
S 155 Xylenes, Total	106				0		0.6000	0.5967	
S 150 Trihalomethanes, Total	1				0		1.20	0.8926	
S 151 Xylenes, Total (URS)	1				0		0.6000	0.5967	
S 152 Total BTEX	1				0			1.52	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

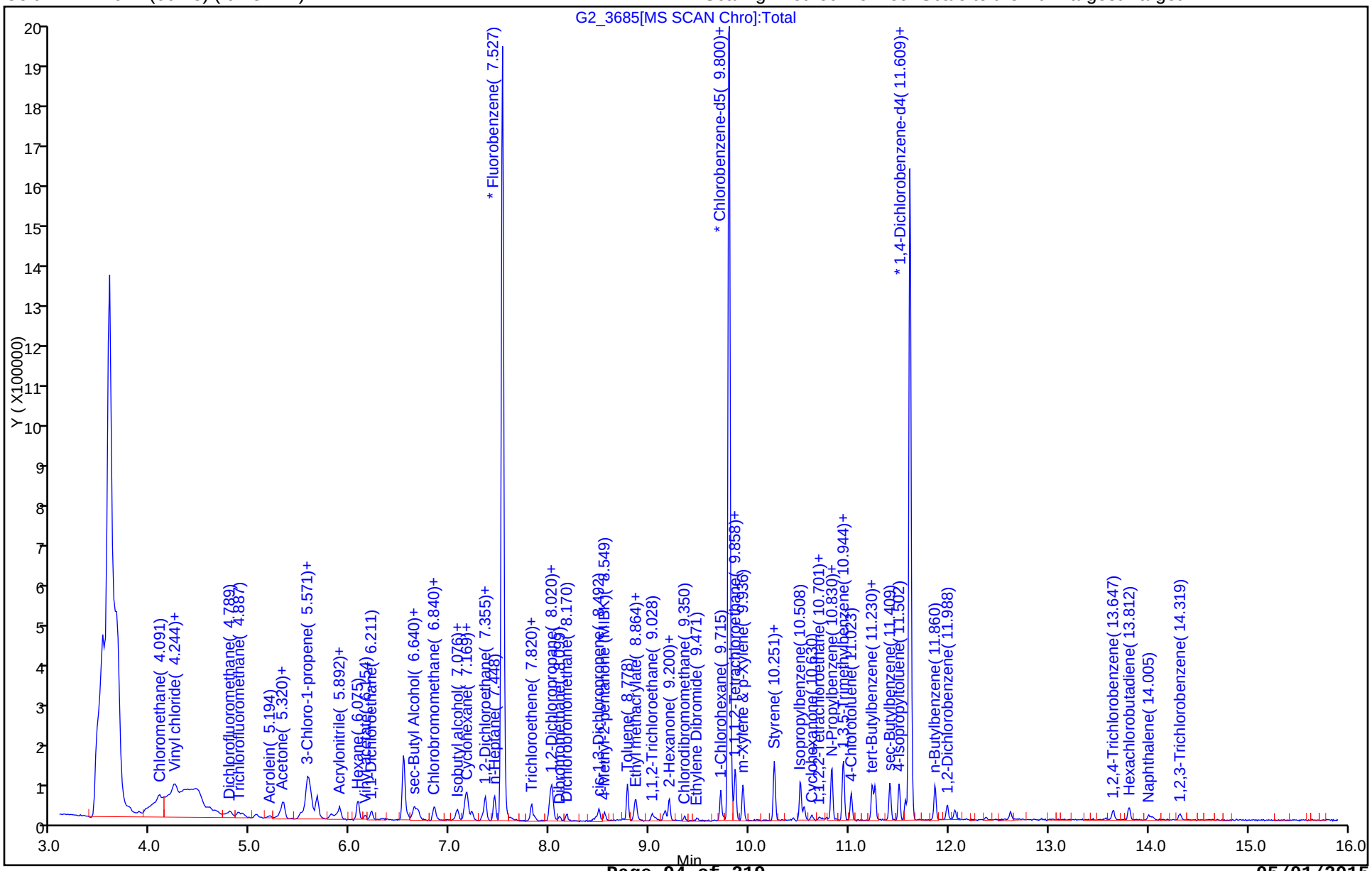
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.15	Units: uL
MV-Main A_00022	Amount Added:	0.15	Units: uL
MV-Gas/Ket A_00032	Amount Added:	0.15	Units: uL

Report Date: 28-Apr-2015 23:36:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3685.D				
Injection Date:	28-Apr-2015 13:46:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3686.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Apr-2015 14:06:30 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub88

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:48 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: meierg Date: 28-Apr-2015 14:48:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	166062	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1535756	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	323006	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.609	0.001	96	409175	12.5	12.5	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	44754	1.00	0.9879	
14 Chloromethane	50	4.091	4.091	0.001	98	55837	1.00	1.15	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	54759	1.00	1.17	
138 Butadiene	54	4.258	4.258	0.000	0	52078	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	91	37217	1.00	1.16	
20 Chloroethane	64	4.663	4.663	0.000	99	37460	1.00	1.19	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	85691	1.00	1.16	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	66637	1.00	1.18	
25 Ethyl ether	59	5.068	5.068	0.000	92	18102	1.00	1.09	
28 Acrolein	56	5.194	5.194	0.000	98	14991	10.0	10.7	
29 Acetone	43	5.292	5.292	0.000	99	16002	4.00	4.98	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.320	0.000	94	35047	1.00	1.14	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	97	46019	1.00	1.18	
34 Iodomethane	142	5.501	5.501	0.000	97	65325	1.00	1.13	
35 Methyl acetate	43	5.529	5.529	0.000	96	43413	5.00	5.92	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	84	79281	1.00	1.16	
37 Carbon disulfide	76	5.613	5.613	0.000	99	192047	1.00	1.16	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	92	10593	10.0	10.6	
39 Methylene Chloride	84	5.669	5.669	0.000	93	56832	1.00	1.69	
40 Acrylonitrile	53	5.809	5.808	0.001	99	45002	10.0	11.2	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	55238	1.00	1.08	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	97	47361	1.00	1.15	
43 Hexane	57	6.075	6.082	-0.007	92	83362	1.00	1.17	
44 Vinyl acetate	43	6.147	6.154	-0.007	97	60838	2.00	2.39	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	97	78103	1.00	1.15	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	98	22366	4.00	4.28	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	50	21949	30.0	29.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	80	43299	1.00	1.14	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	91	70096	1.00	1.18	
56 Chlorobromomethane	128	6.840	6.840	0.000	96	13094	1.00	1.11	
57 Chloroform	83	6.847	6.847	0.000	94	64997	1.00	1.16	
58 Tetrahydrofuran	42	6.876	6.876	0.000	85	10762	2.00	3.72	
59 Isobutyl alcohol	41	7.041	7.040	0.001	94	9673	25.0	32.0	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	98	66848	1.00	1.18	
61 Cyclohexane	56	7.155	7.155	0.000	92	96372	1.00	1.17	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	63776	1.00	1.18	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	53689	1.00	1.16	
64 1,2-Dichloroethane	62	7.327	7.326	0.001	97	30870	1.00	1.10	
66 Benzene	78	7.355	7.355	0.000	96	178222	1.00	1.17	
67 n-Heptane	43	7.448	7.448	0.000	93	90233	1.00	1.19	
69 Trichloroethene	95	7.820	7.820	0.000	98	45879	1.00	1.14	
70 2-Pentanone	43	7.849	7.848	0.000	98	35528	4.00	4.18	
72 1,2-Dichloropropane	63	7.999	7.998	0.001	95	39161	1.00	1.14	
73 Methylcyclohexane	55	8.020	8.020	0.000	94	77926	1.00	1.19	
74 1,4-Dioxane	88	8.063	8.056	0.007	89	1754	20.0	17.5	
75 Dibromomethane	93	8.099	8.099	0.000	96	11825	1.00	1.10	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	39958	1.00	1.10	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	72	1145	1.00	1.24	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	94	49136	1.00	1.10	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	46985	4.00	4.50	
81 Toluene	91	8.778	8.778	0.000	99	199016	1.00	1.18	
82 Ethyl methacrylate	69	8.864	8.856	0.008	91	23602	1.00	1.18	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	97	33795	1.00	1.09	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	90	18377	1.00	1.08	
85 2-Hexanone	43	9.143	9.143	0.001	95	30803	4.00	4.34	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	97	33659	1.00	1.11	
87 Tetrachloroethene	164	9.193	9.200	-0.007	98	40243	1.00	1.18	
88 Chlorodibromomethane	129	9.350	9.350	0.000	91	19800	1.00	1.08	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	15840	1.00	1.08	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	75824	1.00	1.19	
92 Chlorobenzene	112	9.822	9.822	0.000	95	111679	1.00	1.15	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.850	0.001	94	30727	1.00	1.12	
94 Ethylbenzene	106	9.858	9.858	0.000	98	69874	1.00	1.16	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	86223	1.00	1.17	
97 o-Xylene	106	10.251	10.251	0.000	88	77433	1.00	1.17	
96 Styrene	104	10.244	10.251	-0.007	87	112461	1.00	1.12	
98 Bromoform	173	10.437	10.444	-0.007	96	8766	1.00	1.00	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	220611	1.00	1.22	
101 Cyclohexanone	55	10.623	10.623	0.000	92	13695	40.0	42.2	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	93	18957	1.00	1.18	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	90	4369	1.00	1.11	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	84	4666	1.00	1.17	
106 N-Propylbenzene	120	10.823	10.823	0.000	99	60542	1.00	1.21	
105 Bromobenzene	156	10.823	10.823	0.000	95	37181	1.00	1.16	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	167138	1.00	1.20	
108 2-Chlorotoluene	126	10.945	10.944	0.001	96	46438	1.00	1.19	
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	44903	1.00	1.16	
110 tert-Butylbenzene	119	11.231	11.230	0.001	93	175560	1.00	1.20	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	161334	1.00	1.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	47818	1.00	1.21	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	98	190346	1.00	1.19	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	97	76625	1.00	1.16	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	73083	1.00	1.16	
117 n-Butylbenzene	91	11.860	11.852	0.008	98	173139	1.00	1.18	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	97	59156	1.00	1.14	
119 1,2-Dibromo-3-Chloropropan	157	12.704	12.703	0.001	73	1790	1.00	0.8886	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	35710	1.00	1.09	
122 Hexachlorobutadiene	225	13.798	13.797	0.001	96	31521	1.00	1.18	
123 Naphthalene	128	13.998	13.990	0.008	97	37243	1.00	0.9884	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	24877	1.00	1.03	
S 149 1,2-Dichloroethene, Total	96				0		2.00	2.29	
S 153 1,3-Dichloropropene, Total	1				0		2.00	2.19	
S 154 1,2-Dichloroethene, Total	1				0		2.00	2.29	
S 155 Xylenes, Total	106				0		2.00	2.33	
S 150 Trihalomethanes, Total	1				0		4.00	4.34	
S 151 Xylenes, Total (URS)	1				0		2.00	2.33	
S 152 Total BTEX	1				0			5.84	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

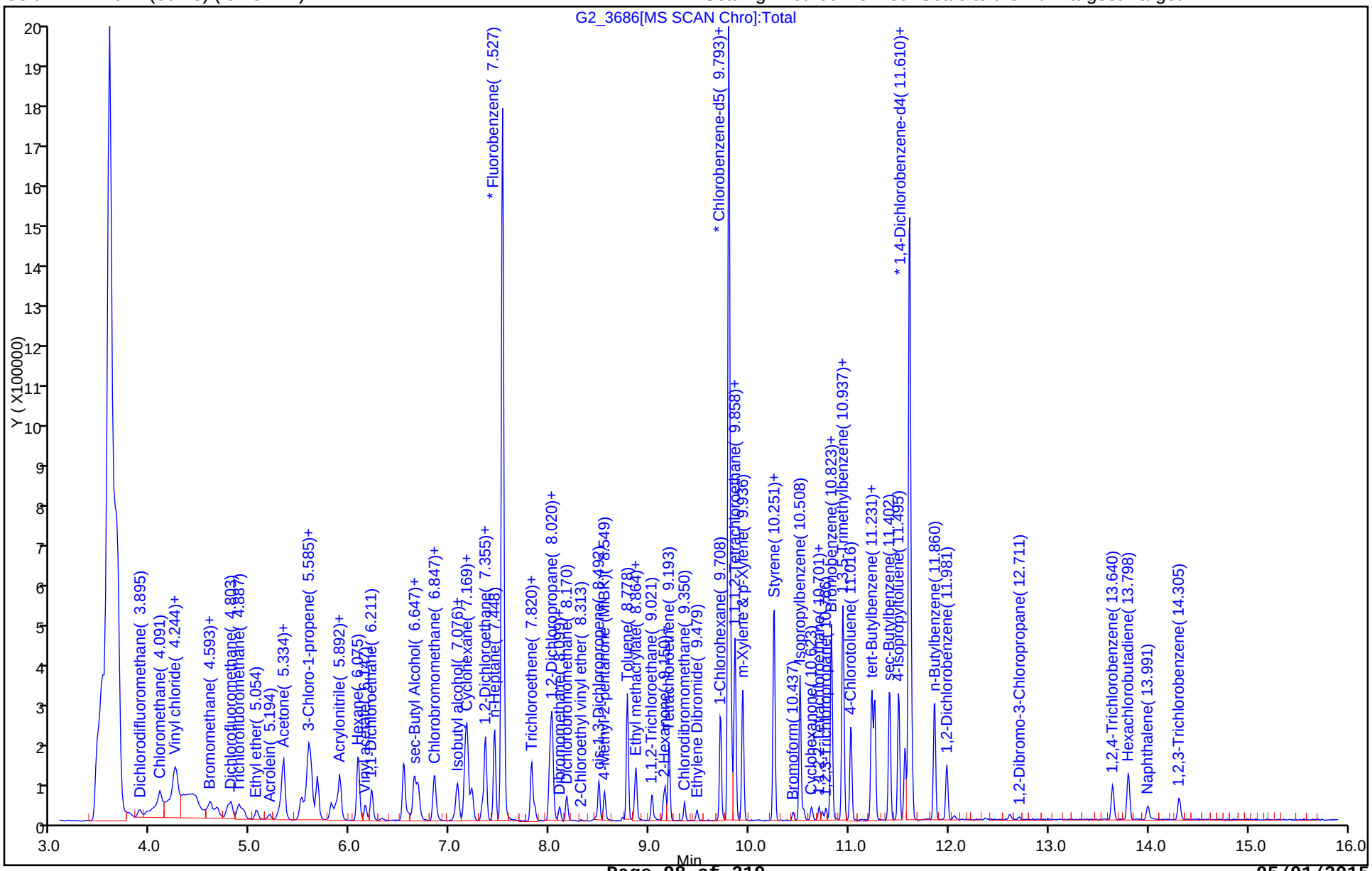
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	0.50	Units: uL
MV-Main A_00022	Amount Added:	0.50	Units: uL
MV-Gas/Ket A_00032	Amount Added:	0.50	Units: uL

Report Date: 28-Apr-2015 23:36:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3686.D				
Injection Date:	28-Apr-2015 14:06:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3687.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Apr-2015 14:25:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub88

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:49 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: meierg Date: 28-Apr-2015 15:06:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	185764	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1724306	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	356813	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	96	457912	12.5	12.5	
13 Dichlorodifluoromethane	85	3.881	3.895	-0.014	99	103366	2.00	2.03	
14 Chloromethane	50	4.091	4.091	0.001	99	102970	2.00	1.89	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	103282	2.00	1.96	
138 Butadiene	54	4.258	4.258	0.000	0	92594	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	90	69172	2.00	1.92	
20 Chloroethane	64	4.663	4.663	0.000	99	67451	2.00	1.90	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	156186	2.00	1.89	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	99	122410	2.00	1.92	
25 Ethyl ether	59	5.068	5.068	0.000	91	34540	2.00	1.86	
28 Acrolein	56	5.194	5.194	0.000	97	28092	20.0	17.8	
29 Acetone	43	5.292	5.292	0.000	100	27578	8.00	7.64	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.320	0.014	93	62056	2.00	1.80	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	97	78683	2.00	1.80	
34 Iodomethane	142	5.501	5.501	0.000	97	118960	2.00	1.83	
35 Methyl acetate	43	5.529	5.529	0.000	96	75670	10.0	9.19	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	81	146312	2.00	1.91	
37 Carbon disulfide	76	5.613	5.613	0.000	99	339086	2.00	1.83	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	92	19531	20.0	17.5	
39 Methylene Chloride	84	5.669	5.669	0.000	93	85621	2.00	2.27	
40 Acrylonitrile	53	5.808	5.808	0.000	99	82274	20.0	18.2	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	95	104861	2.00	1.83	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	98	83722	2.00	1.82	
43 Hexane	57	6.082	6.082	0.000	92	146799	2.00	1.86	
44 Vinyl acetate	43	6.154	6.154	0.000	97	103741	4.00	3.62	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	141136	2.00	1.86	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	99	45620	8.00	7.77	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	96	41921	60.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	81	79258	2.00	1.85	
54 2,2-Dichloropropane	77	6.676	6.683	-0.007	90	118914	2.00	1.79	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	25114	2.00	1.90	
57 Chloroform	83	6.847	6.847	0.000	94	116593	2.00	1.85	
58 Tetrahydrofuran	42	6.883	6.876	0.007	88	12300	4.00	3.79	
59 Isobutyl alcohol	41	7.048	7.040	0.008	92	14540	50.0	42.9	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	98	110959	2.00	1.75	
61 Cyclohexane	56	7.155	7.155	0.000	91	164660	2.00	1.79	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	109340	2.00	1.81	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	92368	2.00	1.78	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	97	58979	2.00	1.86	
66 Benzene	78	7.355	7.355	0.000	95	321071	2.00	1.87	
67 n-Heptane	43	7.448	7.448	0.000	92	152093	2.00	1.79	
69 Trichloroethene	95	7.820	7.820	0.000	98	81670	2.00	1.81	
70 2-Pentanone	43	7.848	7.848	0.000	99	70477	8.00	7.39	
72 1,2-Dichloropropane	63	7.999	7.998	0.001	96	72420	2.00	1.88	
73 Methylcyclohexane	55	8.020	8.020	0.000	94	129821	2.00	1.76	
74 1,4-Dioxane	88	8.056	8.056	0.000	85	3509	40.0	31.1	
75 Dibromomethane	93	8.099	8.099	0.000	96	23359	2.00	1.93	
76 Dichlorobromomethane	83	8.170	8.170	0.000	98	72897	2.00	1.79	
78 2-Chloroethyl vinyl ether	63	8.320	8.313	0.007	86	2858	2.00	1.81	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	93252	2.00	1.89	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	97	84579	8.00	7.21	
81 Toluene	91	8.778	8.778	0.000	98	346819	2.00	1.84	
82 Ethyl methacrylate	69	8.864	8.856	0.008	93	41934	2.00	1.89	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	63055	2.00	1.81	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	90	35060	2.00	1.84	
85 2-Hexanone	43	9.143	9.143	0.001	94	56236	8.00	7.17	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	97	63579	2.00	1.90	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	69860	2.00	1.86	
88 Chlorodibromomethane	129	9.350	9.350	0.000	91	35728	2.00	1.76	
90 Ethylene Dibromide	107	9.479	9.479	0.000	97	30308	2.00	1.87	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	124661	2.00	1.77	
92 Chlorobenzene	112	9.822	9.822	0.000	97	199881	2.00	1.86	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.850	0.000	95	56134	2.00	1.85	
94 Ethylbenzene	106	9.858	9.858	0.000	98	121221	2.00	1.82	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	149119	2.00	1.83	
97 o-Xylene	106	10.251	10.251	0.000	88	134528	2.00	1.83	
96 Styrene	104	10.251	10.251	0.000	88	203382	2.00	1.83	
98 Bromoform	173	10.444	10.444	0.000	95	16346	2.00	1.69	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	376854	2.00	1.86	
101 Cyclohexanone	55	10.623	10.623	0.000	93	24782	80.0	69.2	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	31805	2.00	1.82	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.730	0.007	87	8101	2.00	1.84	
104 1,2,3-Trichloropropane	110	10.766	10.773	-0.007	84	8166	2.00	1.83	
106 N-Propylbenzene	120	10.823	10.823	0.000	99	100981	2.00	1.80	
105 Bromobenzene	156	10.823	10.823	0.000	96	65870	2.00	1.84	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	97	287523	2.00	1.84	
108 2-Chlorotoluene	126	10.944	10.944	0.000	96	80380	2.00	1.85	
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	78746	2.00	1.82	
110 tert-Butylbenzene	119	11.230	11.230	0.000	93	299170	2.00	1.83	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	282013	2.00	1.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	78967	2.00	1.78	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	98	322532	2.00	1.81	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	97	137207	2.00	1.86	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	96	131646	2.00	1.86	
117 n-Butylbenzene	91	11.852	11.852	0.000	98	291052	2.00	1.78	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	97	106260	2.00	1.84	
119 1,2-Dibromo-3-Chloropropan	157	12.711	12.703	0.008	76	4104	2.00	1.82	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	66067	2.00	1.80	
122 Hexachlorobutadiene	225	13.805	13.797	0.007	97	52305	2.00	1.75	
123 Naphthalene	128	13.990	13.990	0.000	97	72332	2.00	1.72	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	96	46610	2.00	1.75	
S 149 1,2-Dichloroethene, Total	96				0		4.00	3.67	
S 153 1,3-Dichloropropene, Total	1				0		4.00	3.69	
S 154 1,2-Dichloroethene, Total	1				0		4.00	3.67	
S 155 Xylenes, Total	106				0		4.00	3.66	
S 150 Trihalomethanes, Total	1				0		8.00	7.09	
S 151 Xylenes, Total (URS)	1				0		4.00	3.66	
S 152 Total BTEX	1				0			9.19	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

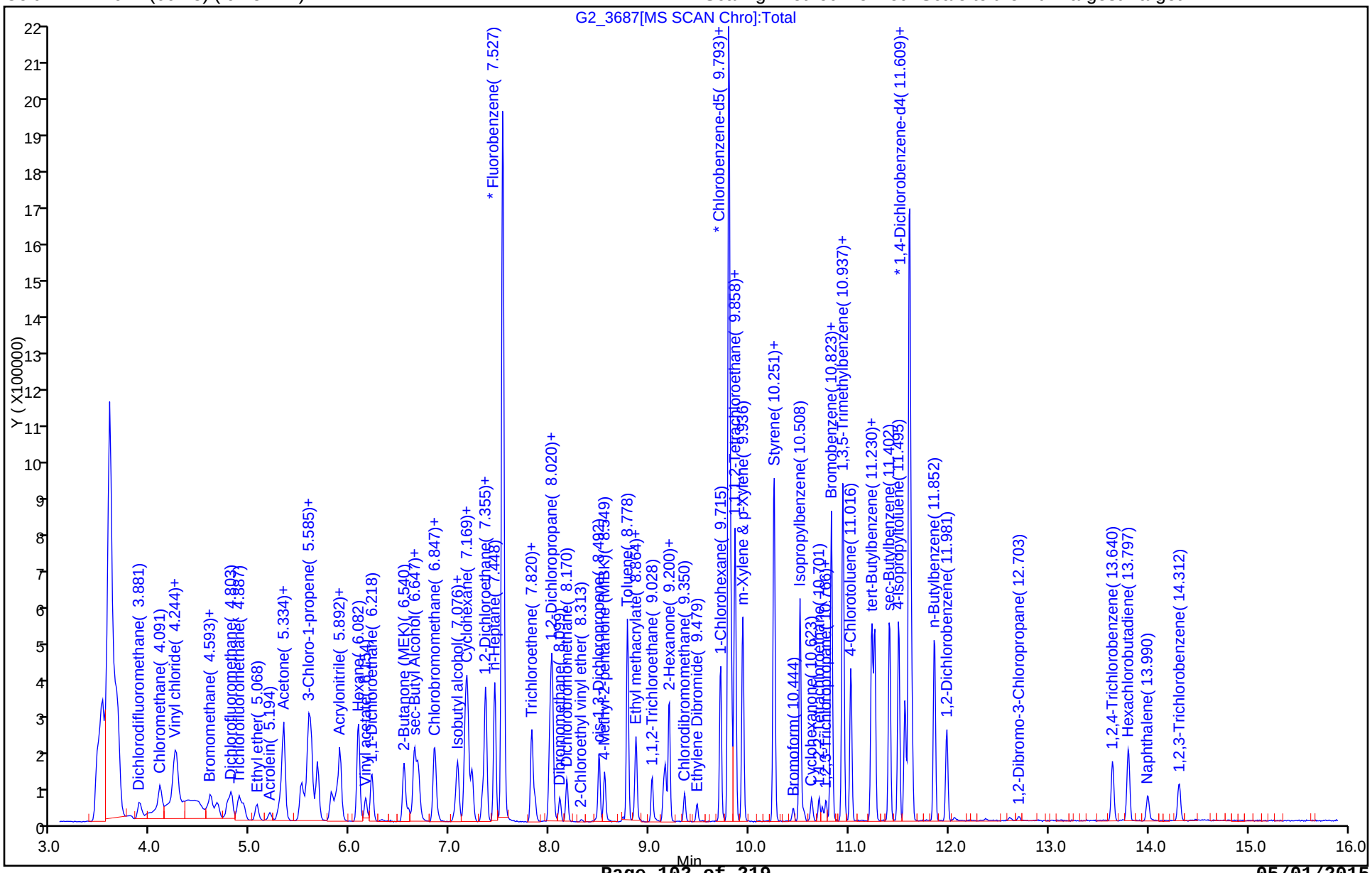
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	1.00	Units: uL
MV-Main A_00022	Amount Added:	1.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	1.00	Units: uL

Report Date: 28-Apr-2015 23:36:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3687.D				
Injection Date:	28-Apr-2015 14:25:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3688.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Apr-2015 14:44:30 ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub88

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:50 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: meierg Date: 28-Apr-2015 15:46:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	172177	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1450756	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	87	314621	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.602	11.609	-0.007	95	418384	12.5	12.5	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	233940	5.00	5.47	
14 Chloromethane	50	4.091	4.091	0.001	99	234000	5.00	5.10	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	232090	5.00	5.23	
138 Butadiene	54	4.258	4.258	0.000	0	204757	NC	NC	
19 Bromomethane	94	4.594	4.607	-0.013	90	157011	5.00	5.18	
20 Chloroethane	64	4.663	4.663	0.000	100	156300	5.00	5.24	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	363160	5.00	5.21	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	283248	5.00	5.29	
25 Ethyl ether	59	5.068	5.068	0.000	91	83144	5.00	5.32	
28 Acrolein	56	5.194	5.194	0.000	98	79074	50.0	59.5	
29 Acetone	43	5.292	5.292	0.000	99	61521	20.0	20.3	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.320	0.000	94	162713	5.00	5.61	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	97	194428	5.00	5.29	
34 Iodomethane	142	5.501	5.501	0.000	97	288130	5.00	5.28	
35 Methyl acetate	43	5.529	5.529	0.000	97	185339	25.0	26.8	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	82	345664	5.00	5.37	
37 Carbon disulfide	76	5.613	5.613	0.000	99	824452	5.00	5.29	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	93	50659	50.0	53.9	
39 Methylene Chloride	84	5.669	5.669	0.000	94	172365	5.00	5.44	
40 Acrylonitrile	53	5.809	5.808	0.001	97	197046	50.0	51.8	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	95	262649	5.00	5.45	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	97	198930	5.00	5.13	
43 Hexane	57	6.082	6.082	0.000	93	355726	5.00	5.12	
44 Vinyl acetate	43	6.154	6.154	0.000	97	247628	10.0	10.3	
46 1,1-Dichloroethane	63	6.211	6.218	-0.007	96	337746	5.00	5.29	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	99	104230	20.0	21.1	
52 sec-Butyl Alcohol	45	6.626	6.633	-0.007	95	110924	150.0	156.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.640	6.647	-0.007	79	186089	5.00	5.17	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	90	289150	5.00	5.17	
56 Chlorobromomethane	128	6.840	6.840	0.000	98	59946	5.00	5.38	
57 Chloroform	83	6.847	6.847	0.000	94	273711	5.00	5.17	
58 Tetrahydrofuran	42	6.876	6.876	0.000	85	28284	10.0	10.3	
59 Isobutyl alcohol	41	7.048	7.040	0.008	94	35550	125.0	124.6	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	274681	5.00	5.14	
61 Cyclohexane	56	7.155	7.155	0.000	91	421999	5.00	5.44	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	269512	5.00	5.29	
63 Carbon tetrachloride	117	7.219	7.219	0.000	98	231005	5.00	5.28	
64 1,2-Dichloroethane	62	7.319	7.326	-0.007	97	141537	5.00	5.32	
66 Benzene	78	7.355	7.355	0.000	96	760905	5.00	5.27	
67 n-Heptane	43	7.448	7.448	0.000	93	378342	5.00	5.28	
69 Trichloroethene	95	7.820	7.820	0.000	98	196641	5.00	5.19	
70 2-Pentanone	43	7.849	7.848	0.001	99	172501	20.0	21.5	
72 1,2-Dichloropropane	63	7.999	7.998	0.001	96	169721	5.00	5.24	
73 Methylcyclohexane	55	8.020	8.020	0.000	93	325251	5.00	5.24	
74 1,4-Dioxane	88	8.056	8.056	0.000	92	10973	100.0	115.6	
75 Dibromomethane	93	8.099	8.099	0.000	97	55223	5.00	5.43	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	174387	5.00	5.09	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	94	8772	5.00	4.55	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	223957	5.00	5.14	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	206076	20.0	20.9	
81 Toluene	91	8.778	8.778	0.000	99	831019	5.00	5.23	
82 Ethyl methacrylate	69	8.857	8.856	0.001	93	103612	5.00	5.30	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	153627	5.00	5.23	
84 1,1,2-Trichloroethane	97	9.021	9.028	-0.007	91	84319	5.00	5.26	
85 2-Hexanone	43	9.143	9.143	0.001	94	139854	20.0	20.2	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	92	154541	5.00	5.25	
87 Tetrachloroethene	164	9.193	9.200	-0.007	97	170464	5.00	5.15	
88 Chlorodibromomethane	129	9.350	9.350	0.000	91	92738	5.00	5.19	
90 Ethylene Dibromide	107	9.479	9.479	0.000	98	74970	5.00	5.25	
91 1-Chlorohexane	91	9.715	9.715	0.000	99	321209	5.00	5.18	
92 Chlorobenzene	112	9.822	9.822	0.000	95	491221	5.00	5.20	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.850	0.001	95	138333	5.00	5.17	
94 Ethylbenzene	106	9.858	9.858	0.000	98	305346	5.00	5.20	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	374398	5.00	5.20	
97 o-Xylene	106	10.251	10.251	0.000	88	339023	5.00	5.24	
96 Styrene	104	10.244	10.251	-0.007	88	521350	5.00	5.31	
98 Bromoform	173	10.437	10.444	-0.007	97	43184	5.00	5.05	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	963548	5.00	5.21	
101 Cyclohexanone	55	10.623	10.623	0.000	93	63820	200.0	202.1	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	80667	5.00	5.28	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	90	20252	5.00	5.02	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	85	21408	5.00	5.24	
106 N-Propylbenzene	120	10.823	10.823	0.000	99	268996	5.00	5.24	
105 Bromobenzene	156	10.823	10.823	0.000	96	170943	5.00	5.23	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	750694	5.00	5.25	
108 2-Chlorotoluene	126	10.945	10.944	0.001	96	207887	5.00	5.23	
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	206934	5.00	5.24	
110 tert-Butylbenzene	119	11.231	11.230	0.001	92	778402	5.00	5.22	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	95	737672	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.402	11.409	-0.007	94	212911	5.00	5.26	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	97	869260	5.00	5.33	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	98	352410	5.00	5.22	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	336014	5.00	5.21	
117 n-Butylbenzene	91	11.853	11.852	0.001	98	794952	5.00	5.31	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	97	281189	5.00	5.32	
119 1,2-Dibromo-3-Chloropropan	157	12.704	12.703	0.001	84	11159	5.00	5.42	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	181394	5.00	5.42	
122 Hexachlorobutadiene	225	13.798	13.797	0.001	97	145607	5.00	5.33	
123 Naphthalene	128	13.991	13.990	0.001	97	202797	5.00	5.26	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	131818	5.00	5.48	
S 149 1,2-Dichloroethene, Total	96				0		10.0	10.3	
S 153 1,3-Dichloropropene, Total	1				0		10.0	10.4	
S 154 1,2-Dichloroethene, Total	1				0		10.0	10.3	
S 155 Xylenes, Total	106				0		10.0	10.4	
S 150 Trihalomethanes, Total	1				0		20.0	20.5	
S 151 Xylenes, Total (URS)	1				0		10.0	10.4	
S 152 Total BTEX	1				0			26.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

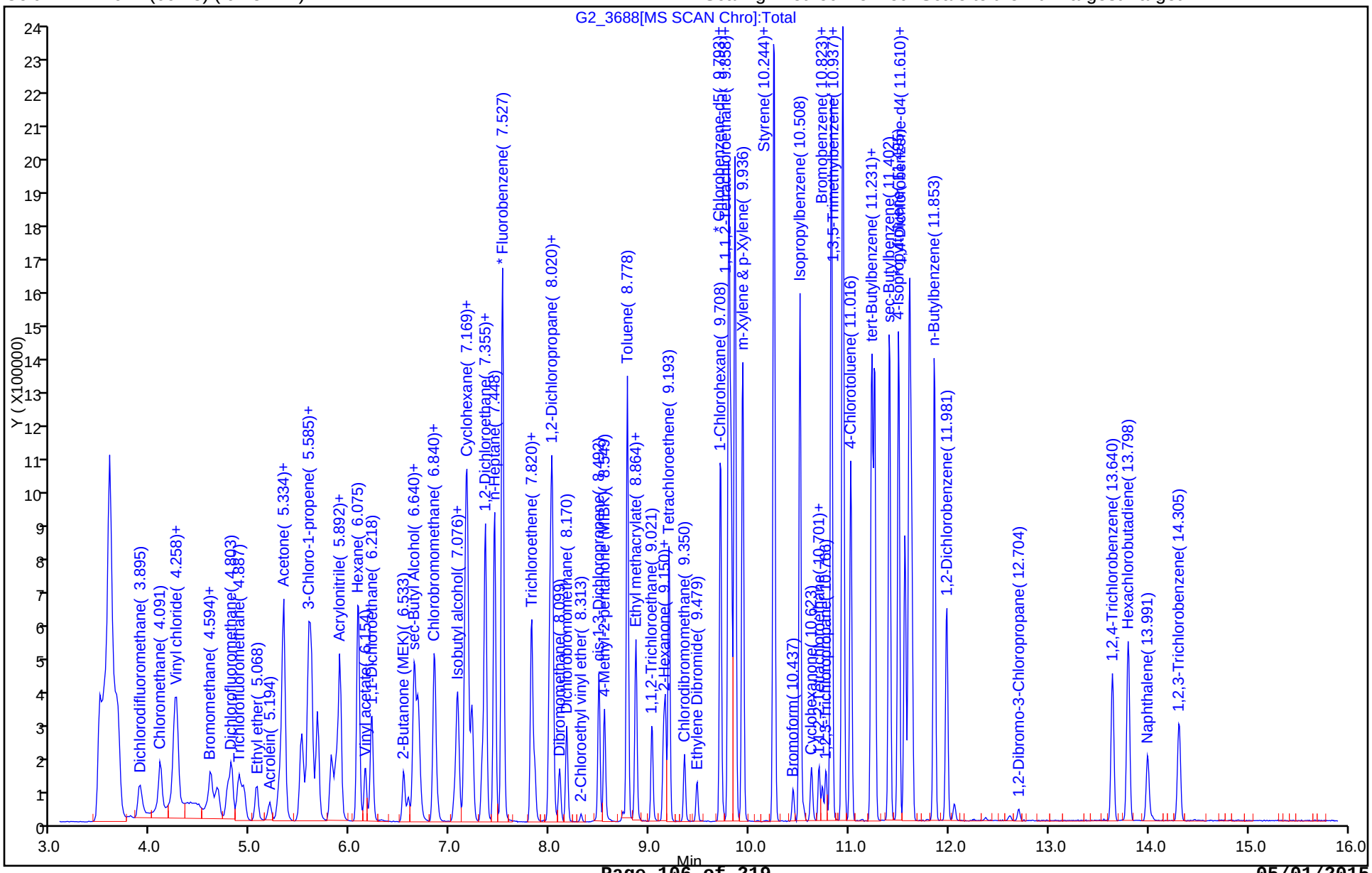
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	2.50	Units: uL
MV-Main A_00022	Amount Added:	2.50	Units: uL
MV-Gas/Ket A_00032	Amount Added:	2.50	Units: uL

Report Date: 28-Apr-2015 23:36:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3688.D				
Injection Date:	28-Apr-2015 14:44:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	12
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3689.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Apr-2015 15:03:30 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub88

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:50 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: meierg Date: 28-Apr-2015 15:47:32

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	5.571	5.571	0.000	0	201686	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	98	1720119	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	70	363038	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	79	487471	12.5	12.5	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	80	476763	10.0	9.40	
14 Chloromethane	50	4.091	4.091	0.000	89	494685	10.0	9.09	
16 Vinyl chloride	62	4.244	4.244	0.000	74	495297	10.0	9.42	
138 Butadiene	54	4.258	4.258	0.000	0	440216	NC	NC	
19 Bromomethane	94	4.607	4.607	0.000	87	335813	10.0	9.34	
20 Chloroethane	64	4.663	4.663	0.000	90	338546	10.0	9.57	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	73	774238	10.0	9.37	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	82	601121	10.0	9.47	
25 Ethyl ether	59	5.068	5.068	0.000	90	180960	10.0	9.76	
28 Acrolein	56	5.194	5.194	0.000	93	147822	100.0	93.8	
29 Acetone	43	5.292	5.292	0.000	93	133678	40.0	37.1	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.320	0.000	70	345798	10.0	10.0	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	89	416087	10.0	9.54	
34 Iodomethane	142	5.501	5.501	0.000	97	624102	10.0	9.64	
35 Methyl acetate	43	5.529	5.529	0.000	89	395710	50.0	48.2	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	77	732456	10.0	9.60	
37 Carbon disulfide	76	5.613	5.613	0.000	98	1766534	10.0	9.57	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	16	106302	100.0	95.4	
39 Methylene Chloride	84	5.669	5.669	0.000	80	349928	10.0	9.31	
40 Acrylonitrile	53	5.808	5.808	0.000	99	419233	100.0	93.0	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	90	555910	10.0	9.72	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	92	433983	10.0	9.45	
43 Hexane	57	6.082	6.082	0.000	92	776761	10.0	9.68	
44 Vinyl acetate	43	6.154	6.154	0.000	91	565417	20.0	19.8	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	85	728531	10.0	9.62	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	227595	40.0	38.9	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	43	229090	300.0	272.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	68	405884	10.0	9.51	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	81	619180	10.0	9.33	
56 Chlorobromomethane	128	6.840	6.840	0.000	59	128345	10.0	9.72	
57 Chloroform	83	6.847	6.847	0.000	81	598309	10.0	9.53	
58 Tetrahydrofuran	42	6.876	6.876	0.000	85	63584	20.0	19.6	
59 Isobutyl alcohol	41	7.040	7.040	0.000	91	79467	250.0	234.9	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	87	596939	10.0	9.43	
61 Cyclohexane	56	7.155	7.155	0.000	92	899930	10.0	9.79	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	90	588920	10.0	9.75	
63 Carbon tetrachloride	117	7.219	7.219	0.000	56	506830	10.0	9.77	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	84	305039	10.0	9.67	
66 Benzene	78	7.355	7.355	0.000	96	1650174	10.0	9.63	
67 n-Heptane	43	7.448	7.448	0.000	92	818946	10.0	9.65	
69 Trichloroethene	95	7.820	7.820	0.000	93	429701	10.0	9.56	
70 2-Pentanone	43	7.848	7.848	0.000	99	365716	40.0	38.5	
72 1,2-Dichloropropane	63	7.998	7.998	0.000	90	366713	10.0	9.56	
73 Methylcyclohexane	55	8.020	8.020	0.000	93	709658	10.0	9.65	
74 1,4-Dioxane	88	8.056	8.056	0.000	25	22993	200.0	204.3	
75 Dibromomethane	93	8.099	8.099	0.000	86	116534	10.0	9.66	
76 Dichlorobromomethane	83	8.170	8.170	0.000	85	380606	10.0	9.37	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	75	22511	10.0	8.95	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	87	487147	10.0	9.70	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	80	448931	40.0	38.4	
81 Toluene	91	8.778	8.778	0.000	89	1785826	10.0	9.48	
82 Ethyl methacrylate	69	8.856	8.856	0.000	83	215225	10.0	9.54	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	93	335706	10.0	9.64	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	86	176647	10.0	9.30	
85 2-Hexanone	43	9.143	9.143	0.000	92	294215	40.0	36.9	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	94	332094	10.0	9.77	
87 Tetrachloroethene	164	9.200	9.200	0.000	93	371782	10.0	9.73	
88 Chlorodibromomethane	129	9.350	9.350	0.000	85	203563	10.0	9.88	
90 Ethylene Dibromide	107	9.479	9.479	0.000	97	162525	10.0	9.86	
91 1-Chlorohexane	91	9.715	9.715	0.000	95	687298	10.0	9.61	
92 Chlorobenzene	112	9.822	9.822	0.000	94	1050678	10.0	9.63	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.850	0.000	29	301284	10.0	9.75	
94 Ethylbenzene	106	9.858	9.858	0.000	70	655335	10.0	9.67	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	805691	10.0	9.70	
97 o-Xylene	106	10.251	10.251	0.000	88	724820	10.0	9.71	
96 Styrene	104	10.251	10.251	0.000	87	1120939	10.0	9.90	
98 Bromoform	173	10.444	10.444	0.000	96	95240	10.0	9.66	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	2056788	10.0	9.55	
101 Cyclohexanone	55	10.623	10.623	0.000	87	133535	400.0	366.5	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	83	170386	10.0	9.67	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	43	44607	10.0	9.49	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	15	44419	10.0	9.33	
106 N-Propylbenzene	120	10.823	10.823	0.000	96	574437	10.0	9.61	
105 Bromobenzene	156	10.823	10.823	0.000	44	365441	10.0	9.59	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	86	1595283	10.0	9.58	
108 2-Chlorotoluene	126	10.944	10.944	0.000	95	442493	10.0	9.55	
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	438623	10.0	9.54	
110 tert-Butylbenzene	119	11.230	11.230	0.000	90	1654617	10.0	9.52	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	91	1561284	10.0	9.51	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	451075	10.0	9.56	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	88	1836039	10.0	9.67	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	83	752419	10.0	9.56	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	94	710065	10.0	9.44	
117 n-Butylbenzene	91	11.852	11.852	0.000	91	1668828	10.0	9.56	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	97	584752	10.0	9.49	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.703	0.000	68	23097	10.0	9.62	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	92	371890	10.0	9.53	
122 Hexachlorobutadiene	225	13.797	13.797	0.000	93	300010	10.0	9.42	
123 Naphthalene	128	13.990	13.990	0.000	96	419626	10.0	9.35	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	93	264542	10.0	9.47	
S 149 1,2-Dichloroethene, Total	96				0		20.0	19.0	
S 153 1,3-Dichloropropene, Total	1				0		20.0	19.3	
S 154 1,2-Dichloroethene, Total	1				0		20.0	19.0	
S 155 Xylenes, Total	106				0		20.0	19.4	
S 150 Trihalomethanes, Total	1				0		40.0	38.4	
S 151 Xylenes, Total (URS)	1				0		20.0	19.4	
S 152 Total BTEX	1				0			48.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

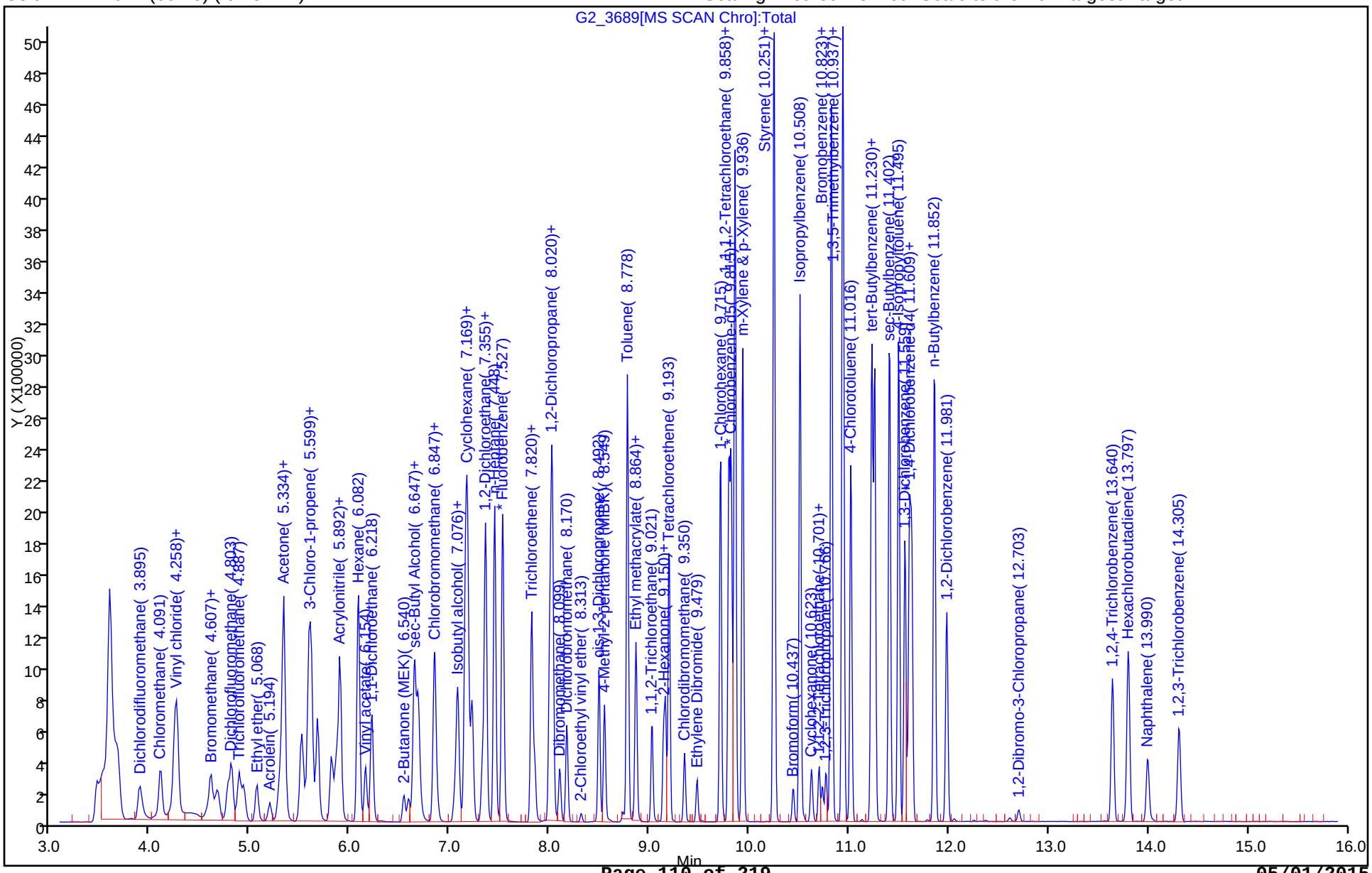
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL
MV-Main A_00022	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL

Report Date: 28-Apr-2015 23:36:51 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3689.D				
Injection Date:	28-Apr-2015 15:03:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	13
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3690.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Apr-2015 15:22:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub88

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:51 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: meierg Date: 28-Apr-2015 15:47:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	200586	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1721318	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	85	369069	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.609	0.001	94	502364	12.5	12.5	
13 Dichlorodifluoromethane	85	3.881	3.895	-0.014	99	1429516	30.0	28.2	
14 Chloromethane	50	4.091	4.091	0.001	99	1430469	30.0	26.3	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	1420788	30.0	27.0	
138 Butadiene	54	4.258	4.258	0.000	0	1272826	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	90	958212	30.0	26.6	
20 Chloroethane	64	4.663	4.663	0.000	100	962805	30.0	27.2	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	2286969	30.0	27.7	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	99	1753830	30.0	27.6	
25 Ethyl ether	59	5.054	5.068	-0.014	91	532388	30.0	28.7	
28 Acrolein	56	5.194	5.194	0.000	99	435969	300.0	276.6	
29 Acetone	43	5.292	5.292	0.000	99	390486	120.0	108.3	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.320	0.000	95	911447	30.0	26.5	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	1134743	30.0	26.0	
34 Iodomethane	142	5.501	5.501	0.000	97	1799931	30.0	27.8	
35 Methyl acetate	43	5.529	5.529	0.000	98	1175623	150.0	143.1	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	87	2101327	30.0	27.5	
37 Carbon disulfide	76	5.599	5.613	-0.014	99	4844103	30.0	26.2	
38 2-Methyl-2-propanol	59	5.627	5.641	-0.014	93	324117	300.0	290.7	
39 Methylene Chloride	84	5.669	5.669	0.000	93	1004878	30.0	26.7	
40 Acrylonitrile	53	5.809	5.808	0.001	98	1221838	300.0	270.7	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	1655590	30.0	28.9	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	98	1235207	30.0	26.9	
43 Hexane	57	6.075	6.082	-0.007	93	2022153	30.0	24.8	
44 Vinyl acetate	43	6.154	6.154	0.000	97	1587037	60.0	55.5	
46 1,1-Dichloroethane	63	6.211	6.218	-0.007	96	2117655	30.0	27.9	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	658360	120.0	112.3	
52 sec-Butyl Alcohol	45	6.626	6.633	-0.007	96	733092	900.0	871.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.640	6.647	-0.007	80	1176096	30.0	27.5	
54 2,2-Dichloropropane	77	6.676	6.683	-0.007	88	1742758	30.0	26.2	
56 Chlorobromomethane	128	6.833	6.840	-0.007	94	385300	30.0	29.1	
57 Chloroform	83	6.847	6.847	0.000	94	1742931	30.0	27.7	
58 Tetrahydrofuran	42	6.876	6.876	0.000	88	191879	60.0	59.2	
59 Isobutyl alcohol	41	7.041	7.040	0.000	94	236985	750.0	700.1	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	1668422	30.0	26.3	
61 Cyclohexane	56	7.155	7.155	0.000	91	2378595	30.0	25.9	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	1618893	30.0	26.8	
63 Carbon tetrachloride	117	7.219	7.219	0.000	98	1412086	30.0	27.2	
64 1,2-Dichloroethane	62	7.327	7.326	0.001	97	905695	30.0	28.7	
66 Benzene	78	7.355	7.355	0.000	96	4701730	30.0	27.4	
67 n-Heptane	43	7.448	7.448	0.000	92	2148367	30.0	25.3	
69 Trichloroethene	95	7.813	7.820	-0.007	98	1231108	30.0	27.4	
70 2-Pentanone	43	7.848	7.848	0.000	99	1091782	120.0	114.7	
72 1,2-Dichloropropane	63	7.999	7.998	0.001	96	1066230	30.0	27.8	
73 Methylcyclohexane	55	8.020	8.020	0.000	93	1878961	30.0	25.5	
74 1,4-Dioxane	88	8.056	8.056	0.000	90	69646	600.0	618.4	
75 Dibromomethane	93	8.099	8.099	0.000	97	348719	30.0	28.9	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	1136457	30.0	28.0	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	91	84563	30.0	31.4	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	1456650	30.0	28.5	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	1338356	120.0	114.3	
81 Toluene	91	8.778	8.778	0.000	99	5053920	30.0	26.8	
82 Ethyl methacrylate	69	8.857	8.856	0.001	91	653489	30.0	28.5	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	1009566	30.0	29.0	
84 1,1,2-Trichloroethane	97	9.021	9.028	-0.007	91	527246	30.0	27.7	
85 2-Hexanone	43	9.136	9.143	-0.006	95	913197	120.0	112.6	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	93	979288	30.0	28.4	
87 Tetrachloroethene	164	9.193	9.200	-0.007	98	1033549	30.0	26.6	
88 Chlorodibromomethane	129	9.350	9.350	0.000	91	625609	30.0	29.9	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	479285	30.0	28.6	
91 1-Chlorohexane	91	9.715	9.715	0.000	99	1855256	30.0	25.5	
92 Chlorobenzene	112	9.822	9.822	0.000	95	3059629	30.0	27.6	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.850	0.001	96	897092	30.0	28.6	
94 Ethylbenzene	106	9.858	9.858	0.000	98	1871327	30.0	27.2	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	2315817	30.0	27.4	
97 o-Xylene	106	10.251	10.251	0.000	87	2092916	30.0	27.6	
96 Styrene	104	10.244	10.251	-0.007	88	3290395	30.0	28.6	
98 Bromoform	173	10.437	10.444	-0.007	97	305558	30.0	30.5	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	5767001	30.0	26.0	
101 Cyclohexanone	55	10.623	10.623	0.000	93	421195	1200.0	1137.1	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	501225	30.0	27.8	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	94	140040	30.0	28.9	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	85	134462	30.0	27.4	
106 N-Propylbenzene	120	10.823	10.823	0.000	98	1624118	30.0	26.4	
105 Bromobenzene	156	10.823	10.823	0.000	97	1078229	30.0	27.5	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	95	4578233	30.0	26.7	
108 2-Chlorotoluene	126	10.945	10.944	0.001	95	1278953	30.0	26.8	
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	1296468	30.0	27.4	
110 tert-Butylbenzene	119	11.231	11.230	0.001	93	4704140	30.0	26.3	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	4570136	30.0	27.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	1288103	30.0	26.5	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	97	5192470	30.0	26.5	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	98	2230991	30.0	27.5	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	94	2134700	30.0	27.5	
117 n-Butylbenzene	91	11.860	11.852	0.008	98	4665264	30.0	25.9	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	1773520	30.0	27.9	
119 1,2-Dibromo-3-Chloropropan	157	12.704	12.703	0.001	86	76158	30.0	30.8	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	1136231	30.0	28.3	
122 Hexachlorobutadiene	225	13.805	13.797	0.008	96	857736	30.0	26.1	
123 Naphthalene	128	13.998	13.990	0.008	97	1343987	30.0	29.1	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	95	832218	30.0	29.0	
S 149 1,2-Dichloroethene, Total	96				0		60.0	54.4	
S 153 1,3-Dichloropropene, Total	1				0		60.0	57.5	
S 154 1,2-Dichloroethene, Total	1				0		60.0	54.4	
S 155 Xylenes, Total	106				0		60.0	55.0	
S 150 Trihalomethanes, Total	1				0		120.0	116.0	
S 151 Xylenes, Total (URS)	1				0		60.0	55.0	
S 152 Total BTEX	1				0			136.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

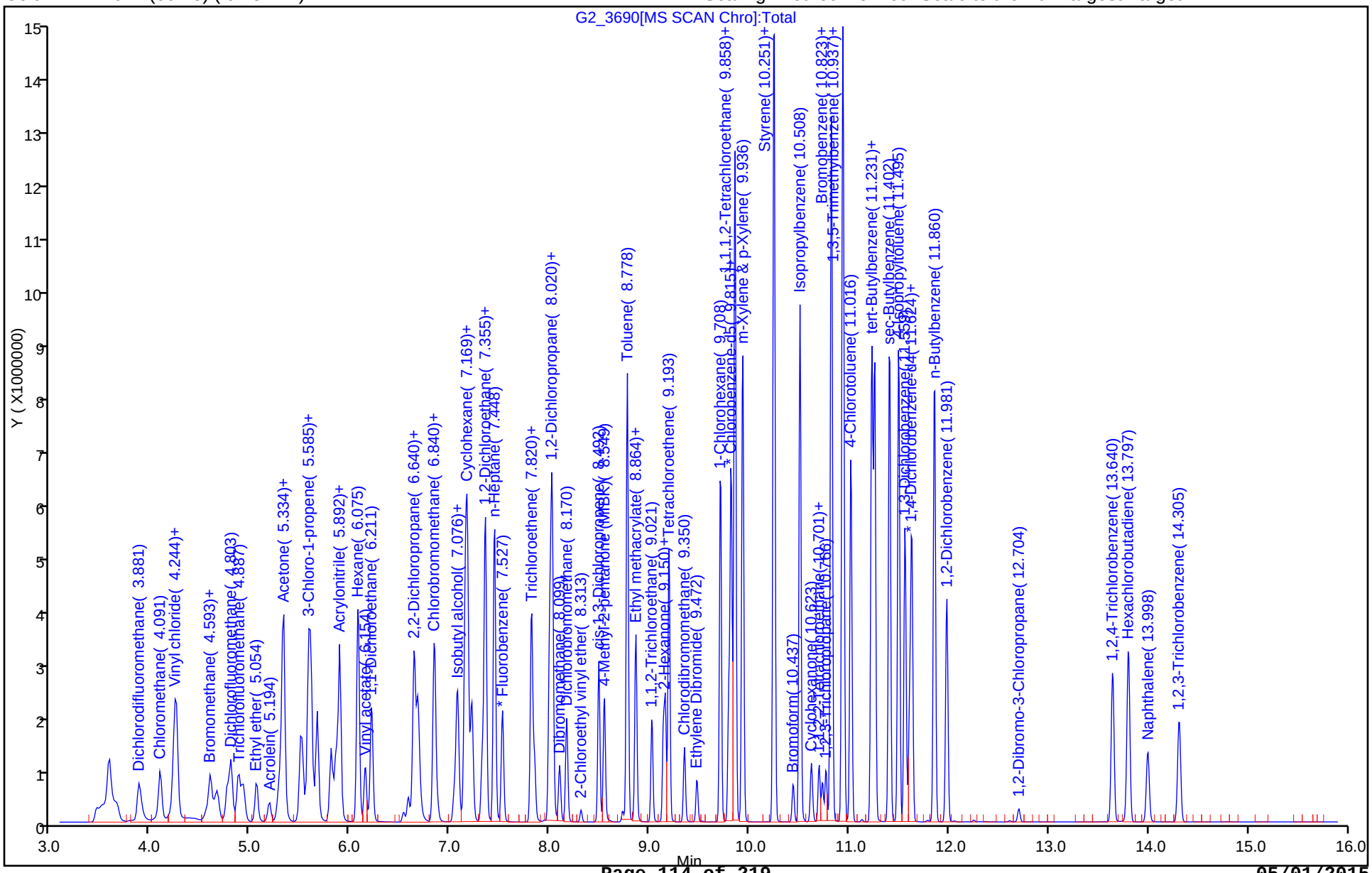
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 15.00	Units: uL
MV-Main A_00022	Amount Added: 15.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 15.00	Units: uL

Report Date: 28-Apr-2015 23:36:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3690.D				
Injection Date:	28-Apr-2015 15:22:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	14
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3691.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Apr-2015 15:41:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub88

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:52 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: meierg Date: 28-Apr-2015 16:23:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	185471	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1599806	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	344857	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	96	480983	12.5	12.5	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	2467805	60.0	52.3	
14 Chloromethane	50	4.105	4.091	0.015	99	2642322	60.0	52.2	
16 Vinyl chloride	62	4.244	4.244	0.000	98	2548103	60.0	52.1	
138 Butadiene	54	4.258	4.258	0.000	0	2238857	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	90	1741029	60.0	52.1	
20 Chloroethane	64	4.663	4.663	0.000	100	1750315	60.0	53.2	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	4286316	60.0	55.8	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	99	3165692	60.0	53.6	
25 Ethyl ether	59	5.068	5.068	0.000	91	1073688	60.0	62.3	
28 Acrolein	56	5.194	5.194	0.000	100	852785	599.9	582.1	
29 Acetone	43	5.292	5.292	0.000	99	770476	240.0	230.0	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.320	0.000	95	1962998	60.0	61.3	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	97	2335910	60.0	57.6	
34 Iodomethane	142	5.501	5.501	0.000	97	3644761	60.0	60.5	
35 Methyl acetate	43	5.529	5.529	0.000	98	2360174	300.0	309.1	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	86	4182515	60.0	58.9	
37 Carbon disulfide	76	5.599	5.613	-0.014	99	9790197	60.0	57.0	
38 2-Methyl-2-propanol	59	5.627	5.641	-0.014	94	644190	600.0	621.7	
39 Methylene Chloride	84	5.669	5.669	0.000	93	2002911	60.0	57.3	
40 Acrylonitrile	53	5.808	5.808	0.000	98	2450889	600.0	584.3	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	3344217	60.0	62.9	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	98	2518405	60.0	58.9	
43 Hexane	57	6.075	6.082	-0.007	93	4280393	60.0	56.2	
44 Vinyl acetate	43	6.154	6.154	0.000	97	3142864	120.0	118.3	
46 1,1-Dichloroethane	63	6.211	6.218	-0.007	96	4286145	60.0	60.8	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	1304838	240.0	239.5	
52 sec-Butyl Alcohol	45	6.626	6.633	-0.007	95	1452630	1800.0	1858.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.640	6.647	-0.007	86	2378230	60.0	59.9	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	90	3585240	60.0	58.1	
56 Chlorobromomethane	128	6.833	6.840	-0.007	96	781904	60.0	63.6	
57 Chloroform	83	6.847	6.847	0.000	94	3520669	60.0	60.3	
58 Tetrahydrofuran	42	6.876	6.876	0.000	87	380424	120.0	126.2	
59 Isobutyl alcohol	41	7.040	7.040	0.000	93	498102	1500.0	1583.2	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	3477099	60.0	59.0	
61 Cyclohexane	56	7.155	7.155	0.000	92	4960124	60.0	58.0	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	95	3337257	60.0	59.4	
63 Carbon tetrachloride	117	7.219	7.219	0.000	98	2997507	60.0	62.1	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	97	1850179	60.0	63.1	
66 Benzene	78	7.355	7.355	0.000	96	9408627	60.0	59.0	
67 n-Heptane	43	7.448	7.448	0.000	92	4573520	60.0	57.9	
69 Trichloroethene	95	7.820	7.820	0.000	98	2542626	60.0	60.8	
70 2-Pentanone	43	7.848	7.848	0.000	99	2233314	240.0	252.5	
72 1,2-Dichloropropane	63	7.999	7.998	0.001	96	2138373	60.0	59.9	
73 Methylcyclohexane	55	8.020	8.020	0.000	95	3956362	60.0	57.8	
74 1,4-Dioxane	88	8.056	8.056	0.000	95	143412	1200.0	1370.0	
75 Dibromomethane	93	8.099	8.099	0.000	96	714305	60.0	63.7	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	2348386	60.0	62.2	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	92	217204	60.0	85.5	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	2979699	60.0	62.4	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	2632317	240.0	241.9	
81 Toluene	91	8.778	8.778	0.000	98	9984860	60.0	57.0	
82 Ethyl methacrylate	69	8.857	8.856	0.001	91	1321370	60.0	61.7	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	2088407	60.0	64.5	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	91	1073298	60.0	60.8	
85 2-Hexanone	43	9.135	9.143	-0.007	95	1800011	240.0	237.5	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	94	1997174	60.0	61.9	
87 Tetrachloroethene	164	9.200	9.200	0.000	97	2170291	60.0	59.8	
88 Chlorodibromomethane	129	9.350	9.350	0.000	91	1315773	60.0	67.2	
90 Ethylene Dibromide	107	9.479	9.479	0.000	98	994939	60.0	63.5	
91 1-Chlorohexane	91	9.715	9.715	0.000	99	3928882	60.0	57.8	
92 Chlorobenzene	112	9.822	9.822	0.000	95	6215990	60.0	60.0	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.850	0.000	96	1825486	60.0	62.2	
94 Ethylbenzene	106	9.858	9.858	0.000	98	3837060	60.0	59.6	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	99	4790561	60.0	60.7	
97 o-Xylene	106	10.251	10.251	0.000	87	4149089	60.0	58.5	
96 Styrene	104	10.251	10.251	0.000	87	6533948	60.0	60.7	
98 Bromoform	173	10.444	10.444	0.000	97	654449	60.0	69.9	
99 Isopropylbenzene	105	10.508	10.508	0.000	97	11430222	60.0	53.8	
101 Cyclohexanone	55	10.623	10.623	0.000	94	847822	2400.0	2449.7	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	1035546	60.0	60.2	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	95	293931	60.0	63.4	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	277651	60.0	59.1	
106 N-Propylbenzene	120	10.823	10.823	0.000	97	3423503	60.0	58.0	
105 Bromobenzene	156	10.823	10.823	0.000	97	2203308	60.0	58.6	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	9285971	60.0	56.5	
108 2-Chlorotoluene	126	10.944	10.944	0.000	94	2587802	60.0	56.6	
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	2731876	60.0	60.2	
110 tert-Butylbenzene	119	11.230	11.230	0.000	93	9697592	60.0	56.5	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	9388912	60.0	58.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.409	11.409	0.000	95	2738594	60.0	58.8	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	96	10709986	60.0	57.1	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	98	4699612	60.0	60.5	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	94	4478762	60.0	60.4	
117 n-Butylbenzene	91	11.853	11.852	0.001	97	9925435	60.0	57.6	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	97	3707266	60.0	61.0	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.703	0.000	86	160328	60.0	67.7	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	2464268	60.0	64.0	
122 Hexachlorobutadiene	225	13.797	13.797	0.000	97	1923721	60.0	61.2	
123 Naphthalene	128	13.990	13.990	0.000	97	2861992	60.0	64.6	
124 1,2,3-Trichlorobenzene	180	14.305	14.312	-0.007	95	1783384	60.0	64.9	
S 149 1,2-Dichloroethene, Total	96				0		120.0	118.9	
S 153 1,3-Dichloropropene, Total	1				0		120.0	126.9	
S 154 1,2-Dichloroethene, Total	1				0		120.0	118.9	
S 155 Xylenes, Total	106				0		120.0	119.2	
S 150 Trihalomethanes, Total	1				0		240.0	259.5	
S 151 Xylenes, Total (URS)	1				0		120.0	119.2	
S 152 Total BTEX	1				0			294.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

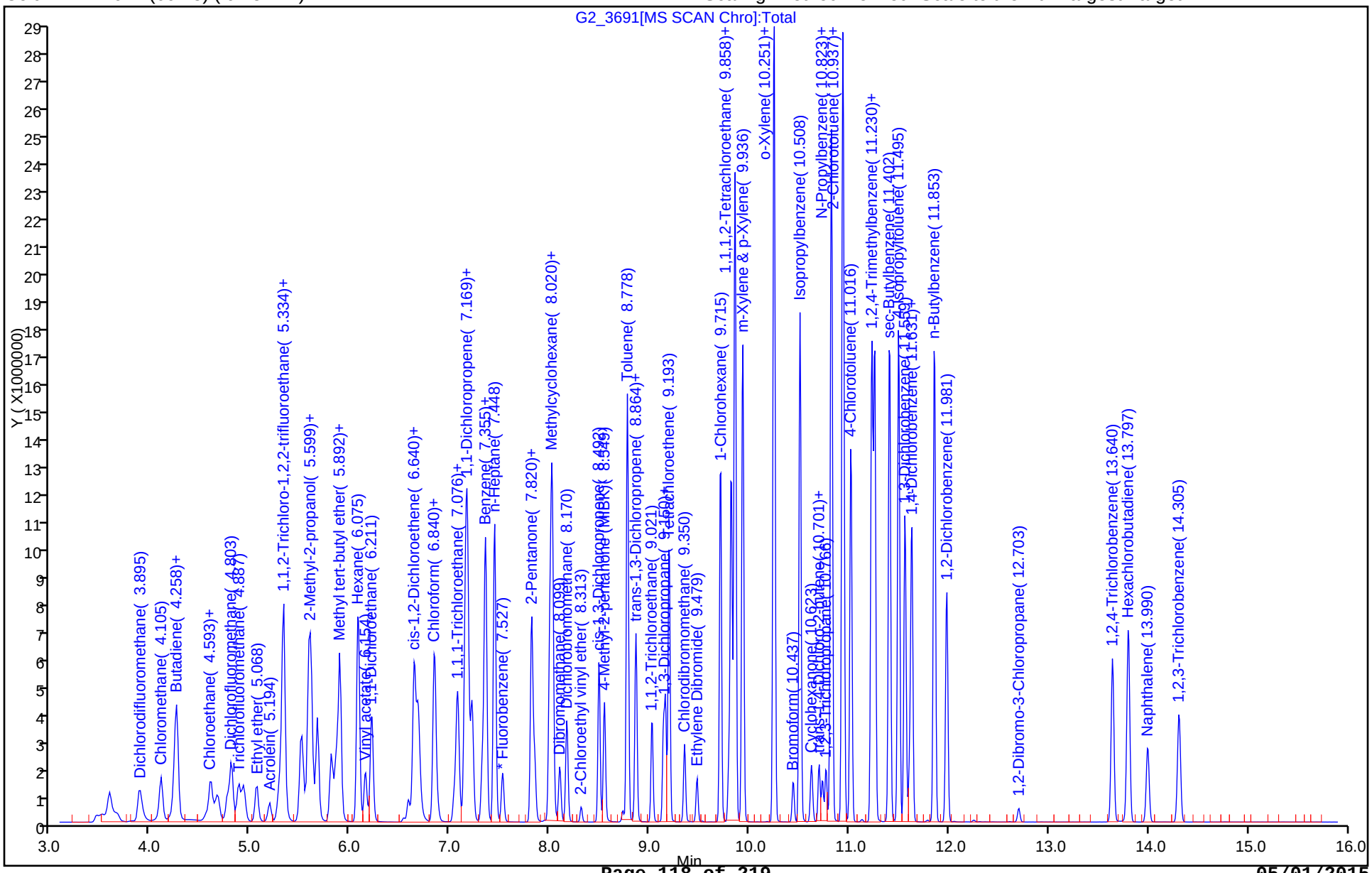
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-2cleve+AVA_00009	Amount Added: 30.00	Units: uL
MV-Main A_00022	Amount Added: 30.00	Units: uL
MV-Gas/Ket A_00032	Amount Added: 30.00	Units: uL

Report Date: 28-Apr-2015 23:36:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3691.D				
Injection Date:	28-Apr-2015 15:41:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	ic			Worklist Smp#:	15
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



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

Lab Name: TestAmerica Denver Job No.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

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

Calibration Files:

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

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

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

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

Lab Name: TestAmerica Denver Job No.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

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

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

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

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

Lab Name: TestAmerica Denver Job No.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

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

Calibration Files:

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

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

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

Lab Name: TestAmerica Denver Job No.: 280-68269-2 Analy Batch No.: 274898

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60.2 ID: 0.25(mm) Heated Purge: (Y/N) N

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

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

Curve Type Legend:

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

TestAmerica Denver
Target Compound Quantitation Report

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

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

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

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

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

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

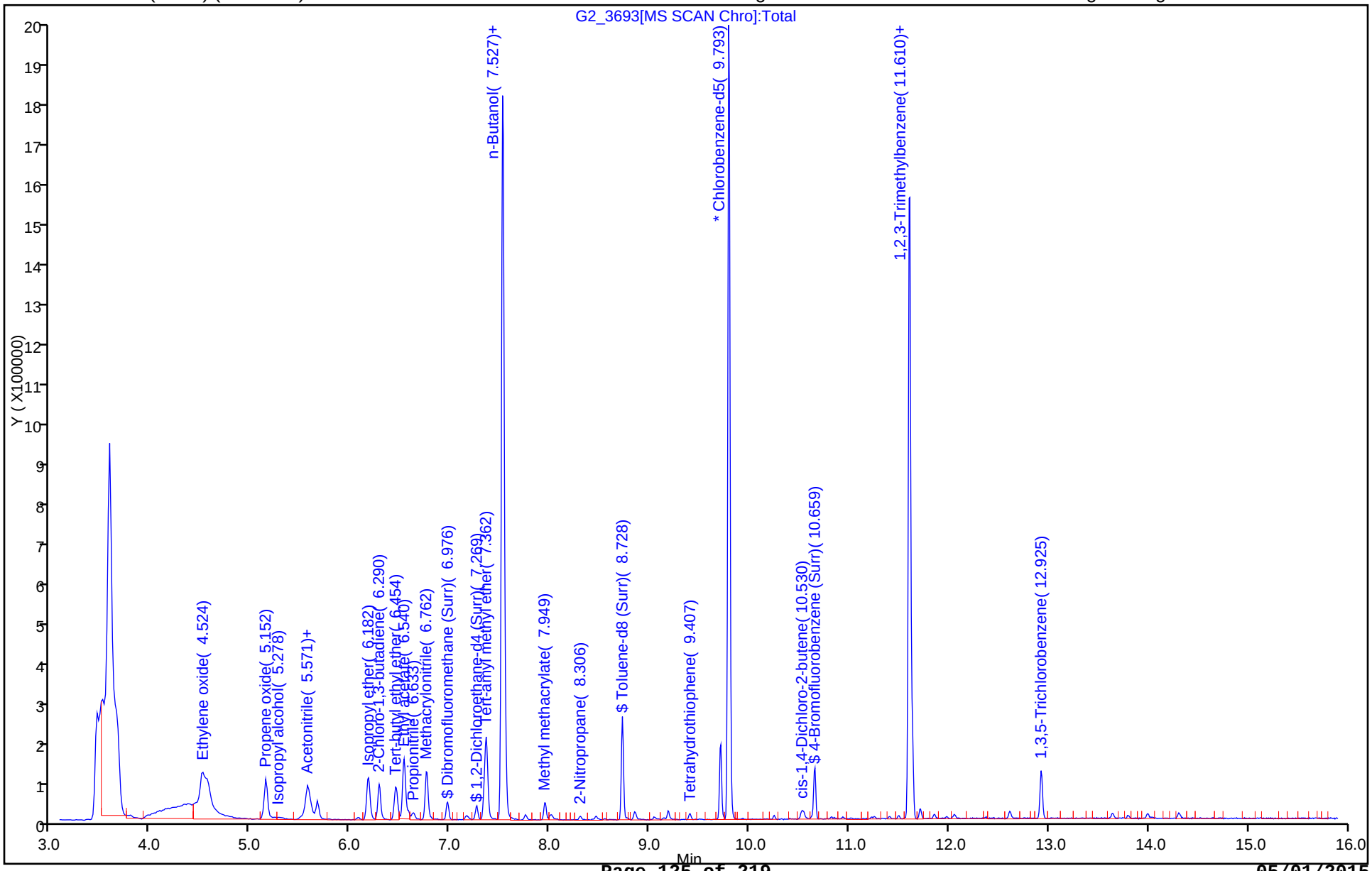
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.08	Units: uL
MV-Supp A_00011	Amount Added:	0.50	Units: uL

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

TestAmerica Denver

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

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



TestAmerica Denver
Target Compound Quantitation Report

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

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

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

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

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

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

a - User Assigned ID

Reagents:

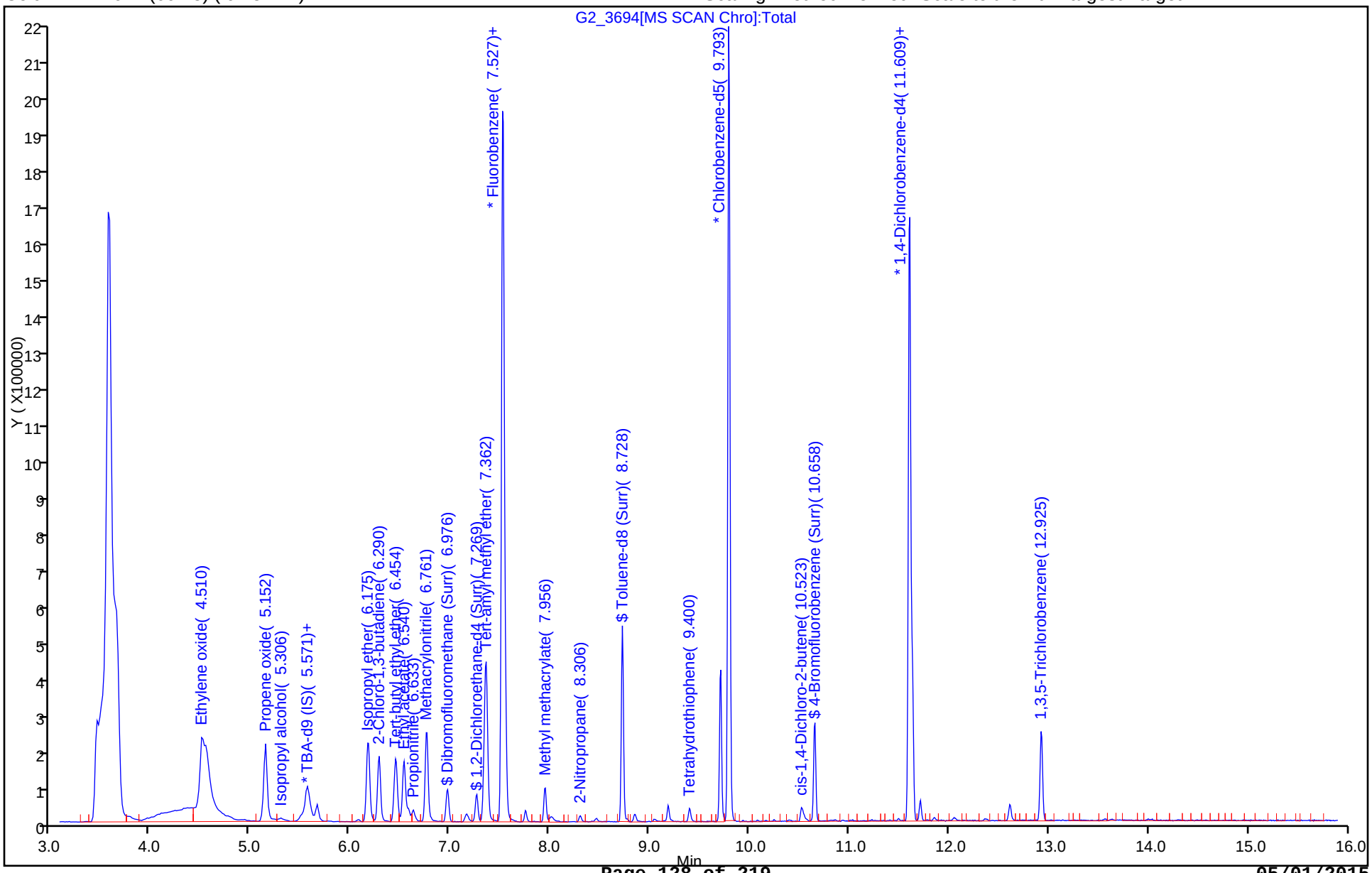
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.16	Units: uL
MV-Supp A_00011	Amount Added:	1.00	Units: uL

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

TestAmerica Denver

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

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



Manual Integration/User Assign Peak Report

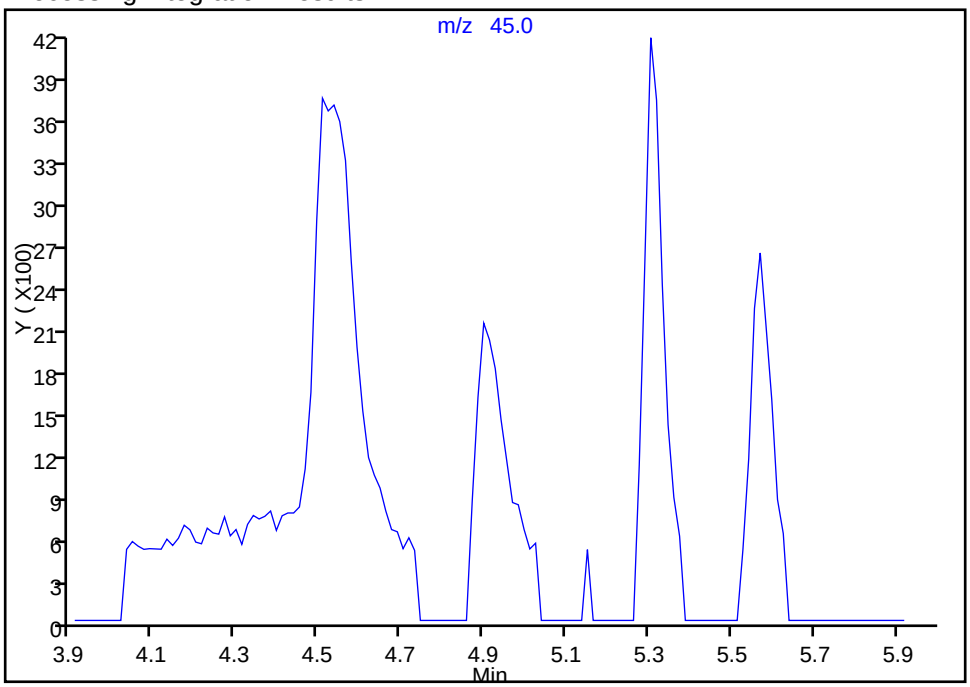
TestAmerica Denver

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

23 Ethanol, CAS: 64-17-5

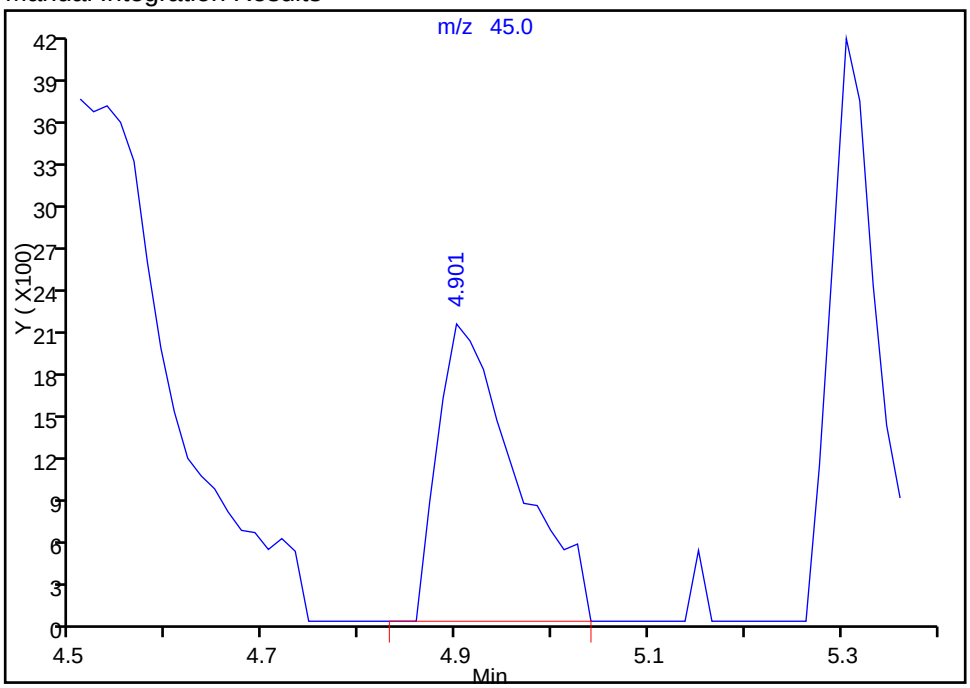
Not Detected
Expected RT: 4.91

Processing Integration Results



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

Manual Integration Results



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

TestAmerica Denver
Target Compound Quantitation Report

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

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

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

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

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

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

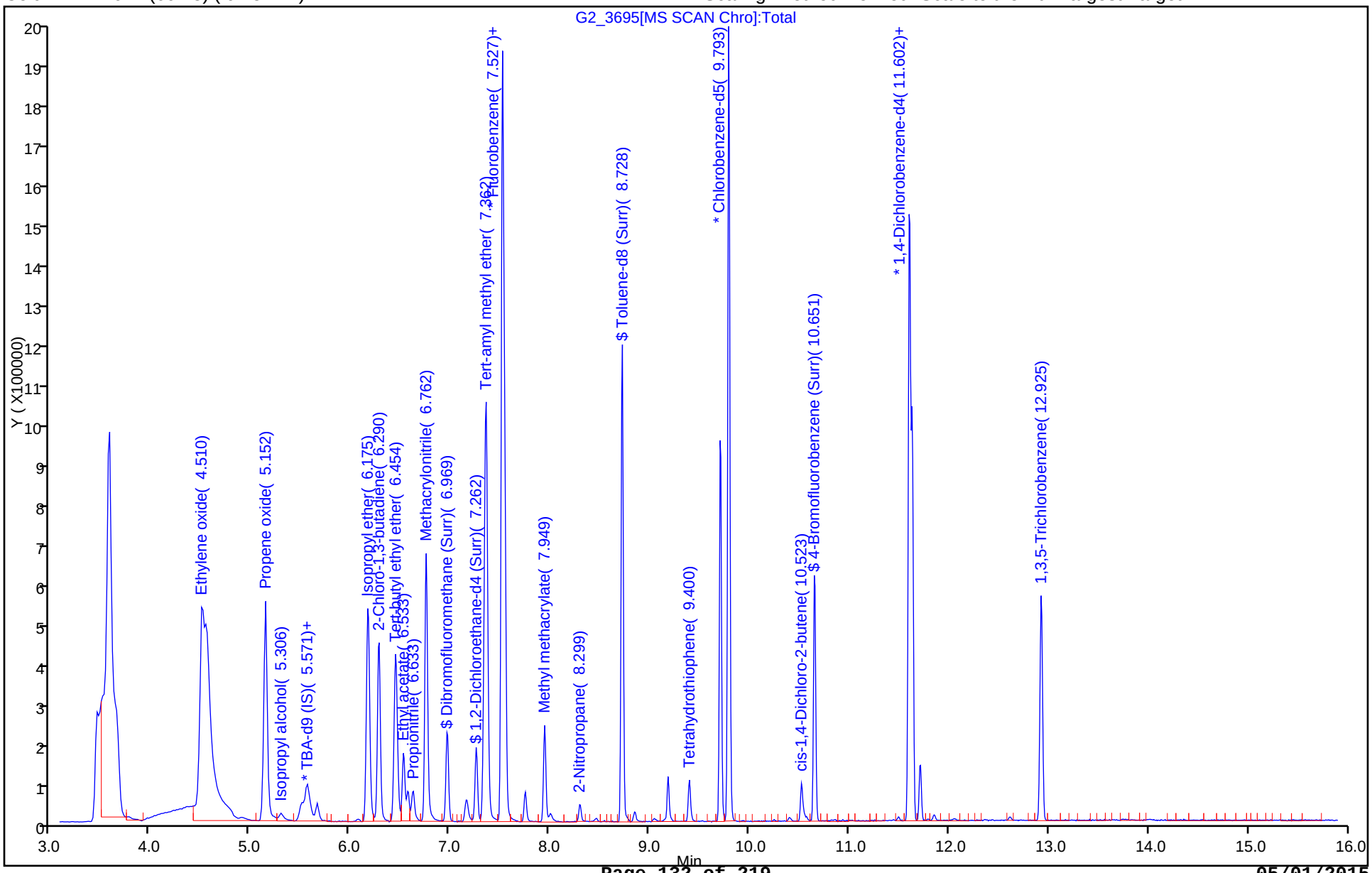
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.40	Units: uL
MV-Supp A_00011	Amount Added:	2.50	Units: uL

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

TestAmerica Denver

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

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



TestAmerica Denver
Target Compound Quantitation Report

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

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

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

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

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

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

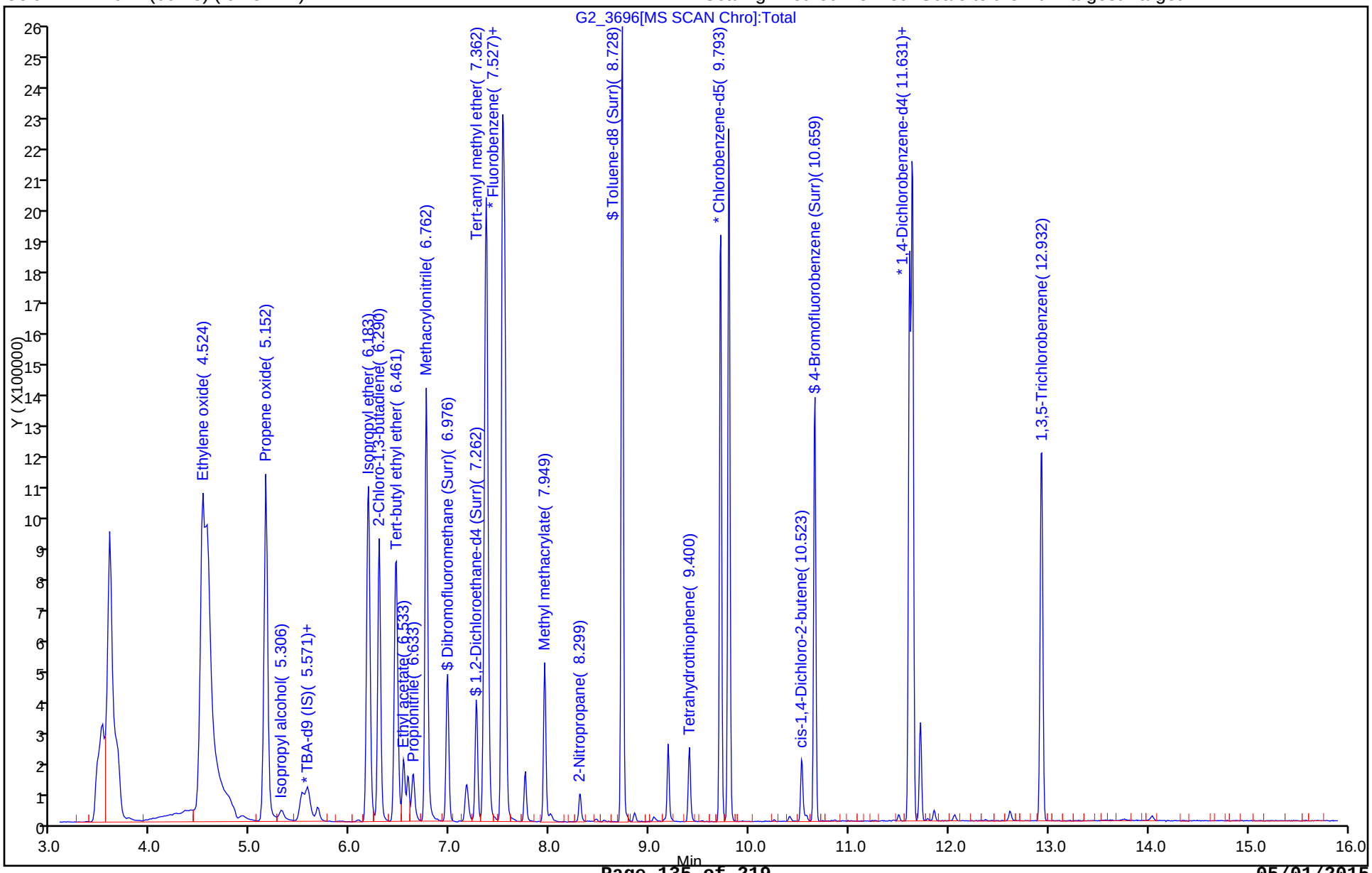
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL
MV-Supp A_00011	Amount Added:	5.00	Units: uL

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

TestAmerica Denver

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

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



TestAmerica Denver
Target Compound Quantitation Report

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

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

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

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

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

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

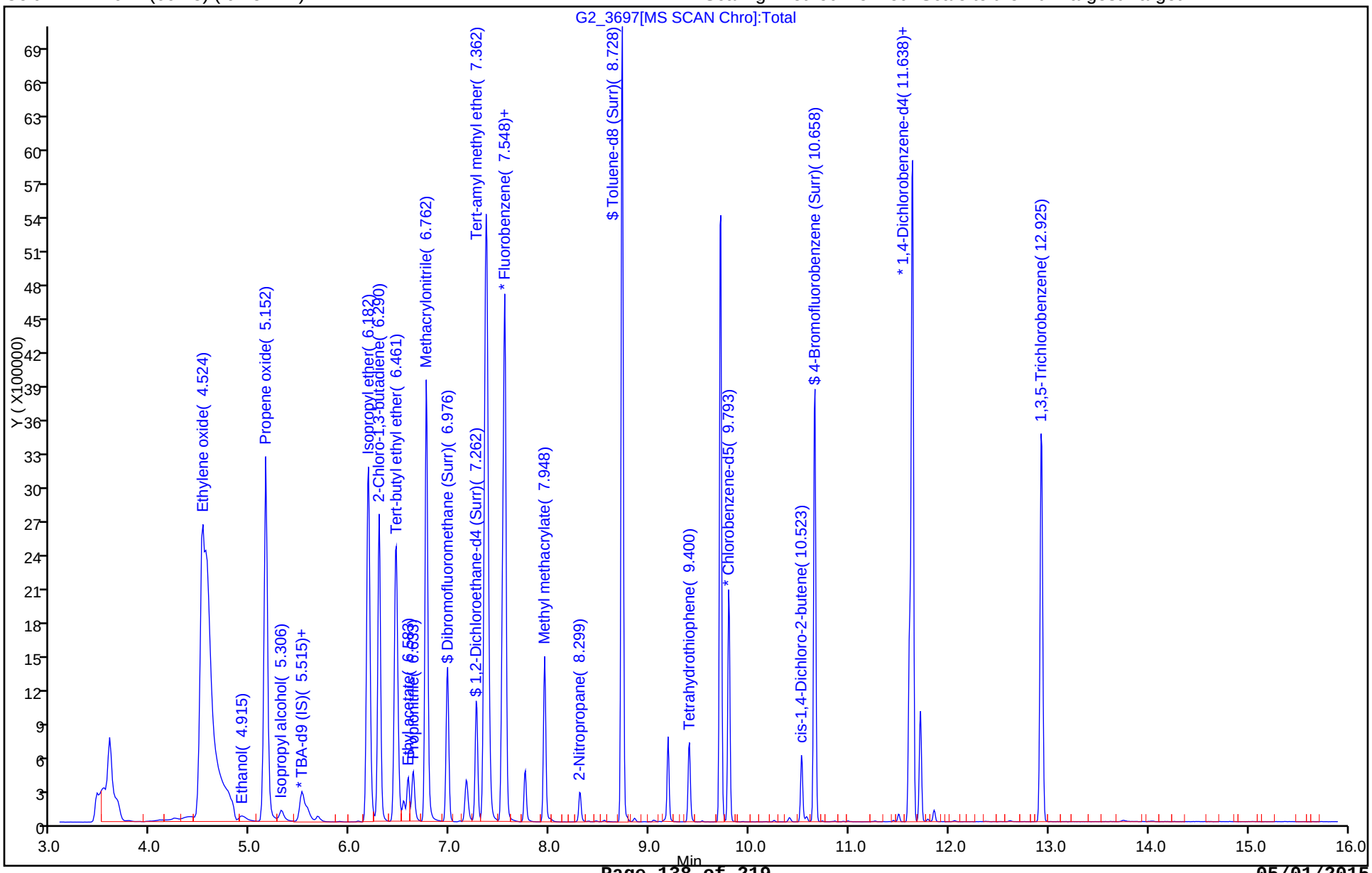
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00043	Amount Added: 2.40	Units: uL
MV-Supp A_00011	Amount Added: 15.00	Units: uL

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

TestAmerica Denver

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

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



TestAmerica Denver
Target Compound Quantitation Report

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

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

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

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

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

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

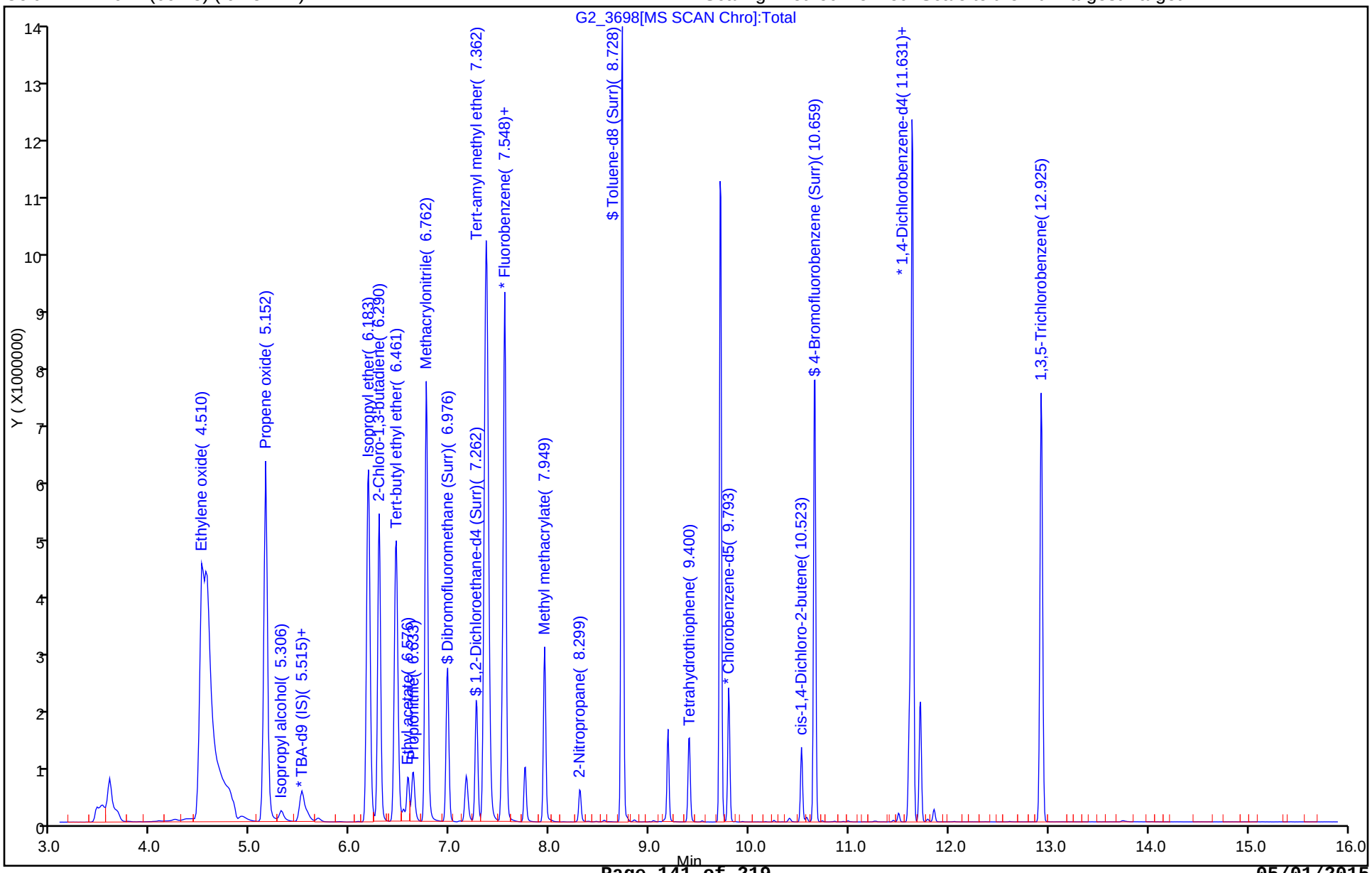
MV-567649-D_00001	Amount Added: 1.00	Units: uL
MV-ARCH SS A_00043	Amount Added: 4.80	Units: uL
MV-Supp A_00011	Amount Added: 30.00	Units: uL

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

TestAmerica Denver

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

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: ICV 280-274898/16 Calibration Date: 04/28/2015 16:00

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3692.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	0.3687	0.3026		8.21	10.0	-17.9	20.0
Chloromethane	Ave	0.3954	0.3394	0.1000	8.58	10.0	-14.2	20.0
Vinyl chloride	Ave	0.3821	0.3275		8.57	10.0	-14.3	20.0
Bromomethane	Ave	0.2613	0.2328		8.91	10.0	-10.9	20.0
Chloroethane	Ave	0.2571	0.2284		8.88	10.0	-11.2	20.0
Dichlorofluoromethane	Ave	0.6004	0.5266		8.77	10.0	-12.3	20.0
Trichlorofluoromethane	Ave	0.4614	0.3975		8.61	10.0	-13.9	20.0
Ethyl ether	Ave	0.1347	0.1267		9.40	10.0	-6.0	20.0
Acrolein	Ave	0.0114	0.0108		94.0	100	-6.0	20.0
Acetone	Ave	0.0262	0.0224		34.2	40.0	-14.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2500	0.2250		9.00	10.0	-10.0	20.0
1,1-Dichloroethene	Ave	0.3168	0.2762		8.72	10.0	-12.8	20.0
Iodomethane	Ave	0.4706	0.4405		9.36	10.0	-6.4	20.0
Methyl acetate	Ave	0.0597	0.0543		45.5	50.0	-9.0	20.0
3-Chloro-1-propene	Ave	0.5546	0.4731		8.53	10.0	-14.7	20.0
Carbon disulfide	Ave	1.342	1.179		8.78	10.0	-12.2	20.0
tert-Butyl alcohol	Ave	0.0081	0.0076		93.2	100	-6.8	20.0
Methylene Chloride	Ave	0.2731	0.2462		9.01	10.0	-9.9	20.0
Acrylonitrile	Ave	0.0328	0.0291		88.9	100	-11.1	20.0
Methyl tert-butyl ether	Ave	0.4154	0.3900		9.39	10.0	-6.1	20.0
trans-1,2-Dichloroethene	Ave	0.3338	0.3078		9.22	10.0	-7.8	20.0
Hexane	Ave	2.762	2.576		9.33	10.0	-6.7	20.0
Vinyl acetate	Ave	0.2075	0.2126		20.5	20.0	2.5	20.0
1,1-Dichloroethane	Ave	0.5506	0.5211	0.1000	9.46	10.0	-5.4	20.0
2-Butanone (MEK)	Ave	0.0426	0.0399		37.5	40.0	-6.3	20.0
sec-Butyl Alcohol	Ave	0.0061	0.0054		266	300	-11.2	20.0
cis-1,2-Dichloroethene	Ave	0.3102	0.2842		9.16	10.0	-8.4	20.0
2,2-Dichloropropane	Ave	0.4824	0.4078		8.45	10.0	-15.5	20.0
Bromochloromethane	Ave	0.0960	0.0911		9.49	10.0	-5.1	20.0
Chloroform	Ave	0.4564	0.4190		9.18	10.0	-8.2	20.0
Tetrahydrofuran	Ave	0.0236	0.0237		20.1	20.0	0.6	20.0
Isobutyl alcohol	Ave	0.0025	0.0022		226	250	-9.7	20.0
1,1,1-Trichloroethane	Ave	0.4602	0.4078		8.86	10.0	-11.4	20.0
Cyclohexane	Ave	0.6679	0.6039		9.04	10.0	-9.6	20.0
1,1-Dichloropropene	Ave	0.4391	0.4394		10.0	10.0	0.0	20.0
Carbon tetrachloride	Ave	0.3769	0.3535		9.38	10.0	-6.2	20.0
1,2-Dichloroethane	Ave	0.2293	0.2146		9.36	10.0	-6.4	20.0
Benzene	Ave	1.245	1.165		9.36	10.0	-6.4	20.0
Trichloroethene	Ave	0.3265	0.3056		9.36	10.0	-6.4	20.0
2-Pentanone	Ave	0.0691	0.0558		32.3	40.0	-19.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: ICV 280-274898/16 Calibration Date: 04/28/2015 16:00

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3692.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	0.2788	0.2610		9.36	10.0	-6.4	20.0
Methylcyclohexane	Ave	0.5344	0.4836		9.05	10.0	-9.5	20.0
1,4-Dioxane	Ave	0.0008	0.0008		203	200	1.5	20.0
Dibromomethane	Ave	0.0877	0.0832		9.49	10.0	-5.1	20.0
Bromodichloromethane	Ave	0.2952	0.2648		8.97	10.0	-10.3	20.0
2-Chloroethyl vinyl ether	Lin1	0.0143	0.0152		8.38	10.0	-16.2	20.0
cis-1,3-Dichloropropene	Ave	1.730	1.664		9.62	10.0	-3.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0850	0.0799		37.6	40.0	-6.0	20.0
Toluene	Ave	1.369	1.268		9.26	10.0	-7.4	20.0
Ethyl methacrylate	Ave	0.7768	0.7300		9.40	10.0	-6.0	20.0
trans-1,3-Dichloropropene	Ave	0.2532	0.2591		10.2	10.0	2.4	20.0
1,1,2-Trichloroethane	Ave	0.1380	0.1253		9.07	10.0	-9.3	20.0
2-Hexanone	Ave	0.2747	0.2545		37.0	40.0	-7.4	20.0
1,3-Dichloropropane	Ave	1.170	1.082		9.25	10.0	-7.5	20.0
Tetrachloroethene	Ave	1.315	1.226		9.32	10.0	-6.8	20.0
Chlorodibromomethane	Ave	0.7094	0.6711		9.46	10.0	-5.4	20.0
1,2-Dibromoethane	Ave	0.5676	0.5350		9.42	10.0	-5.8	20.0
1-Chlorohexane	Ave	2.464	2.267		9.20	10.0	-8.0	20.0
Chlorobenzene	Ave	3.755	3.537	0.3000	9.42	10.0	-5.8	20.0
1,1,1,2-Tetrachloroethane	Ave	1.064	1.000		9.40	10.0	-6.0	20.0
Ethylbenzene	Ave	2.334	2.164		9.27	10.0	-7.3	20.0
m-Xylene & p-Xylene	Ave	2.861	2.706		9.46	10.0	-5.4	20.0
o-Xylene	Ave	2.570	2.412		9.38	10.0	-6.2	20.0
Styrene	Ave	3.899	3.677		9.43	10.0	-5.7	20.0
Bromoform	Ave	0.3395	0.3170	0.1000	9.34	10.0	-6.6	20.0
Isopropylbenzene	Ave	5.523	5.215		9.44	10.0	-5.6	20.0
Cyclohexanone	Ave	0.0125	0.0115		366	400	-8.5	20.0
1,1,2,2-Tetrachloroethane	Lin2		0.4310	0.3000	9.53	10.0	-4.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1205	0.1146		9.51	10.0	-4.9	20.0
1,2,3-Trichloropropane	Ave	0.1220	0.1124		9.21	10.0	-7.9	20.0
Bromobenzene	Ave	0.9768	0.9251		9.47	10.0	-5.3	20.0
N-Propylbenzene	Ave	1.533	1.453		9.48	10.0	-5.2	20.0
1,3,5-Trimethylbenzene	Ave	4.270	4.044		9.47	10.0	-5.3	20.0
2-Chlorotoluene	Ave	1.188	1.121		9.43	10.0	-5.7	20.0
4-Chlorotoluene	Ave	1.179	1.116		9.46	10.0	-5.4	20.0
tert-Butylbenzene	Ave	4.458	4.218		9.46	10.0	-5.4	20.0
1,2,4-Trimethylbenzene	Ave	4.208	3.904		9.28	10.0	-7.2	20.0
sec-Butylbenzene	Ave	1.210	1.151		9.51	10.0	-4.9	20.0
p-Isopropyltoluene	Ave	4.871	4.640		9.53	10.0	-4.7	20.0
1,3-Dichlorobenzene	Ave	2.018	1.925		9.54	10.0	-4.6	20.0
1,4-Dichlorobenzene	Ave	1.928	1.826		9.47	10.0	-5.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: ICV 280-274898/16 Calibration Date: 04/28/2015 16:00

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3692.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	4.475	4.217		9.42	10.0	-5.8	20.0
1,2-Dichlorobenzene	Ave	1.580	1.504		9.52	10.0	-4.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0615	0.0623		10.1	10.0	1.3	20.0
1,2,4-Trichlorobenzene	Ave	1.001	1.000		9.99	10.0	-0.0	20.0
Hexachlorobutadiene	Ave	0.8163	0.7843		9.61	10.0	-3.9	20.0
Naphthalene	Ave	1.151	1.160		10.1	10.0	0.8	20.0
1,2,3-Trichlorobenzene	Lin2		0.7258		10.1	10.0	1.3	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3692.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 28-Apr-2015 16:00:30 ALS Bottle#: 17 Worklist Smp#: 16
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist:

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:36:52 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: contrerase Date: 28-Apr-2015 23:32:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	201835	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1799355	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	85	380328	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	95	498579	12.5	12.5	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	435513	10.0	8.21	
14 Chloromethane	50	4.105	4.091	0.015	99	488585	10.0	8.58	
16 Vinyl chloride	62	4.244	4.244	0.000	98	471452	10.0	8.57	
138 Butadiene	54	4.258	4.258	0.000	0	410781	NC	NC	
19 Bromomethane	94	4.607	4.607	0.000	90	335161	10.0	8.91	
20 Chloroethane	64	4.663	4.663	0.000	100	328749	10.0	8.88	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	758075	10.0	8.77	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	572123	10.0	8.61	
25 Ethyl ether	59	5.068	5.068	0.000	91	182309	10.0	9.40	
28 Acrolein	56	5.194	5.194	0.000	99	154839	100.0	94.0	
29 Acetone	43	5.292	5.292	0.000	100	128677	40.0	34.2	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.320	0.014	94	323943	10.0	9.00	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	397530	10.0	8.72	
34 Iodomethane	142	5.501	5.501	0.000	97	634134	10.0	9.36	
35 Methyl acetate	43	5.529	5.529	0.000	97	390684	50.0	45.5	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	84	681058	10.0	8.53	
37 Carbon disulfide	76	5.613	5.613	0.000	99	1696735	10.0	8.78	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	92	108623	100.0	93.2	
39 Methylene Chloride	84	5.669	5.669	0.000	93	354366	10.0	9.01	
40 Acrylonitrile	53	5.808	5.808	0.000	98	419525	100.0	88.9	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	561429	10.0	9.39	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	97	443090	10.0	9.22	
43 Hexane	57	6.082	6.082	0.000	92	783865	10.0	9.33	
44 Vinyl acetate	43	6.154	6.154	0.000	97	612174	20.0	20.5	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	750044	10.0	9.46	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	99	229724	40.0	37.5	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	95	234176	300.0	266.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
53 cis-1,2-Dichloroethene	96	6.640	6.647	-0.007	80	409085	10.0	9.16	
54 2,2-Dichloropropane	77	6.676	6.683	-0.007	88	586977	10.0	8.45	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	131090	10.0	9.49	
57 Chloroform	83	6.847	6.847	0.000	94	603130	10.0	9.18	
58 Tetrahydrofuran	42	6.876	6.876	0.000	88	68244	20.0	20.1	
59 Isobutyl alcohol	41	7.048	7.040	0.008	94	79840	250.0	225.6	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	586982	10.0	8.86	
61 Cyclohexane	56	7.155	7.155	0.000	91	869235	10.0	9.04	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	632507	10.0	10.0	
63 Carbon tetrachloride	117	7.219	7.219	0.000	98	508920	10.0	9.38	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	97	308951	10.0	9.36	
66 Benzene	78	7.355	7.355	0.000	96	1676755	10.0	9.36	
67 n-Heptane	43	7.448	7.448	0.000	93	828906	10.0	9.33	
69 Trichloroethene	95	7.820	7.820	0.000	98	439915	10.0	9.36	
70 2-Pentanone	43	7.848	7.848	0.000	99	321482	40.0	32.3	
72 1,2-Dichloropropane	63	7.999	7.998	0.001	96	375765	10.0	9.36	
73 Methylcyclohexane	55	8.020	8.020	0.000	95	696166	10.0	9.05	
74 1,4-Dioxane	88	8.056	8.056	0.000	89	23890	200.0	202.9	
75 Dibromomethane	93	8.099	8.099	0.000	97	119761	10.0	9.49	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	381115	10.0	8.97	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	91	21924	10.0	8.38	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	506339	10.0	9.62	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	460089	40.0	37.6	
81 Toluene	91	8.778	8.778	0.000	99	1825677	10.0	9.26	
82 Ethyl methacrylate	69	8.857	8.856	0.001	91	222097	10.0	9.40	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	373029	10.0	10.2	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	90	180301	10.0	9.07	
85 2-Hexanone	43	9.143	9.143	0.001	96	309686	40.0	37.0	
86 1,3-Dichloropropane	76	9.157	9.157	0.000	98	329266	10.0	9.25	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	373031	10.0	9.32	
88 Chlorodibromomethane	129	9.350	9.350	0.000	91	204178	10.0	9.46	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	162772	10.0	9.42	
91 1-Chlorohexane	91	9.715	9.715	0.000	99	689769	10.0	9.20	
92 Chlorobenzene	112	9.822	9.822	0.000	97	1076094	10.0	9.42	
93 1,1,1,2-Tetrachloroethane	131	9.850	9.850	0.000	97	304381	10.0	9.40	
94 Ethylbenzene	106	9.858	9.858	0.000	98	658572	10.0	9.27	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	823273	10.0	9.46	
97 o-Xylene	106	10.251	10.251	0.000	88	733766	10.0	9.38	
96 Styrene	104	10.251	10.251	0.000	88	1118760	10.0	9.43	
98 Bromoform	173	10.437	10.444	-0.007	97	96459	10.0	9.34	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	2080019	10.0	9.44	
101 Cyclohexanone	55	10.623	10.623	0.000	93	139693	400.0	366.0	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	171908	10.0	9.53	
103 trans-1,4-Dichloro-2-buten	53	10.730	10.730	0.000	92	45707	10.0	9.51	
104 1,2,3-Trichloropropane	110	10.766	10.773	-0.007	85	44844	10.0	9.21	
106 N-Propylbenzene	120	10.823	10.823	0.000	99	579714	10.0	9.48	
105 Bromobenzene	156	10.823	10.823	0.000	97	368996	10.0	9.47	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	1612906	10.0	9.47	
108 2-Chlorotoluene	126	10.944	10.944	0.000	96	447078	10.0	9.43	
109 4-Chlorotoluene	126	11.016	11.016	0.000	98	445208	10.0	9.46	
110 tert-Butylbenzene	119	11.230	11.230	0.000	92	1682390	10.0	9.46	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	1557235	10.0	9.28	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	459055	10.0	9.51	
113 4-Isopropyltoluene	119	11.495	11.495	0.000	97	1850910	10.0	9.53	
114 1,3-Dichlorobenzene	146	11.559	11.559	0.000	97	767784	10.0	9.54	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	728451	10.0	9.47	
117 n-Butylbenzene	91	11.853	11.852	0.001	98	1682166	10.0	9.42	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	600080	10.0	9.52	
119 1,2-Dibromo-3-Chloropropan	157	12.703	12.703	0.000	85	24861	10.0	10.1	
121 1,2,4-Trichlorobenzene	180	13.640	13.640	0.000	94	398862	10.0	10.0	
122 Hexachlorobutadiene	225	13.797	13.797	0.000	96	312823	10.0	9.61	
123 Naphthalene	128	13.998	13.990	0.008	97	462651	10.0	10.1	
124 1,2,3-Trichlorobenzene	180	14.312	14.312	0.000	96	289500	10.0	10.1	
S 149 1,2-Dichloroethene, Total	96				0		20.0	18.4	
S 153 1,3-Dichloropropene, Total	1				0		20.0	19.9	
S 154 1,2-Dichloroethene, Total	1				0		20.0	18.4	
S 155 Xylenes, Total	106				0		20.0	18.8	
S 150 Trihalomethanes, Total	1				0		40.0	36.9	
S 151 Xylenes, Total (URS)	1				0		20.0	18.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

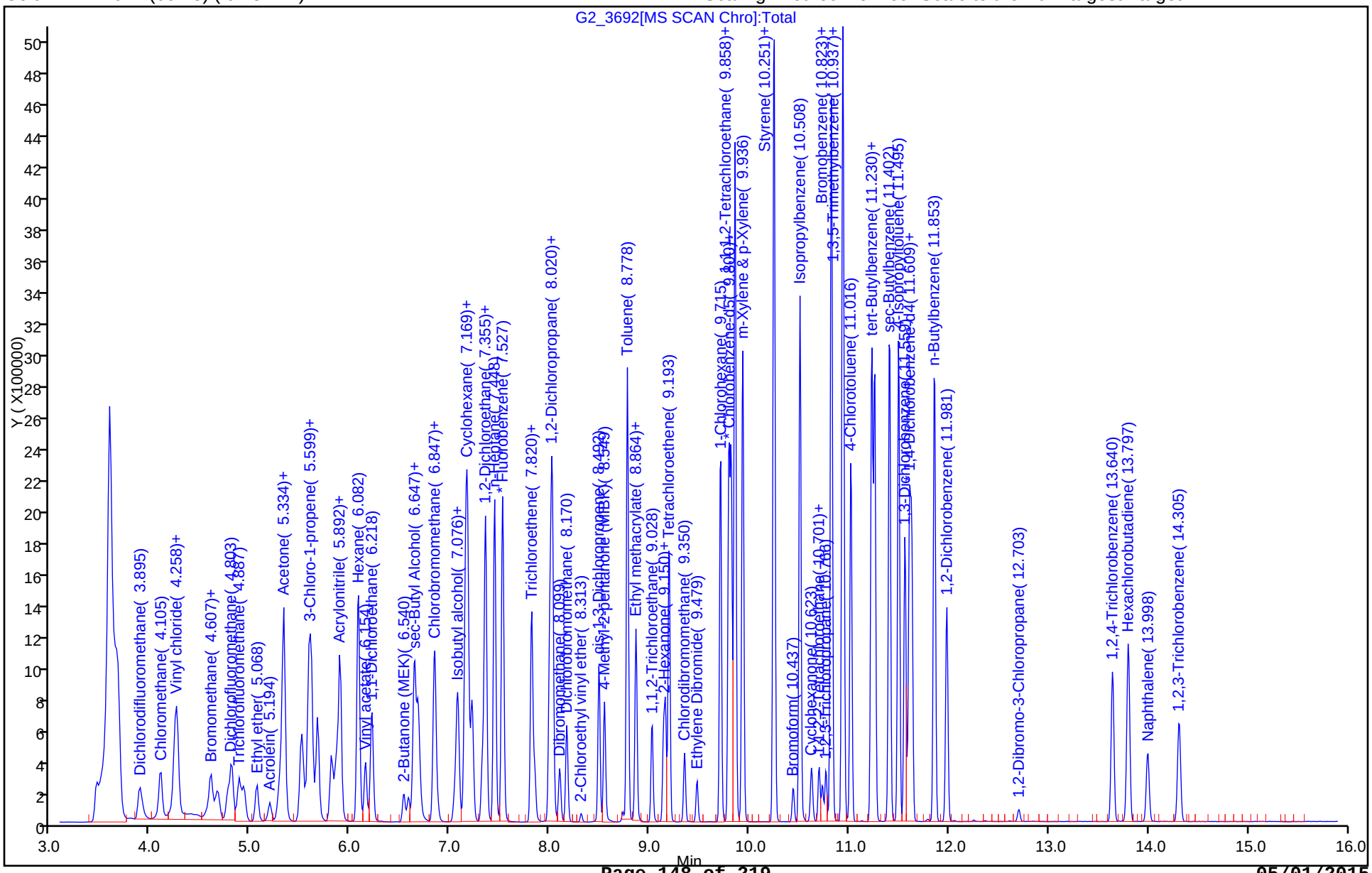
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-SS 2-Cleve_00020	Amount Added:	5.00	Units: uL
MV-Main B_00009	Amount Added:	5.00	Units: uL
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL

Report Date: 28-Apr-2015 23:36:53 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3692.D				
Injection Date:	28-Apr-2015 16:00:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	icv			Worklist Smp#:	16
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: ICV 280-274898/23 Calibration Date: 04/28/2015 18:14

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 16:19

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 17:55

Lab File ID: G2_3699.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Ave	0.0009	0.0010		565	500	13.0	20.0
Isopropyl alcohol	Ave	0.0050	0.0053		105	100	4.5	20.0
Acetonitrile	Ave	0.0087	0.0092		105	100	5.5	20.0
Isopropyl ether	Ave	0.1786	0.1960		11.0	10.0	9.7	20.0
2-Chloro-1,3-butadiene	Ave	0.4359	0.4554		10.4	10.0	4.5	20.0
Tert-butyl ethyl ether	Ave	0.5286	0.5686		10.8	10.0	7.6	20.0
Ethyl acetate	Ave	0.0590	0.0323		11.0	20.0	-45.2*	20.0
Propionitrile	Ave	0.0100	0.0109		108	100	8.4	20.0
Methacrylonitrile	Ave	0.0499	0.0539		108	100	8.0	20.0
Tert-amyl methyl ether	Ave	0.4143	0.4471		10.8	10.0	7.9	20.0
n-Butanol	Lin2		0.0032		269	250	7.6	20.0
Methyl methacrylate	Ave	0.0275	0.0303		22.1	20.0	10.3	20.0
2-Nitropropane	Ave	0.0183	0.0188		20.5	20.0	2.3	20.0
cis-1,4-Dichloro-2-butene	Ave	0.1111	0.1138		10.2	10.0	2.4	20.0
1,2,3-Trimethylbenzene	Ave	3.222	3.128		9.71	10.0	-2.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2166	0.2198		10.2	10.0	1.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1806	0.1870		10.4	10.0	3.5	20.0
Toluene-d8 (Surr)	Ave	5.193	5.247		10.1	10.0	1.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.176	1.142		9.70	10.0	-3.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3699.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 28-Apr-2015 18:14:30 ALS Bottle#: 24 Worklist Smp#: 23
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: ilczyszyn Instrument ID: VMS_G2
Sublist:

Method: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-Apr-2015 23:44:20 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

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

First Level Reviewer: contrerase Date: 28-Apr-2015 19:04:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	184517	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1646174	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	344955	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.610	-0.001	94	442019	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	289492	10.0	10.2	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	246236	10.0	10.4	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1447960	10.0	10.1	
$ 9 4-Bromofluorobenzene (Surr	95	10.651	10.659	-0.008	90	403728	10.0	9.70	
18 Ethylene oxide	43	4.523	4.524	-0.001	100	1436079	2000.0	2179.6	
23 Ethanol	45	4.915	4.915	-0.001	98	64071	500.0	565.0	
27 Propene oxide	58	5.152	5.152	0.000	96	1183636	500.0	517.8	
30 Isopropyl alcohol	45	5.306	5.306	0.000	98	69218	100.0	104.5	
33 Acetonitrile	41	5.515	5.515	0.000	99	121411	100.0	105.5	
45 Isopropyl ether	87	6.182	6.183	-0.001	94	258080	10.0	11.0	
47 2-Chloro-1,3-butadiene	53	6.290	6.290	0.000	91	599735	10.0	10.4	
48 Tert-butyl ethyl ether	59	6.454	6.461	-0.007	98	748820	10.0	10.8	
49 Ethyl acetate	43	6.583	6.576	0.007	99	85156	20.0	11.0	
51 Propionitrile	54	6.633	6.633	0.000	98	143064	100.0	108.4	
55 Methacrylonitrile	41	6.761	6.762	-0.001	92	710216	100.0	108.0	
65 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	588795	10.0	10.8	
68 n-Butanol	56	7.548	7.548	0.000	35	105048	250.0	268.9	
71 Methyl methacrylate	100	7.948	7.949	-0.001	93	79771	20.0	22.1	
77 2-Nitropropane	41	8.306	8.299	0.007	99	49439	20.0	20.5	
89 Tetrahydrothiophene	60	9.400	9.400	0.000	92	82164	10.0	9.60	
100 cis-1,4-Dichloro-2-butene	53	10.522	10.523	-0.001	94	40239	10.0	10.2	
115 1,2,3-Trimethylbenzene	105	11.631	11.638	-0.007	98	1106190	10.0	9.71	
120 1,3,5-Trichlorobenzene	180	12.925	12.932	-0.007	98	440593	10.0	9.83	
144 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

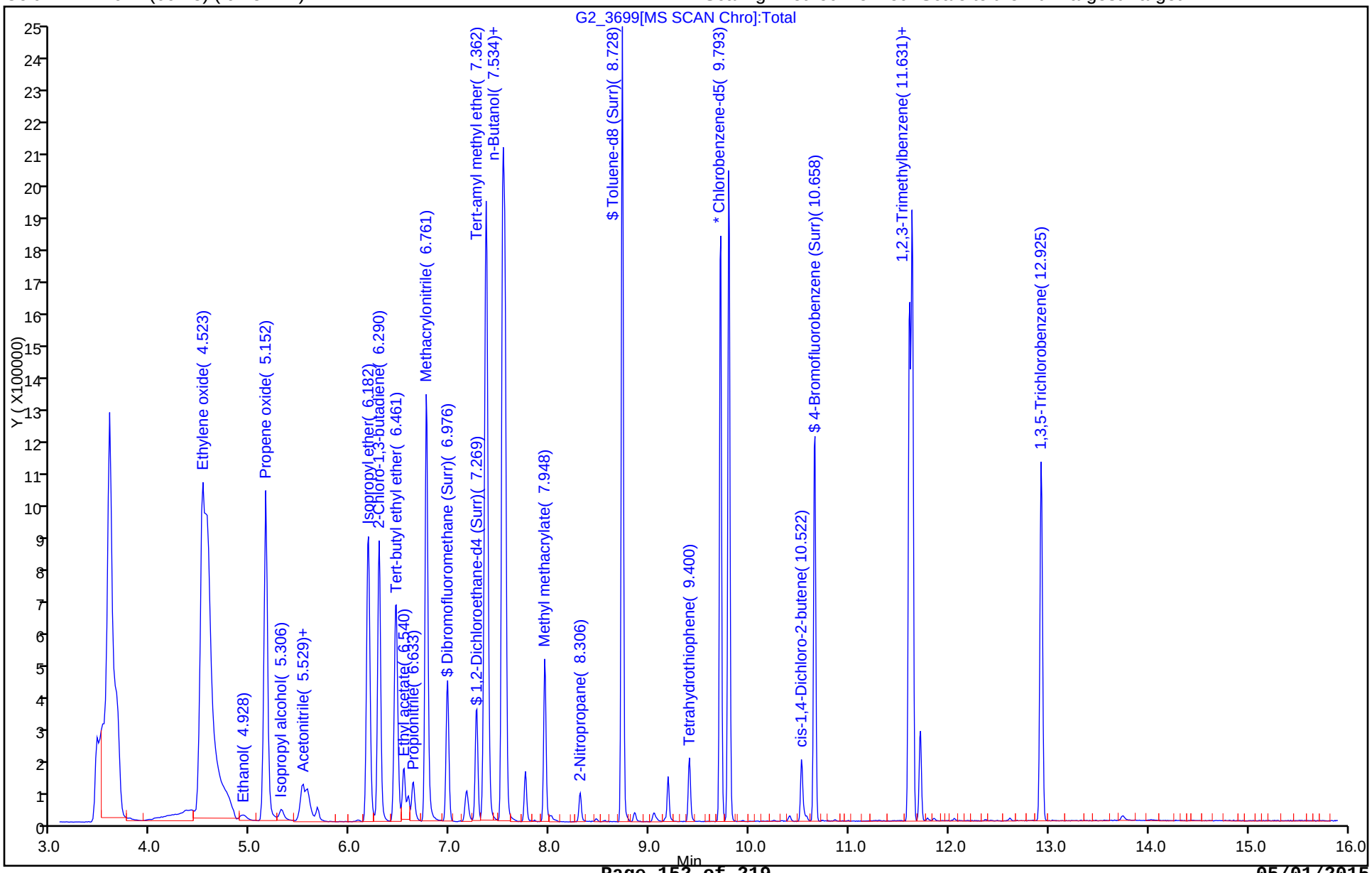
MV-567649-D_00001	Amount Added:	1.00	Units: uL
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL
MV-Supp B_00005	Amount Added:	5.00	Units: uL

Report Date: 28-Apr-2015 23:44:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3699.D				
Injection Date:	28-Apr-2015 18:14:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszyn
Lims ID:	icv			Worklist Smp#:	23
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCV 280-275238/2 Calibration Date: 04/30/2015 08:11

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3760.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	0.3687	0.3120		8.46	10.0	-15.4	20.0
Chloromethane	Ave	0.3954	0.3354	0.1000	8.48	10.0	-15.2	20.0
Vinyl chloride	Ave	0.3821	0.3365		8.81	10.0	-11.9	20.0
Bromomethane	Ave	0.2613	0.2251		8.62	10.0	-13.8	20.0
Chloroethane	Ave	0.2571	0.2277		8.86	10.0	-11.4	20.0
Dichlorofluoromethane	Ave	0.6004	0.5330		8.88	10.0	-11.2	20.0
Trichlorofluoromethane	Ave	0.4614	0.3893		8.44	10.0	-15.6	20.0
Ethyl ether	Ave	0.1347	0.1256		9.32	10.0	-6.8	20.0
Acrolein	Ave	0.0114	0.0108		94.4	100	-5.6	20.0
Acetone	Ave	0.0262	0.0221		33.7	40.0	-15.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2500	0.2524		10.1	10.0	1.0	20.0
1,1-Dichloroethene	Ave	0.3168	0.3017		9.52	10.0	-4.8	20.0
Iodomethane	Ave	0.4706	0.4499		9.56	10.0	-4.4	20.0
Methyl acetate	Ave	0.0597	0.0545		45.7	50.0	-8.7	20.0
3-Chloro-1-propene	Ave	0.5546	0.5356		9.66	10.0	-3.4	20.0
Carbon disulfide	Ave	1.342	1.302		9.71	10.0	-2.9	20.0
tert-Butyl alcohol	Ave	0.0081	0.0072		88.5	100	-11.5	20.0
Methylene Chloride	Ave	0.2731	0.2517		9.21	10.0	-7.9	20.0
Acrylonitrile	Ave	0.0328	0.0288		88.0	100	-12.0	20.0
Methyl tert-butyl ether	Ave	0.4154	0.3765		9.06	10.0	-9.4	20.0
trans-1,2-Dichloroethene	Ave	0.3338	0.3131		9.38	10.0	-6.2	20.0
Hexane	Ave	2.762	2.715		9.83	10.0	-1.7	20.0
Vinyl acetate	Ave	0.2075	0.2129		20.5	20.0	2.6	20.0
1,1-Dichloroethane	Ave	0.5506	0.5206	0.1000	9.45	10.0	-5.5	20.0
2-Butanone (MEK)	Ave	0.0426	0.0380		35.7	40.0	-10.7	20.0
sec-Butyl Alcohol	Ave	0.0061	0.0050		244	300	-18.6	20.0
cis-1,2-Dichloroethene	Ave	0.3102	0.2901		9.35	10.0	-6.5	20.0
2,2-Dichloropropane	Ave	0.4824	0.4502		9.33	10.0	-6.7	20.0
Bromochloromethane	Ave	0.0960	0.0929		9.68	10.0	-3.2	20.0
Chloroform	Ave	0.4564	0.4162		9.12	10.0	-8.8	20.0
Tetrahydrofuran	Ave	0.0236	0.0216		18.4	20.0	-8.2	20.0
Isobutyl alcohol	Ave	0.0025	0.0022		226	250	-9.4	20.0
1,1,1-Trichloroethane	Ave	0.4602	0.4152		9.02	10.0	-9.8	20.0
Cyclohexane	Ave	0.6679	0.6508		9.74	10.0	-2.6	20.0
1,1-Dichloropropene	Ave	0.4391	0.4245		9.67	10.0	-3.3	20.0
Carbon tetrachloride	Ave	0.3769	0.3486		9.25	10.0	-7.5	20.0
1,2-Dichloroethane	Ave	0.2293	0.2054		8.96	10.0	-10.4	20.0
Benzene	Ave	1.245	1.198		9.62	10.0	-3.8	20.0
Trichloroethene	Ave	0.3265	0.3056		9.36	10.0	-6.4	20.0
2-Pentanone	Ave	0.0691	0.0771		44.6	40.0	11.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCV 280-275238/2 Calibration Date: 04/30/2015 08:11

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3760.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	0.2788	0.2622		9.40	10.0	-6.0	20.0
Methylcyclohexane	Ave	0.5344	0.5061		9.47	10.0	-5.3	20.0
1,4-Dioxane	Ave	0.0008	0.0008		194	200	-3.1	20.0
Dibromomethane	Ave	0.0877	0.0820		9.35	10.0	-6.5	20.0
Bromodichloromethane	Ave	0.2952	0.2637		8.93	10.0	-10.7	20.0
2-Chloroethyl vinyl ether	Lin1	0.0143	0.0128		7.18	10.0	-28.2*	20.0
cis-1,3-Dichloropropene	Ave	1.730	1.624		9.39	10.0	-6.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0850	0.0722		34.0	40.0	-15.0	20.0
Toluene	Ave	1.369	1.289		9.42	10.0	-5.8	20.0
Ethyl methacrylate	Ave	0.7768	0.6749		8.69	10.0	-13.1	20.0
trans-1,3-Dichloropropene	Ave	0.2532	0.2306		9.11	10.0	-8.9	20.0
1,1,2-Trichloroethane	Ave	0.1380	0.1221		8.84	10.0	-11.6	20.0
2-Hexanone	Ave	0.2747	0.2246		32.7	40.0	-18.3	20.0
1,3-Dichloropropane	Ave	1.170	1.087		9.29	10.0	-7.1	20.0
Tetrachloroethene	Ave	1.315	1.293		9.83	10.0	-1.7	20.0
Chlorodibromomethane	Ave	0.7094	0.6574		9.27	10.0	-7.3	20.0
1,2-Dibromoethane	Ave	0.5676	0.5224		9.20	10.0	-8.0	20.0
1-Chlorohexane	Ave	2.464	2.355		9.56	10.0	-4.4	20.0
Chlorobenzene	Ave	3.755	3.598	0.3000	9.58	10.0	-4.2	20.0
1,1,1,2-Tetrachloroethane	Ave	1.064	0.996		9.37	10.0	-6.3	20.0
Ethylbenzene	Ave	2.334	2.231		9.56	10.0	-4.4	20.0
m-Xylene & p-Xylene	Ave	2.861	2.764		9.66	10.0	-3.4	20.0
o-Xylene	Ave	2.570	2.460		9.57	10.0	-4.3	20.0
Styrene	Ave	3.899	3.711		9.52	10.0	-4.8	20.0
Bromoform	Ave	0.3395	0.3100	0.1000	9.13	10.0	-8.7	20.0
Isopropylbenzene	Ave	5.523	5.313		9.62	10.0	-3.8	20.0
Cyclohexanone	Ave	0.0125	0.0101		321	400	-19.8	20.0
1,1,2,2-Tetrachloroethane	Lin2		0.4089	0.3000	9.04	10.0	-9.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1205	0.1026		8.51	10.0	-14.9	20.0
1,2,3-Trichloropropane	Ave	0.1220	0.1039		8.51	10.0	-14.9	20.0
Bromobenzene	Ave	0.9768	0.9323		9.54	10.0	-4.6	20.0
N-Propylbenzene	Ave	1.533	1.499		9.78	10.0	-2.2	20.0
1,3,5-Trimethylbenzene	Ave	4.270	4.098		9.60	10.0	-4.0	20.0
2-Chlorotoluene	Ave	1.188	1.146		9.64	10.0	-3.6	20.0
4-Chlorotoluene	Ave	1.179	1.133		9.61	10.0	-3.9	20.0
tert-Butylbenzene	Ave	4.458	4.269		9.58	10.0	-4.2	20.0
1,2,4-Trimethylbenzene	Ave	4.208	3.969		9.43	10.0	-5.7	20.0
sec-Butylbenzene	Ave	1.210	1.185		9.80	10.0	-2.0	20.0
p-Isopropyltoluene	Ave	4.871	4.712		9.67	10.0	-3.3	20.0
1,3-Dichlorobenzene	Ave	2.018	1.933		9.58	10.0	-4.2	20.0
1,4-Dichlorobenzene	Ave	1.928	1.826		9.47	10.0	-5.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCV 280-275238/2 Calibration Date: 04/30/2015 08:11

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3760.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	4.475	4.297		9.60	10.0	-4.0	20.0
1,2-Dichlorobenzene	Ave	1.580	1.489		9.42	10.0	-5.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0615	0.0527		8.57	10.0	-14.3	20.0
1,2,4-Trichlorobenzene	Ave	1.001	0.9363		9.36	10.0	-6.4	20.0
Hexachlorobutadiene	Ave	0.8163	0.7755		9.50	10.0	-5.0	20.0
Naphthalene	Ave	1.151	0.9666		8.40	10.0	-16.0	20.0
1,2,3-Trichlorobenzene	Lin2		0.6482		9.04	10.0	-9.6	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3760.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 30-Apr-2015 08:11:30 ALS Bottle#: 10 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Apr-2015 15:07:33 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: ilczyszynd Date: 30-Apr-2015 10:09:19

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	5.571	5.571	0.000	0	191190	250.0	250.0	
* 2 Fluorobenzene	96	7.534	7.534	0.000	93	1819388	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.800	0.000	79	381552	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	79	501841	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	57	309423	10.0	9.82	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.269	7.269	0.000	92	247335	10.0	9.41	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	84	1611420	10.0	10.2	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	89	468017	10.0	9.91	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	87	454153	10.0	8.46	
14 Chloromethane	50	4.105	4.105	0.000	89	488127	10.0	8.48	
16 Vinyl chloride	62	4.244	4.244	0.000	82	489774	10.0	8.81	
138 Butadiene	54	4.258	4.258	0.000	0	430537	NC	NC	
19 Bromomethane	94	4.607	4.607	0.000	87	327698	10.0	8.62	
20 Chloroethane	64	4.677	4.677	0.000	82	331445	10.0	8.86	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	73	775830	10.0	8.88	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	84	566604	10.0	8.44	
25 Ethyl ether	59	5.068	5.068	0.000	90	182853	10.0	9.32	
28 Acrolein	56	5.194	5.194	0.000	90	157215	100.0	94.4	
29 Acetone	43	5.292	5.292	0.000	98	128385	40.0	33.7	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	89	439149	10.0	9.52	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	53	367401	10.0	10.1	
34 Iodomethane	142	5.501	5.501	0.000	97	654775	10.0	9.56	
35 Methyl acetate	43	5.529	5.529	0.000	90	396503	50.0	45.7	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	78	779551	10.0	9.66	
37 Carbon disulfide	76	5.613	5.613	0.000	98	1895451	10.0	9.71	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	1	104336	100.0	88.5	
39 Methylene Chloride	84	5.669	5.669	0.000	79	366296	10.0	9.21	
40 Acrylonitrile	53	5.808	5.808	0.000	99	419741	100.0	88.0	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	89	548041	10.0	9.06	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	92	455694	10.0	9.38	
43 Hexane	57	6.082	6.082	0.000	90	828590	10.0	9.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	6.154	6.154	0.000	89	619729	20.0	20.5	
46 1,1-Dichloroethane	63	6.218	6.218	0.000	85	757667	10.0	9.45	
50 2-Butanone (MEK)	43	6.590	6.590	0.000	97	221411	40.0	35.7	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	44	216977	300.0	244.1	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	68	422193	10.0	9.35	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	83	655249	10.0	9.33	
56 Chlorobromomethane	128	6.840	6.840	0.000	62	135248	10.0	9.68	
57 Chloroform	83	6.847	6.847	0.000	81	605709	10.0	9.12	
58 Tetrahydrofuran	42	6.883	6.883	0.000	87	62943	20.0	18.4	
59 Isobutyl alcohol	41	7.048	7.048	0.000	91	81024	250.0	226.5	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	87	604277	10.0	9.02	
61 Cyclohexane	56	7.162	7.162	0.000	85	947301	10.0	9.74	
62 1,1-Dichloropropene	75	7.183	7.183	0.000	92	617905	10.0	9.67	
63 Carbon tetrachloride	117	7.226	7.226	0.000	55	507434	10.0	9.25	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	78	298996	10.0	8.96	
66 Benzene	78	7.362	7.362	0.000	91	1743562	10.0	9.62	
67 n-Heptane	43	7.448	7.448	0.000	92	869828	10.0	9.69	
69 Trichloroethene	95	7.820	7.820	0.000	93	444740	10.0	9.36	
70 2-Pentanone	43	7.855	7.855	0.000	99	448597	40.0	44.6	
72 1,2-Dichloropropane	63	8.006	8.006	0.000	87	381638	10.0	9.40	
73 Methylcyclohexane	55	8.027	8.027	0.000	90	736649	10.0	9.47	
74 1,4-Dioxane	88	8.063	8.063	0.000	16	23082	200.0	193.9	
75 Dibromomethane	93	8.106	8.106	0.000	83	119318	10.0	9.35	
76 Dichlorobromomethane	83	8.177	8.177	0.000	87	383848	10.0	8.93	
78 2-Chloroethyl vinyl ether	63	8.320	8.320	0.000	73	18672	10.0	7.18	
79 cis-1,3-Dichloropropene	75	8.499	8.499	0.000	89	495855	10.0	9.39	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	80	420580	40.0	34.0	
81 Toluene	91	8.785	8.785	0.000	88	1876305	10.0	9.42	
82 Ethyl methacrylate	69	8.864	8.864	0.000	73	206011	10.0	8.69	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	93	335594	10.0	9.11	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	86	177697	10.0	8.84	
85 2-Hexanone	43	9.143	9.143	0.000	94	274198	40.0	32.7	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	92	331803	10.0	9.29	
87 Tetrachloroethene	164	9.200	9.200	0.000	93	394591	10.0	9.83	
88 Chlorodibromomethane	129	9.357	9.357	0.000	86	200673	10.0	9.27	
90 Ethylene Dibromide	107	9.479	9.479	0.000	97	159460	10.0	9.20	
91 1-Chlorohexane	91	9.715	9.715	0.000	95	718925	10.0	9.56	
92 Chlorobenzene	112	9.822	9.822	0.000	94	1098248	10.0	9.58	
93 1,1,1,2-Tetrachloroethane	131	9.858	9.858	0.000	27	304157	10.0	9.37	
94 Ethylbenzene	106	9.865	9.865	0.000	77	680850	10.0	9.56	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	843729	10.0	9.66	
97 o-Xylene	106	10.251	10.251	0.000	87	750768	10.0	9.57	
96 Styrene	104	10.251	10.251	0.000	88	1132746	10.0	9.52	
98 Bromoform	173	10.444	10.444	0.000	96	94635	10.0	9.13	
99 Isopropylbenzene	105	10.515	10.515	0.000	95	2133042	10.0	9.62	
101 Cyclohexanone	55	10.630	10.630	0.000	86	122892	400.0	320.9	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	46	164159	10.0	9.04	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	49	41176	10.0	8.51	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	13	41713	10.0	8.51	
105 Bromobenzene	156	10.823	10.823	0.000	55	374293	10.0	9.54	
106 N-Propylbenzene	120	10.830	10.830	0.000	96	601725	10.0	9.78	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	89	1645378	10.0	9.60	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.952	10.952	0.000	96	460054	10.0	9.64	
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	455060	10.0	9.61	
110 tert-Butylbenzene	119	11.230	11.230	0.000	91	1714081	10.0	9.58	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	91	1593267	10.0	9.43	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	475913	10.0	9.80	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	88	1891560	10.0	9.67	
114 1,3-Dichlorobenzene	146	11.566	11.566	0.000	82	775939	10.0	9.58	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	94	732998	10.0	9.47	
117 n-Butylbenzene	91	11.860	11.860	0.000	95	1725278	10.0	9.60	
118 1,2-Dichlorobenzene	146	11.988	11.988	0.000	97	597715	10.0	9.42	
119 1,2-Dibromo-3-Chloropropan	157	12.710	12.710	0.000	58	21169	10.0	8.57	
121 1,2,4-Trichlorobenzene	180	13.647	13.647	0.000	92	375882	10.0	9.36	
122 Hexachlorobutadiene	225	13.812	13.812	0.000	92	311360	10.0	9.50	
123 Naphthalene	128	14.005	14.005	0.000	96	388055	10.0	8.40	
124 1,2,3-Trichlorobenzene	180	14.319	14.319	0.000	92	260214	10.0	9.04	
S 149 1,2-Dichloroethene, Total	96				0		20.0	18.7	
S 153 1,3-Dichloropropene, Total	1				0		20.0	18.5	
S 154 1,2-Dichloroethene, Total	1				0		20.0	18.7	
S 155 Xylenes, Total	106				0		20.0	19.2	
S 150 Trihalomethanes, Total	1				0		40.0	36.5	
S 151 Xylenes, Total (URS)	1				0		20.0	19.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

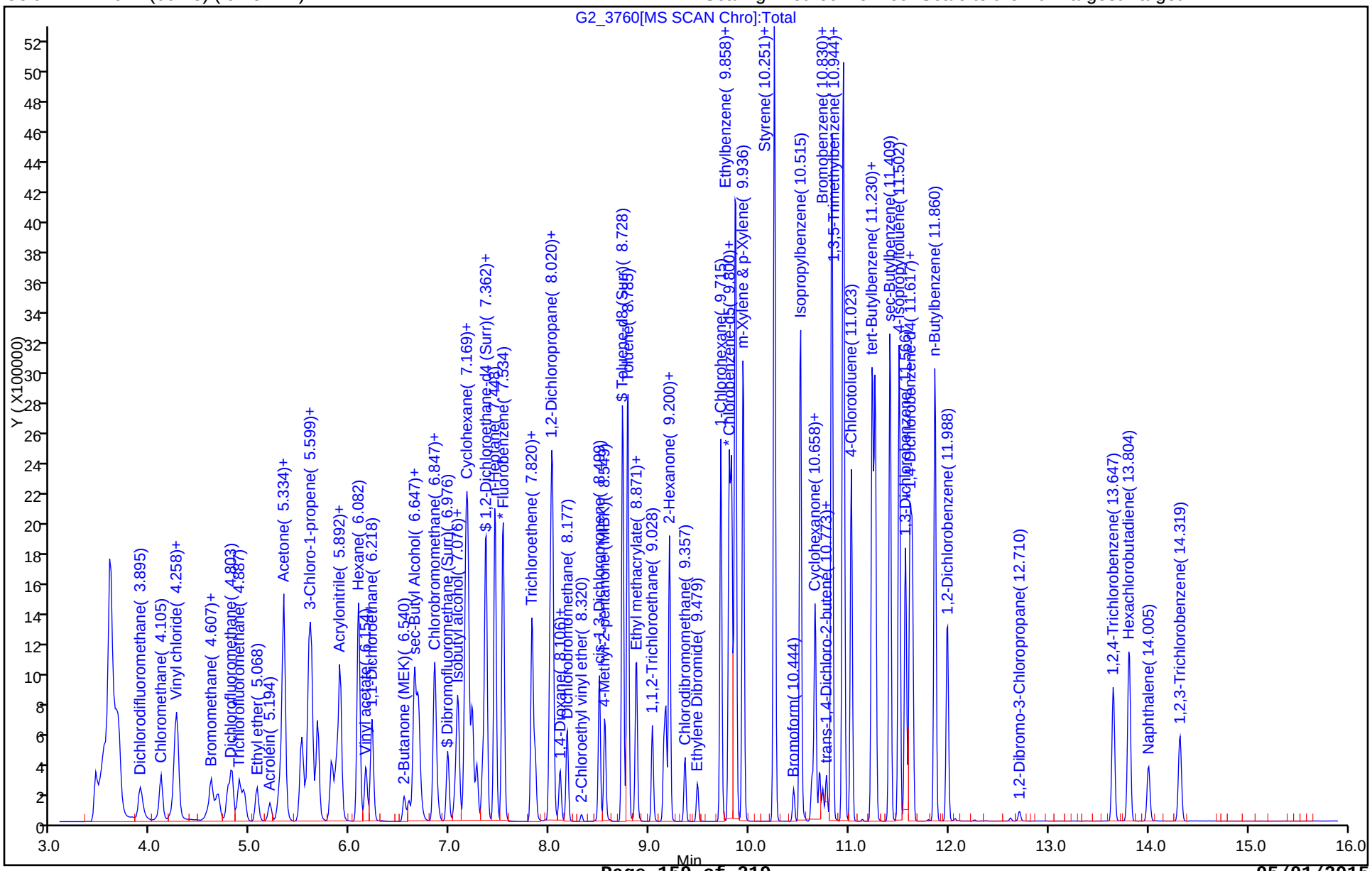
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 30-Apr-2015 15:07:34 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3760.D				
Injection Date:	30-Apr-2015 08:11:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCV 280-275238/2 Calibration Date: 04/30/2015 08:11

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 16:19

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 17:55

Lab File ID: G2_3760.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	0.2166	0.2126		9.82	10.0	-1.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1806	0.1699		9.41	10.0	-5.9	20.0
Toluene-d8 (Surr)	Ave	5.193	5.279		10.2	10.0	1.7	20.0
4-Bromofluorobenzene (Surr)	Ave	1.176	1.166		9.91	10.0	-0.9	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3760.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 30-Apr-2015 08:11:30 ALS Bottle#: 10 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Apr-2015 15:07:33 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: ilczyszynd Date: 30-Apr-2015 10:09:19

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	5.571	5.571	0.000	0	191190	250.0	250.0	
* 2 Fluorobenzene	96	7.534	7.534	0.000	93	1819388	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.800	0.000	79	381552	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	79	501841	12.5	12.5	
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41 Methyl tert-butyl ether	73	5.864	5.864	0.000	89	548041	10.0	9.06	
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53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	68	422193	10.0	9.35	
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56 Chlorobromomethane	128	6.840	6.840	0.000	62	135248	10.0	9.68	
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59 Isobutyl alcohol	41	7.048	7.048	0.000	91	81024	250.0	226.5	
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61 Cyclohexane	56	7.162	7.162	0.000	85	947301	10.0	9.74	
62 1,1-Dichloropropene	75	7.183	7.183	0.000	92	617905	10.0	9.67	
63 Carbon tetrachloride	117	7.226	7.226	0.000	55	507434	10.0	9.25	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	78	298996	10.0	8.96	
66 Benzene	78	7.362	7.362	0.000	91	1743562	10.0	9.62	
67 n-Heptane	43	7.448	7.448	0.000	92	869828	10.0	9.69	
69 Trichloroethene	95	7.820	7.820	0.000	93	444740	10.0	9.36	
70 2-Pentanone	43	7.855	7.855	0.000	99	448597	40.0	44.6	
72 1,2-Dichloropropane	63	8.006	8.006	0.000	87	381638	10.0	9.40	
73 Methylcyclohexane	55	8.027	8.027	0.000	90	736649	10.0	9.47	
74 1,4-Dioxane	88	8.063	8.063	0.000	16	23082	200.0	193.9	
75 Dibromomethane	93	8.106	8.106	0.000	83	119318	10.0	9.35	
76 Dichlorobromomethane	83	8.177	8.177	0.000	87	383848	10.0	8.93	
78 2-Chloroethyl vinyl ether	63	8.320	8.320	0.000	73	18672	10.0	7.18	
79 cis-1,3-Dichloropropene	75	8.499	8.499	0.000	89	495855	10.0	9.39	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	80	420580	40.0	34.0	
81 Toluene	91	8.785	8.785	0.000	88	1876305	10.0	9.42	
82 Ethyl methacrylate	69	8.864	8.864	0.000	73	206011	10.0	8.69	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	93	335594	10.0	9.11	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	86	177697	10.0	8.84	
85 2-Hexanone	43	9.143	9.143	0.000	94	274198	40.0	32.7	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	92	331803	10.0	9.29	
87 Tetrachloroethene	164	9.200	9.200	0.000	93	394591	10.0	9.83	
88 Chlorodibromomethane	129	9.357	9.357	0.000	86	200673	10.0	9.27	
90 Ethylene Dibromide	107	9.479	9.479	0.000	97	159460	10.0	9.20	
91 1-Chlorohexane	91	9.715	9.715	0.000	95	718925	10.0	9.56	
92 Chlorobenzene	112	9.822	9.822	0.000	94	1098248	10.0	9.58	
93 1,1,1,2-Tetrachloroethane	131	9.858	9.858	0.000	27	304157	10.0	9.37	
94 Ethylbenzene	106	9.865	9.865	0.000	77	680850	10.0	9.56	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	843729	10.0	9.66	
97 o-Xylene	106	10.251	10.251	0.000	87	750768	10.0	9.57	
96 Styrene	104	10.251	10.251	0.000	88	1132746	10.0	9.52	
98 Bromoform	173	10.444	10.444	0.000	96	94635	10.0	9.13	
99 Isopropylbenzene	105	10.515	10.515	0.000	95	2133042	10.0	9.62	
101 Cyclohexanone	55	10.630	10.630	0.000	86	122892	400.0	320.9	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	46	164159	10.0	9.04	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	49	41176	10.0	8.51	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	13	41713	10.0	8.51	
105 Bromobenzene	156	10.823	10.823	0.000	55	374293	10.0	9.54	
106 N-Propylbenzene	120	10.830	10.830	0.000	96	601725	10.0	9.78	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	89	1645378	10.0	9.60	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 2-Chlorotoluene	126	10.952	10.952	0.000	96	460054	10.0	9.64	
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	455060	10.0	9.61	
110 tert-Butylbenzene	119	11.230	11.230	0.000	91	1714081	10.0	9.58	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	91	1593267	10.0	9.43	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	475913	10.0	9.80	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	88	1891560	10.0	9.67	
114 1,3-Dichlorobenzene	146	11.566	11.566	0.000	82	775939	10.0	9.58	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	94	732998	10.0	9.47	
117 n-Butylbenzene	91	11.860	11.860	0.000	95	1725278	10.0	9.60	
118 1,2-Dichlorobenzene	146	11.988	11.988	0.000	97	597715	10.0	9.42	
119 1,2-Dibromo-3-Chloropropan	157	12.710	12.710	0.000	58	21169	10.0	8.57	
121 1,2,4-Trichlorobenzene	180	13.647	13.647	0.000	92	375882	10.0	9.36	
122 Hexachlorobutadiene	225	13.812	13.812	0.000	92	311360	10.0	9.50	
123 Naphthalene	128	14.005	14.005	0.000	96	388055	10.0	8.40	
124 1,2,3-Trichlorobenzene	180	14.319	14.319	0.000	92	260214	10.0	9.04	
S 149 1,2-Dichloroethene, Total	96				0		20.0	18.7	
S 153 1,3-Dichloropropene, Total	1				0		20.0	18.5	
S 154 1,2-Dichloroethene, Total	1				0		20.0	18.7	
S 155 Xylenes, Total	106				0		20.0	19.2	
S 150 Trihalomethanes, Total	1				0		40.0	36.5	
S 151 Xylenes, Total (URS)	1				0		20.0	19.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

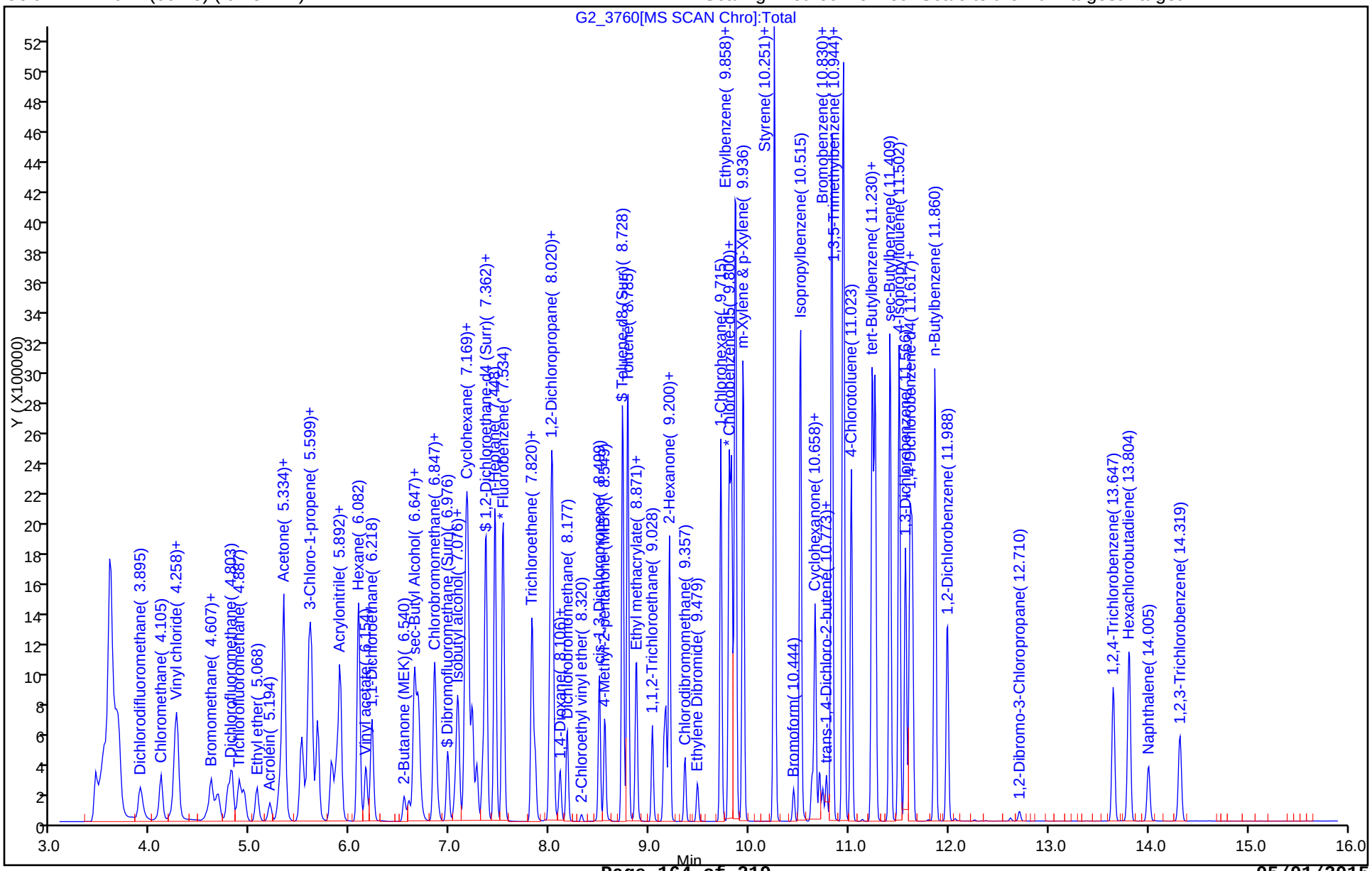
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 30-Apr-2015 15:07:34 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3760.D				
Injection Date:	30-Apr-2015 08:11:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCVC 280-275238/24 Calibration Date: 04/30/2015 14:15

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3779.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	0.3687	0.3159		8.57	10.0	-14.3	50.0
Chloromethane	Ave	0.3954	0.3233	0.1000	8.18	10.0	-18.2	50.0
Vinyl chloride	Ave	0.3821	0.3198		8.37	10.0	-16.3	50.0
Bromomethane	Ave	0.2613	0.2333		8.93	10.0	-10.7	50.0
Chloroethane	Ave	0.2571	0.2318		9.01	10.0	-9.9	50.0
Dichlorofluoromethane	Ave	0.6004	0.5527		9.20	10.0	-8.0	50.0
Trichlorofluoromethane	Ave	0.4614	0.4050		8.78	10.0	-12.2	50.0
Ethyl ether	Ave	0.1347	0.1419		10.5	10.0	5.3	50.0
Acrolein	Ave	0.0114	0.0111		96.5	100	-3.4	50.0
Acetone	Ave	0.0262	0.0267		40.9	40.0	2.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2500	0.2501		10.0	10.0	0.0	50.0
1,1-Dichloroethene	Ave	0.3168	0.3008		9.49	10.0	-5.1	50.0
Iodomethane	Ave	0.4706	0.4873		10.4	10.0	3.6	50.0
Methyl acetate	Ave	0.0597	0.0627		52.6	50.0	5.1	50.0
3-Chloro-1-propene	Ave	0.5546	0.5292		9.54	10.0	-4.6	50.0
Carbon disulfide	Ave	1.342	1.284		9.57	10.0	-4.3	50.0
tert-Butyl alcohol	Ave	0.0081	0.0084		103	100	3.2	50.0
Methylene Chloride	Ave	0.2731	0.2799		10.2	10.0	2.5	50.0
Acrylonitrile	Ave	0.0328	0.0328		100	100	0.2	50.0
Methyl tert-butyl ether	Ave	0.4154	0.4421		10.6	10.0	6.4	50.0
trans-1,2-Dichloroethene	Ave	0.3338	0.3245		9.72	10.0	-2.8	50.0
Hexane	Ave	2.762	2.447		8.86	10.0	-11.4	50.0
Vinyl acetate	Ave	0.2075	0.1753		16.9	20.0	-15.5	50.0
1,1-Dichloroethane	Ave	0.5506	0.5556	0.1000	10.1	10.0	0.9	50.0
2-Butanone (MEK)	Ave	0.0426	0.0434		40.8	40.0	2.0	50.0
sec-Butyl Alcohol	Ave	0.0061	0.0059		288	300	-3.9	50.0
cis-1,2-Dichloroethene	Ave	0.3102	0.3109		10.0	10.0	0.2	50.0
2,2-Dichloropropane	Ave	0.4824	0.4076		8.45	10.0	-15.5	50.0
Bromochloromethane	Ave	0.0960	0.1030		10.7	10.0	7.2	50.0
Chloroform	Ave	0.4564	0.4589		10.1	10.0	0.6	50.0
Tetrahydrofuran	Ave	0.0236	0.0253		21.4	20.0	7.2	50.0
Isobutyl alcohol	Ave	0.0025	0.0025		257	250	2.8	50.0
1,1,1-Trichloroethane	Ave	0.4602	0.4276		9.29	10.0	-7.1	50.0
Cyclohexane	Ave	0.6679	0.6131		9.18	10.0	-8.2	50.0
1,1-Dichloropropene	Ave	0.4391	0.4112		9.36	10.0	-6.4	50.0
Carbon tetrachloride	Ave	0.3769	0.3546		9.41	10.0	-5.9	50.0
1,2-Dichloroethane	Ave	0.2293	0.2371		10.3	10.0	3.4	50.0
Benzene	Ave	1.245	1.238		9.94	10.0	-0.6	50.0
Trichloroethene	Ave	0.3265	0.3213		9.84	10.0	-1.6	50.0
2-Pentanone	Ave	0.0691	0.0877		50.8	40.0	26.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCVC 280-275238/24 Calibration Date: 04/30/2015 14:15

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3779.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	0.2788	0.2829		10.1	10.0	1.4	50.0
Methylcyclohexane	Ave	0.5344	0.4721		8.83	10.0	-11.7	50.0
1,4-Dioxane	Ave	0.0008	0.0010		236	200	18.0	50.0
Dibromomethane	Ave	0.0877	0.0938		10.7	10.0	7.0	50.0
Bromodichloromethane	Ave	0.2952	0.2940		9.96	10.0	-0.4	50.0
2-Chloroethyl vinyl ether	Lin1	0.0143	0.0157		8.63	10.0	-13.7	50.0
cis-1,3-Dichloropropene	Ave	1.730	1.685		9.74	10.0	-2.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0850	0.0825		38.8	40.0	-3.0	50.0
Toluene	Ave	1.369	1.310		9.57	10.0	-4.3	50.0
Ethyl methacrylate	Ave	0.7768	0.7511		9.67	10.0	-3.3	50.0
trans-1,3-Dichloropropene	Ave	0.2532	0.2543		10.0	10.0	0.4	50.0
1,1,2-Trichloroethane	Ave	0.1380	0.1411		10.2	10.0	2.2	50.0
2-Hexanone	Ave	0.2747	0.2558		37.2	40.0	-6.9	50.0
1,3-Dichloropropane	Ave	1.170	1.206		10.3	10.0	3.1	50.0
Tetrachloroethene	Ave	1.315	1.202		9.14	10.0	-8.6	50.0
Chlorodibromomethane	Ave	0.7094	0.7362		10.4	10.0	3.8	50.0
1,2-Dibromoethane	Ave	0.5676	0.5788		10.2	10.0	2.0	50.0
1-Chlorohexane	Ave	2.464	1.986		8.06	10.0	-19.4	50.0
Chlorobenzene	Ave	3.755	3.546	0.3000	9.44	10.0	-5.6	50.0
1,1,1,2-Tetrachloroethane	Ave	1.064	1.049		9.86	10.0	-1.4	50.0
Ethylbenzene	Ave	2.334	2.090		8.95	10.0	-10.5	50.0
m-Xylene & p-Xylene	Ave	2.861	2.543		8.89	10.0	-11.1	50.0
o-Xylene	Ave	2.570	2.340		9.10	10.0	-9.0	50.0
Styrene	Ave	3.899	3.617		9.28	10.0	-7.2	50.0
Bromoform	Ave	0.3395	0.3413	0.1000	10.1	10.0	0.5	50.0
Isopropylbenzene	Ave	5.523	4.630		8.38	10.0	-16.2	50.0
Cyclohexanone	Ave	0.0125	0.0115		367	400	-8.3	50.0
1,1,2,2-Tetrachloroethane	Lin2		0.4323	0.3000	9.56	10.0	-4.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1205	0.1033		8.57	10.0	-14.3	50.0
1,2,3-Trichloropropane	Ave	0.1220	0.1194		9.78	10.0	-2.2	50.0
Bromobenzene	Ave	0.9768	0.9260		9.48	10.0	-5.2	50.0
N-Propylbenzene	Ave	1.533	1.248		8.14	10.0	-18.6	50.0
1,3,5-Trimethylbenzene	Ave	4.270	3.562		8.34	10.0	-16.6	50.0
2-Chlorotoluene	Ave	1.188	1.038		8.74	10.0	-12.6	50.0
4-Chlorotoluene	Ave	1.179	1.015		8.61	10.0	-13.9	50.0
tert-Butylbenzene	Ave	4.458	3.689		8.27	10.0	-17.3	50.0
1,2,4-Trimethylbenzene	Ave	4.208	3.534		8.40	10.0	-16.0	50.0
sec-Butylbenzene	Ave	1.210	0.9753		8.06	10.0	-19.4	50.0
p-Isopropyltoluene	Ave	4.871	3.881		7.97	10.0	-20.3	50.0
1,3-Dichlorobenzene	Ave	2.018	1.799		8.91	10.0	-10.9	50.0
1,4-Dichlorobenzene	Ave	1.928	1.724		8.94	10.0	-10.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCVC 280-275238/24 Calibration Date: 04/30/2015 14:15

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 13:46

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 15:41

Lab File ID: G2_3779.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	4.475	3.395		7.59	10.0	-24.1	50.0
1,2-Dichlorobenzene	Ave	1.580	1.471		9.31	10.0	-6.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0615	0.0616		10.0	10.0	0.1	50.0
1,2,4-Trichlorobenzene	Ave	1.001	0.9530		9.52	10.0	-4.8	50.0
Hexachlorobutadiene	Ave	0.8163	0.6351		7.78	10.0	-22.2	50.0
Naphthalene	Ave	1.151	1.117		9.71	10.0	-2.9	50.0
1,2,3-Trichlorobenzene	Lin2		0.6956		9.71	10.0	-2.9	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3779.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 30-Apr-2015 14:15:30 ALS Bottle#: 29 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Apr-2015 15:07:37 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	167989	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1510770	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.800	0.000	92	328659	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	94	442416	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	280625	10.0	10.7	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	234801	10.0	10.8	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1357660	10.0	9.94	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	91	391842	10.0	9.41	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	381758	10.0	8.57	
14 Chloromethane	50	4.091	4.091	0.000	99	390723	10.0	8.18	
16 Vinyl chloride	62	4.244	4.244	0.000	98	386501	10.0	8.37	
138 Butadiene	54	4.258	4.258	0.000	0	322104	NC	NC	
19 Bromomethane	94	4.607	4.607	0.000	90	282003	10.0	8.93	
20 Chloroethane	64	4.663	4.663	0.000	100	280133	10.0	9.01	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	667964	10.0	9.20	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	489448	10.0	8.78	
25 Ethyl ether	59	5.068	5.068	0.000	91	171476	10.0	10.5	
28 Acrolein	56	5.194	5.194	0.000	99	133576	100.0	96.5	
29 Acetone	43	5.292	5.292	0.000	100	129264	40.0	40.9	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	363494	10.0	9.49	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	94	302291	10.0	10.0	
34 Iodomethane	142	5.501	5.501	0.000	97	588991	10.0	10.4	
35 Methyl acetate	43	5.529	5.529	0.000	97	379022	50.0	52.6	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	82	639572	10.0	9.54	
37 Carbon disulfide	76	5.613	5.613	0.000	99	1551428	10.0	9.57	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	93	100962	100.0	103.2	
39 Methylene Chloride	84	5.669	5.669	0.000	93	338322	10.0	10.2	
40 Acrylonitrile	53	5.808	5.808	0.000	99	396791	100.0	100.2	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	534338	10.0	10.6	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	98	392157	10.0	9.72	
43 Hexane	57	6.082	6.082	0.000	92	643316	10.0	8.86	
44 Vinyl acetate	43	6.154	6.154	0.000	97	423755	20.0	16.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	671529	10.0	10.1	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	209907	40.0	40.8	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	95	212850	300.0	288.3	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	79	375750	10.0	10.0	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	88	492590	10.0	8.45	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	124428	10.0	10.7	
57 Chloroform	83	6.847	6.847	0.000	94	554636	10.0	10.1	
58 Tetrahydrofuran	42	6.876	6.876	0.000	89	61033	20.0	21.4	
59 Isobutyl alcohol	41	7.040	7.040	0.000	95	76379	250.0	257.1	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	516762	10.0	9.29	
61 Cyclohexane	56	7.155	7.155	0.000	92	740950	10.0	9.18	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	496934	10.0	9.36	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	428532	10.0	9.41	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	97	286537	10.0	10.3	
66 Benzene	78	7.355	7.355	0.000	96	1495856	10.0	9.94	
67 n-Heptane	43	7.448	7.448	0.000	92	648394	10.0	8.70	
69 Trichloroethene	95	7.820	7.820	0.000	98	388351	10.0	9.84	
70 2-Pentanone	43	7.848	7.848	0.000	99	424085	40.0	50.8	
72 1,2-Dichloropropane	63	7.998	7.998	0.000	96	341863	10.0	10.1	
73 Methylcyclohexane	55	8.020	8.020	0.000	93	570570	10.0	8.83	
74 1,4-Dioxane	88	8.056	8.056	0.000	92	23326	200.0	236.0	
75 Dibromomethane	93	8.099	8.099	0.000	96	113374	10.0	10.7	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	355300	10.0	9.96	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	92	19014	10.0	8.63	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	442993	10.0	9.74	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	398860	40.0	38.8	
81 Toluene	91	8.778	8.778	0.000	99	1583860	10.0	9.57	
82 Ethyl methacrylate	69	8.864	8.864	0.000	90	197495	10.0	9.67	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	307308	10.0	10.0	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	91	170575	10.0	10.2	
85 2-Hexanone	43	9.143	9.143	0.000	96	269072	40.0	37.2	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	97	316993	10.0	10.3	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	316129	10.0	9.14	
88 Chlorodibromomethane	129	9.357	9.357	0.000	90	193565	10.0	10.4	
90 Ethylene Dibromide	107	9.479	9.479	0.000	98	152192	10.0	10.2	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	522111	10.0	8.06	
92 Chlorobenzene	112	9.822	9.822	0.000	96	932407	10.0	9.44	
93 1,1,1,2-Tetrachloroethane	131	9.858	9.858	0.000	96	275866	10.0	9.86	
94 Ethylbenzene	106	9.865	9.865	0.000	98	549409	10.0	8.95	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	668712	10.0	8.89	
97 o-Xylene	106	10.251	10.251	0.000	88	615159	10.0	9.10	
96 Styrene	104	10.251	10.251	0.000	88	951057	10.0	9.28	
98 Bromoform	173	10.444	10.444	0.000	97	89727	10.0	10.1	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	1638878	10.0	8.38	
101 Cyclohexanone	55	10.630	10.630	0.000	93	120983	400.0	366.8	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	153009	10.0	9.56	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	87	36551	10.0	8.57	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	42257	10.0	9.78	
105 Bromobenzene	156	10.823	10.823	0.000	95	327746	10.0	9.48	
106 N-Propylbenzene	120	10.830	10.830	0.000	99	441677	10.0	8.14	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	1260538	10.0	8.34	
108 2-Chlorotoluene	126	10.944	10.944	0.000	95	367401	10.0	8.74	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	359316	10.0	8.61	
110 tert-Butylbenzene	119	11.230	11.230	0.000	92	1305610	10.0	8.27	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	1250826	10.0	8.40	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	345190	10.0	8.06	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	1373440	10.0	7.97	
114 1,3-Dichlorobenzene	146	11.566	11.566	0.000	98	636577	10.0	8.91	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	610233	10.0	8.94	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	1201528	10.0	7.59	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	520794	10.0	9.31	
119 1,2-Dibromo-3-Chloropropan	157	12.710	12.710	0.000	84	21803	10.0	10.0	
121 1,2,4-Trichlorobenzene	180	13.647	13.647	0.000	93	337294	10.0	9.52	
122 Hexachlorobutadiene	225	13.804	13.804	0.000	96	224771	10.0	7.78	
123 Naphthalene	128	14.005	14.005	0.000	97	395502	10.0	9.71	
124 1,2,3-Trichlorobenzene	180	14.319	14.319	0.000	95	246181	10.0	9.71	
S 149 1,2-Dichloroethene, Total	96				0		20.0	19.7	
S 153 1,3-Dichloropropene, Total	1				0		20.0	19.8	
S 154 1,2-Dichloroethene, Total	1				0		20.0	19.7	
S 155 Xylenes, Total	106				0		20.0	18.0	
S 150 Trihalomethanes, Total	1				0		40.0	40.4	
S 151 Xylenes, Total (URS)	1				0		20.0	18.0	
S 152 Total BTEX	1				0			46.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

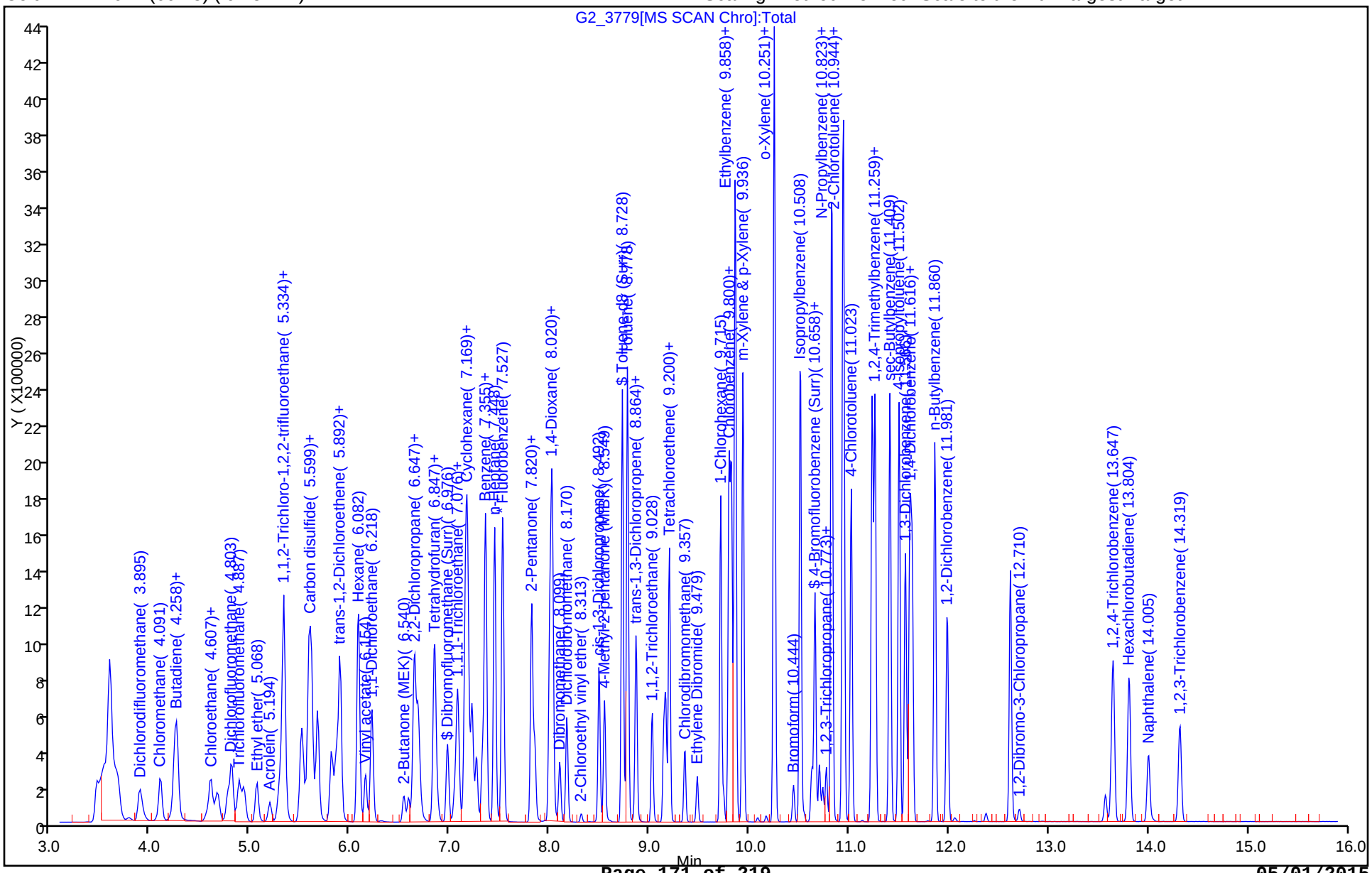
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 30-Apr-2015 15:07:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3779.D				
Injection Date:	30-Apr-2015 14:15:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ccvc			Worklist Smp#:	24
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Lab Sample ID: CCVC 280-275238/24 Calibration Date: 04/30/2015 14:15

Instrument ID: VMS_G2 Calib Start Date: 04/28/2015 16:19

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/28/2015 17:55

Lab File ID: G2_3779.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	0.2166	0.2322		10.7	10.0	7.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1806	0.1943		10.8	10.0	7.6	50.0
Toluene-d8 (Surr)	Ave	5.193	5.164		9.94	10.0	-0.6	50.0
4-Bromofluorobenzene (Surr)	Ave	1.176	1.107		9.41	10.0	-5.9	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3779.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 30-Apr-2015 14:15:30 ALS Bottle#: 29 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: ilczyszynd Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Apr-2015 15:07:37 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	167989	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1510770	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.800	9.800	0.000	92	328659	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.609	11.609	0.000	94	442416	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	280625	10.0	10.7	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.262	0.000	99	234801	10.0	10.8	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1357660	10.0	9.94	
$ 9 4-Bromofluorobenzene (Surr	95	10.658	10.658	0.000	91	391842	10.0	9.41	
13 Dichlorodifluoromethane	85	3.895	3.895	0.000	99	381758	10.0	8.57	
14 Chloromethane	50	4.091	4.091	0.000	99	390723	10.0	8.18	
16 Vinyl chloride	62	4.244	4.244	0.000	98	386501	10.0	8.37	
138 Butadiene	54	4.258	4.258	0.000	0	322104	NC	NC	
19 Bromomethane	94	4.607	4.607	0.000	90	282003	10.0	8.93	
20 Chloroethane	64	4.663	4.663	0.000	100	280133	10.0	9.01	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	667964	10.0	9.20	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	98	489448	10.0	8.78	
25 Ethyl ether	59	5.068	5.068	0.000	91	171476	10.0	10.5	
28 Acrolein	56	5.194	5.194	0.000	99	133576	100.0	96.5	
29 Acetone	43	5.292	5.292	0.000	100	129264	40.0	40.9	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	363494	10.0	9.49	
31 1,1,2-Trichloro-1,2,2-trif	151	5.334	5.334	0.000	94	302291	10.0	10.0	
34 Iodomethane	142	5.501	5.501	0.000	97	588991	10.0	10.4	
35 Methyl acetate	43	5.529	5.529	0.000	97	379022	50.0	52.6	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	82	639572	10.0	9.54	
37 Carbon disulfide	76	5.613	5.613	0.000	99	1551428	10.0	9.57	
38 2-Methyl-2-propanol	59	5.641	5.641	0.000	93	100962	100.0	103.2	
39 Methylene Chloride	84	5.669	5.669	0.000	93	338322	10.0	10.2	
40 Acrylonitrile	53	5.808	5.808	0.000	99	396791	100.0	100.2	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	534338	10.0	10.6	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	98	392157	10.0	9.72	
43 Hexane	57	6.082	6.082	0.000	92	643316	10.0	8.86	
44 Vinyl acetate	43	6.154	6.154	0.000	97	423755	20.0	16.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
46 1,1-Dichloroethane	63	6.218	6.218	0.000	96	671529	10.0	10.1	
50 2-Butanone (MEK)	43	6.583	6.583	0.000	100	209907	40.0	40.8	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	95	212850	300.0	288.3	
53 cis-1,2-Dichloroethene	96	6.647	6.647	0.000	79	375750	10.0	10.0	
54 2,2-Dichloropropane	77	6.683	6.683	0.000	88	492590	10.0	8.45	
56 Chlorobromomethane	128	6.840	6.840	0.000	97	124428	10.0	10.7	
57 Chloroform	83	6.847	6.847	0.000	94	554636	10.0	10.1	
58 Tetrahydrofuran	42	6.876	6.876	0.000	89	61033	20.0	21.4	
59 Isobutyl alcohol	41	7.040	7.040	0.000	95	76379	250.0	257.1	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	516762	10.0	9.29	
61 Cyclohexane	56	7.155	7.155	0.000	92	740950	10.0	9.18	
62 1,1-Dichloropropene	75	7.176	7.176	0.000	96	496934	10.0	9.36	
63 Carbon tetrachloride	117	7.219	7.219	0.000	97	428532	10.0	9.41	
64 1,2-Dichloroethane	62	7.326	7.326	0.000	97	286537	10.0	10.3	
66 Benzene	78	7.355	7.355	0.000	96	1495856	10.0	9.94	
67 n-Heptane	43	7.448	7.448	0.000	92	648394	10.0	8.70	
69 Trichloroethene	95	7.820	7.820	0.000	98	388351	10.0	9.84	
70 2-Pentanone	43	7.848	7.848	0.000	99	424085	40.0	50.8	
72 1,2-Dichloropropane	63	7.998	7.998	0.000	96	341863	10.0	10.1	
73 Methylcyclohexane	55	8.020	8.020	0.000	93	570570	10.0	8.83	
74 1,4-Dioxane	88	8.056	8.056	0.000	92	23326	200.0	236.0	
75 Dibromomethane	93	8.099	8.099	0.000	96	113374	10.0	10.7	
76 Dichlorobromomethane	83	8.170	8.170	0.000	99	355300	10.0	9.96	
78 2-Chloroethyl vinyl ether	63	8.313	8.313	0.000	92	19014	10.0	8.63	
79 cis-1,3-Dichloropropene	75	8.492	8.492	0.000	95	442993	10.0	9.74	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	398860	40.0	38.8	
81 Toluene	91	8.778	8.778	0.000	99	1583860	10.0	9.57	
82 Ethyl methacrylate	69	8.864	8.864	0.000	90	197495	10.0	9.67	
83 trans-1,3-Dichloropropene	75	8.871	8.871	0.000	98	307308	10.0	10.0	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	91	170575	10.0	10.2	
85 2-Hexanone	43	9.143	9.143	0.000	96	269072	40.0	37.2	
86 1,3-Dichloropropane	76	9.164	9.164	0.000	97	316993	10.0	10.3	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	316129	10.0	9.14	
88 Chlorodibromomethane	129	9.357	9.357	0.000	90	193565	10.0	10.4	
90 Ethylene Dibromide	107	9.479	9.479	0.000	98	152192	10.0	10.2	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	522111	10.0	8.06	
92 Chlorobenzene	112	9.822	9.822	0.000	96	932407	10.0	9.44	
93 1,1,1,2-Tetrachloroethane	131	9.858	9.858	0.000	96	275866	10.0	9.86	
94 Ethylbenzene	106	9.865	9.865	0.000	98	549409	10.0	8.95	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	668712	10.0	8.89	
97 o-Xylene	106	10.251	10.251	0.000	88	615159	10.0	9.10	
96 Styrene	104	10.251	10.251	0.000	88	951057	10.0	9.28	
98 Bromoform	173	10.444	10.444	0.000	97	89727	10.0	10.1	
99 Isopropylbenzene	105	10.508	10.508	0.000	96	1638878	10.0	8.38	
101 Cyclohexanone	55	10.630	10.630	0.000	93	120983	400.0	366.8	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	94	153009	10.0	9.56	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	87	36551	10.0	8.57	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	42257	10.0	9.78	
105 Bromobenzene	156	10.823	10.823	0.000	95	327746	10.0	9.48	
106 N-Propylbenzene	120	10.830	10.830	0.000	99	441677	10.0	8.14	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	1260538	10.0	8.34	
108 2-Chlorotoluene	126	10.944	10.944	0.000	95	367401	10.0	8.74	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	359316	10.0	8.61	
110 tert-Butylbenzene	119	11.230	11.230	0.000	92	1305610	10.0	8.27	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	1250826	10.0	8.40	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	345190	10.0	8.06	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	97	1373440	10.0	7.97	
114 1,3-Dichlorobenzene	146	11.566	11.566	0.000	98	636577	10.0	8.91	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	610233	10.0	8.94	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	1201528	10.0	7.59	
118 1,2-Dichlorobenzene	146	11.981	11.981	0.000	98	520794	10.0	9.31	
119 1,2-Dibromo-3-Chloropropan	157	12.710	12.710	0.000	84	21803	10.0	10.0	
121 1,2,4-Trichlorobenzene	180	13.647	13.647	0.000	93	337294	10.0	9.52	
122 Hexachlorobutadiene	225	13.804	13.804	0.000	96	224771	10.0	7.78	
123 Naphthalene	128	14.005	14.005	0.000	97	395502	10.0	9.71	
124 1,2,3-Trichlorobenzene	180	14.319	14.319	0.000	95	246181	10.0	9.71	
S 149 1,2-Dichloroethene, Total	96				0		20.0	19.7	
S 153 1,3-Dichloropropene, Total	1				0		20.0	19.8	
S 154 1,2-Dichloroethene, Total	1				0		20.0	19.7	
S 155 Xylenes, Total	106				0		20.0	18.0	
S 150 Trihalomethanes, Total	1				0		40.0	40.4	
S 151 Xylenes, Total (URS)	1				0		20.0	18.0	
S 152 Total BTEX	1				0			46.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

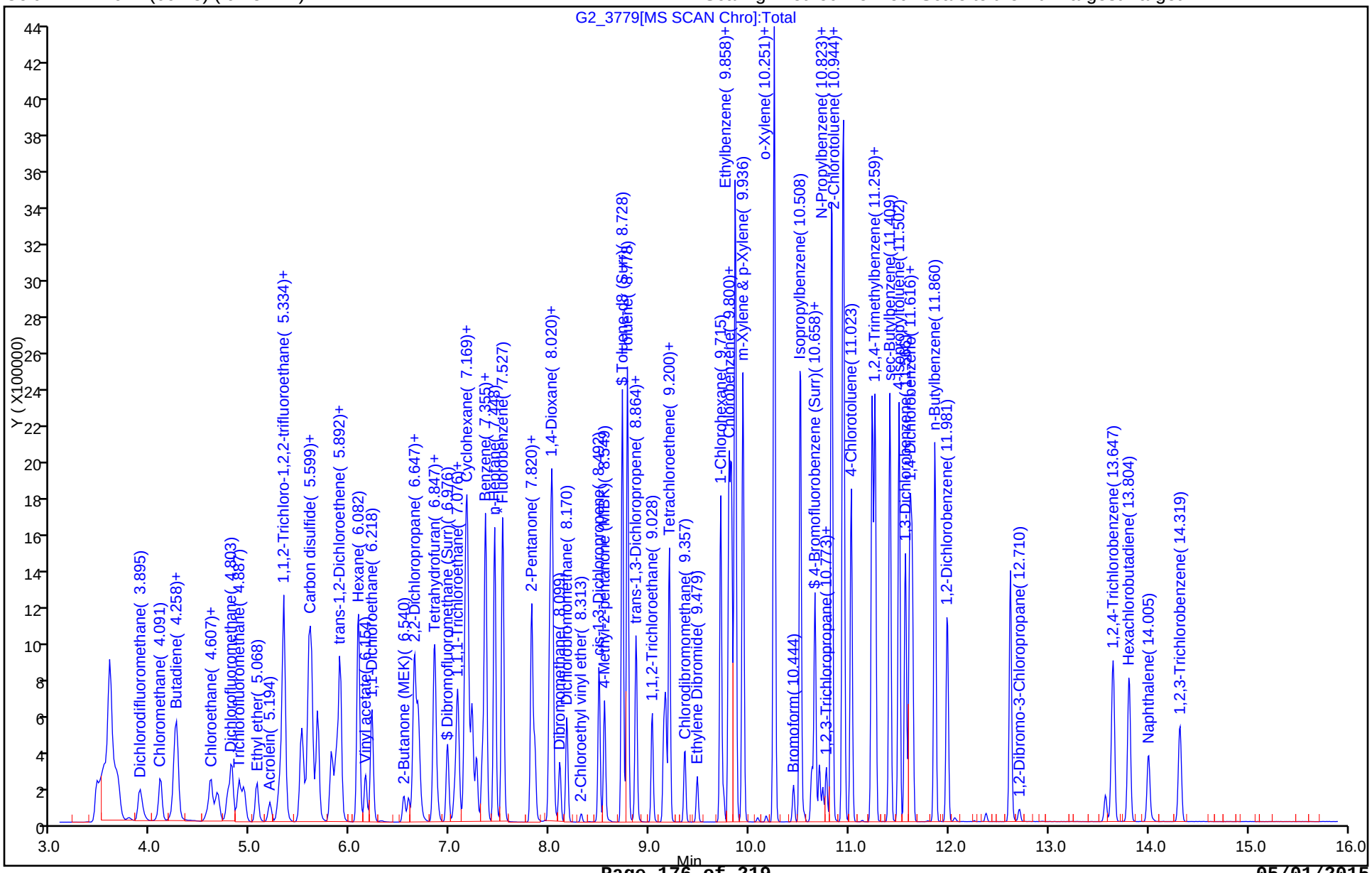
MV-Main A_00022	Amount Added:	5.00	Units: uL	
MV-Gas/Ket A_00032	Amount Added:	5.00	Units: uL	
MV-2cleve+AVA_00009	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 30-Apr-2015 15:07:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3779.D				
Injection Date:	30-Apr-2015 14:15:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	ccvc			Worklist Smp#:	24
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3684.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	28-Apr-2015 13:12:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	ilczyszyn	Instrument ID:	VMS_G2		
Method:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\AQ_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	28-Apr-2015 23:36:59	Calib Date:	28-Apr-2015 17:55:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK051				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	4.573	4.573	0.000	82	109394	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

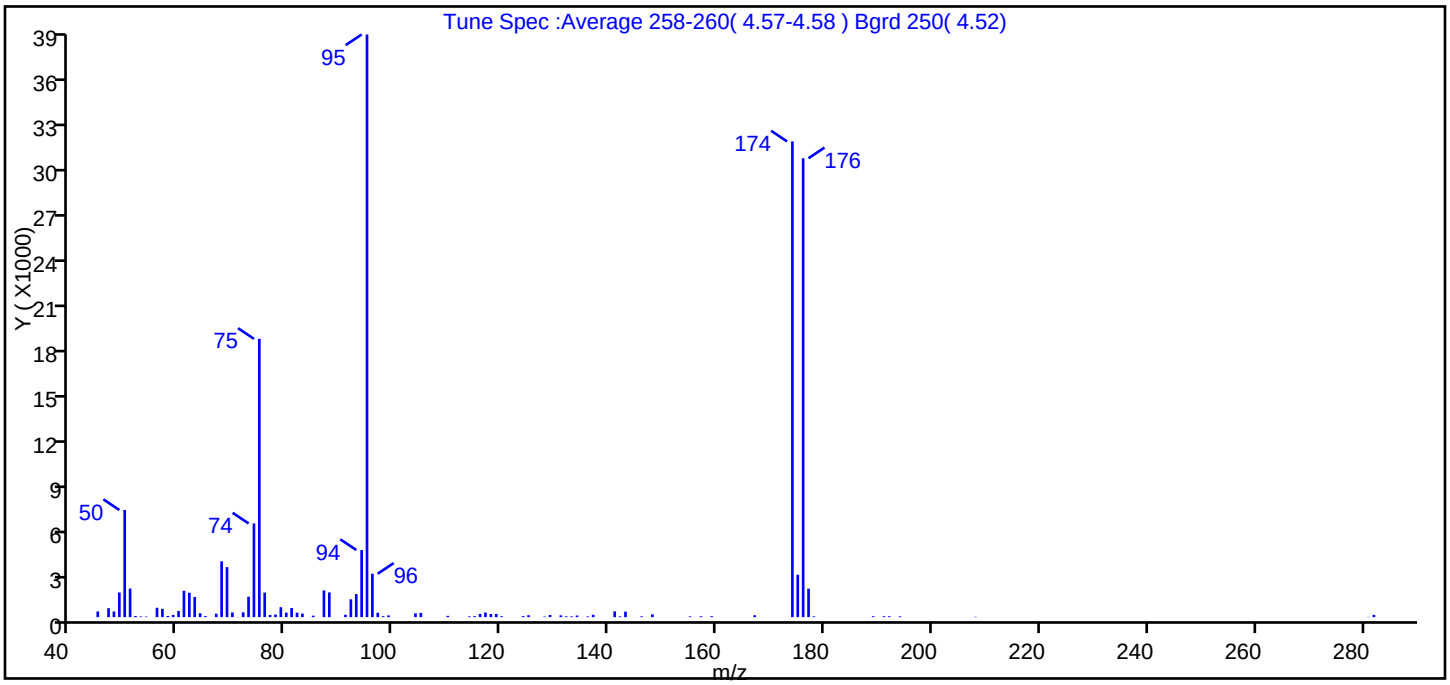
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3684.D				
Injection Date:	28-Apr-2015 13:12:30	Instrument ID:	VMS_G2		
Lims ID:	BFB				
Client ID:					
Operator ID:	ilczyszyn	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Tune Method:	BFB Method 8260				

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.4
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	81.6
175	5 to 9% of m/z 174	7.3 (8.9)
176	Greater than 95% but less than 101% of m/z 174	78.8 (96.5)
177	5 to 9% of m/z 176	4.9 (6.2)

Data File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3684.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 28-Apr-2015 13:12:30
Spectrum: Tune Spec :Average 258-260(4.57-4.58) Bgrd 250(4.52)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	379	71.00	12	98.00	64	142.00	50
47.00	595	72.00	321	99.00	115	143.00	368
48.00	378	73.00	1360	104.00	254	146.00	53
49.00	1640	74.00	6237	105.00	283	148.00	186
50.00	7133	75.00	18528	110.00	89	155.00	50
51.00	1903	76.00	1635	114.00	53	157.00	56
52.00	76	77.00	147	115.00	65	159.00	62
53.00	47	78.00	172	116.00	211	167.00	126
54.00	40	79.00	659	117.00	308	174.00	31672
56.00	624	80.00	299	118.00	207	175.00	2823
57.00	556	81.00	606	119.00	214	176.00	30552
58.00	76	82.00	300	120.00	61	177.00	1896
59.00	149	83.00	236	124.00	67	178.00	51
60.00	412	85.00	99	125.00	129	189.00	59
61.00	1759	87.00	1781	128.00	37	191.00	59
62.00	1625	88.00	1646	129.00	146	192.00	57
63.00	1342	91.00	156	131.00	119	194.00	52
64.00	260	92.00	1187	132.00	54	208.00	26
65.00	68	93.00	1535	133.00	50	281.00	15
67.00	231	94.00	4470	134.00	107	282.00	149
68.00	3716	95.00	38792	136.00	51		
69.00	3329	96.00	2891	137.00	156		
70.00	312	97.00	292	141.00	384		

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3759.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	30-Apr-2015 07:47:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	ilczyszynd	Instrument ID:	VMS_G2		
Method:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Apr-2015 15:07:33	Calib Date:	28-Apr-2015 17:55:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK025				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	4.579	4.579	0.000	86	194195	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

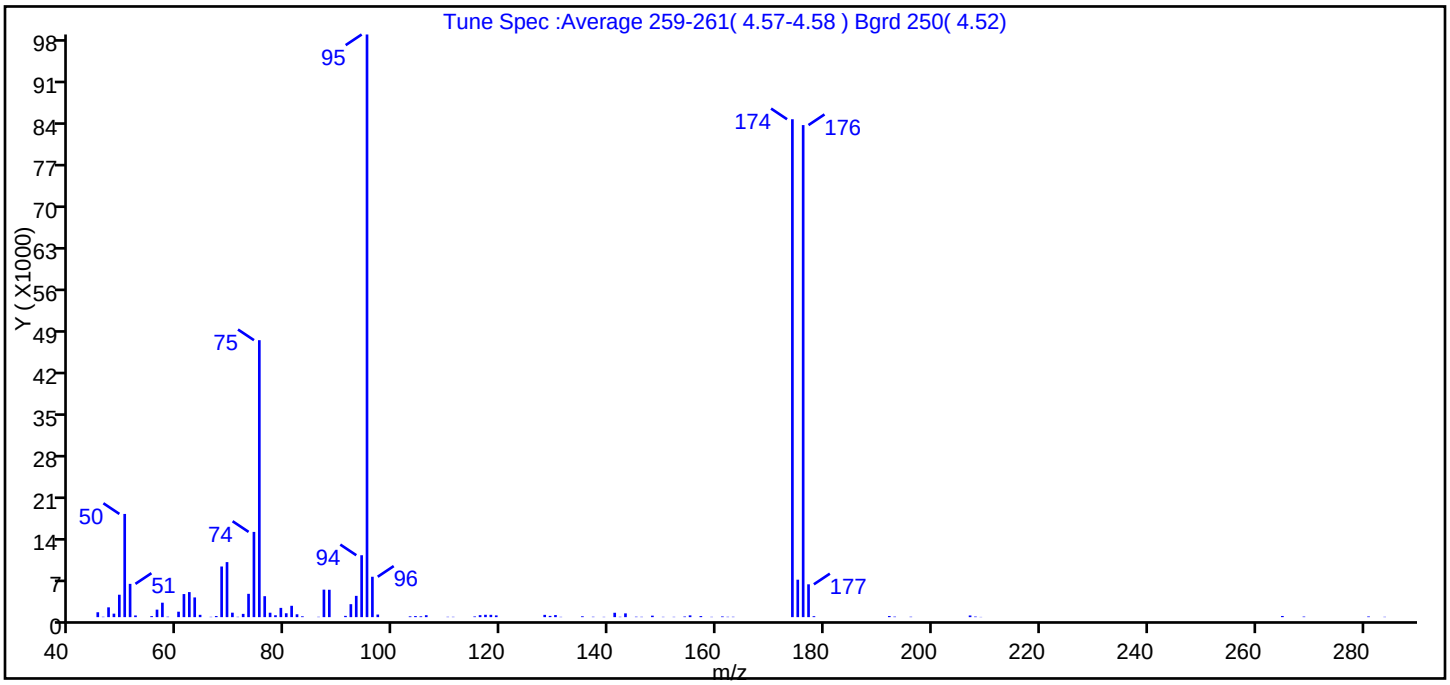
MV-BFB_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3759.D				
Injection Date:	30-Apr-2015 07:47:30	Instrument ID:	VMS_G2		
Lims ID:	BFB				
Client ID:					
Operator ID:	ilczyszynd	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Tune Method:	BFB Method 8260				

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.7
75	30 to 60% of m/z 95	47.5
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	85.5
175	5 to 9% of m/z 174	6.4 (7.5)
176	Greater than 95% but less than 101% of m/z 174	84.4 (98.8)
177	5 to 9% of m/z 176	5.6 (6.7)

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3759.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 30-Apr-2015 07:47:30
Spectrum: Tune Spec :Average 259-261(4.57-4.58) Bgrd 250(4.52)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	830	73.00	3953	106.00	326	155.00	301
46.00	66	74.00	14450	110.00	58	157.00	179
47.00	1663	75.00	46952	111.00	56	159.00	52
48.00	593	76.00	3553	115.00	119	161.00	117
49.00	3800	77.00	751	116.00	340	162.00	62
50.00	17496	78.00	318	117.00	399	163.00	63
51.00	5643	79.00	1570	118.00	392	174.00	84408
52.00	286	80.00	659	119.00	296	175.00	6349
55.00	175	81.00	1925	128.00	387	176.00	83416
56.00	1273	82.00	485	129.00	212	177.00	5566
57.00	2450	83.00	142	130.00	350	178.00	160
58.00	78	86.00	57	131.00	50	192.00	186
60.00	922	87.00	4664	135.00	146	193.00	88
61.00	3912	88.00	4642	137.00	67	196.00	70
62.00	4246	91.00	216	139.00	50	207.00	281
63.00	3342	92.00	2199	141.00	743	208.00	98
64.00	393	93.00	3608	142.00	62	209.00	36
66.00	54	94.00	10495	143.00	640	265.00	197
67.00	187	95.00	98776	145.00	76	269.00	98
68.00	8585	96.00	6848	146.00	58	281.00	113
69.00	9330	97.00	440	148.00	250	284.00	55
70.00	756	103.00	136	150.00	54		
71.00	61	104.00	184	152.00	53		
72.00	554	105.00	142	154.00	106		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68269-2

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-275238/5

Matrix: Water | Lab File ID: G2_3763.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 04/30/2015 09:09

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 275238 | 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.: 280-68269-2
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-275238/5
Matrix: Water
Lab File ID: G2_3763.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 04/30/2015 09:09
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 275238
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	0.423	J	5.0	0.80	0.32
179601-23-1	m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.34
91-20-3	Naphthalene	0.80	U	1.0	0.80	0.22
104-51-8	n-Butylbenzene	0.80	U	1.0	0.80	0.32
103-65-1	N-Propylbenzene	0.40	U	1.0	0.40	0.16
95-47-6	o-Xylene	0.40	U	1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	0.40	U	1.0	0.40	0.17
135-98-8	sec-Butylbenzene	0.40	U	1.0	0.40	0.17
100-42-5	Styrene	0.40	U	1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	32	U	50	32	11
98-06-6	tert-Butylbenzene	0.40	U	1.0	0.40	0.16
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-275238/5

Matrix: Water Lab File ID: G2_3763.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/30/2015 09:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 275238 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	100		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	101		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3763.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Apr-2015 09:09:30 ALS Bottle#: 13 Worklist Smp#: 5
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: ilczyszynd Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Apr-2015 15:07:34 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: ilczyszynd Date: 30-Apr-2015 10:05:37

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	5.571	5.571	0.000	0	194005	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1807849	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	86	374897	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.609	0.001	95	473516	12.5	12.5	
* 5 1,4-Dioxane-d8	96		0.000					ND	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	309438	10.0	9.88	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.269	-0.007	99	251947	10.0	9.64	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1575110	10.0	10.1	
$ 9 4-Bromofluorobenzene (Surr	95	10.659	10.658	0.001	92	446801	10.0	10.0	
$ 10 Trifluorotoluene (Surr)	1		0.000					ND	
$ 11 BFB	95		4.579					ND	
12 Chlorotrifluoroethene	116		3.867					ND	
13 Dichlorodifluoromethane	85		3.895					ND	
15 1,2-Dichloro-1,1,2,2-tetra	85		4.077					ND	
14 Chloromethane	50		4.105					ND	
16 Vinyl chloride	62		4.244					ND	
138 Butadiene	54		4.258					ND	
17 2-Chloro-1,1,1-Trifluoroet	118		4.314					ND	
18 Ethylene oxide	43		4.524					ND	
19 Bromomethane	94		4.607					ND	
20 Chloroethane	64		4.677					ND	
21 Dichlorofluoromethane	67		4.803					ND	
22 Trichlorofluoromethane	101		4.887					ND	
23 Ethanol	45		4.901					ND	
25 Ethyl ether	59		5.068					ND	
24 1,2-Dichloro-1,1,2-trifluo	117		5.082					ND	
26 1,1,1-Trifluoro-2,2-dichlo	83		5.110					ND	
27 Propene oxide	58		5.152					ND	
28 Acrolein	56		5.194					ND	
29 Acetone	43		5.292					ND	
30 Isopropyl alcohol	45		5.306					ND	
32 1,1-Dichloroethene	96		5.334					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 1,1,2-Trichloro-1,2,2-trif	151		5.334					ND	
34 Iodomethane	142		5.501					ND	
33 Acetonitrile	41		5.501					ND	
35 Methyl acetate	43		5.529					ND	
36 3-Chloro-1-propene	41		5.585					ND	
37 Carbon disulfide	76		5.613					ND	
38 2-Methyl-2-propanol	59		5.641					ND	
39 Methylene Chloride	84	5.669	5.669	0.000	94	16695		0.4226	
40 Acrylonitrile	53		5.808					ND	
41 Methyl tert-butyl ether	73		5.864					ND	
42 trans-1,2-Dichloroethene	96		5.892					ND	
43 Hexane	57		6.082					ND	
44 Vinyl acetate	43		6.154					ND	
45 Isopropyl ether	87		6.175					ND	
46 1,1-Dichloroethane	63		6.218					ND	
47 2-Chloro-1,3-butadiene	53		6.290					ND	
48 Tert-butyl ethyl ether	59		6.454					ND	
49 Ethyl acetate	43		6.583					ND	
50 2-Butanone (MEK)	43		6.590					ND	
52 sec-Butyl Alcohol	45		6.633					ND	
51 Propionitrile	54		6.633					ND	
53 cis-1,2-Dichloroethene	96		6.647					ND	
54 2,2-Dichloropropane	77		6.683					ND	
55 Methacrylonitrile	41		6.762					ND	
56 Chlorobromomethane	128		6.840					ND	
57 Chloroform	83		6.847					ND	
58 Tetrahydrofuran	42		6.883					ND	
59 Isobutyl alcohol	41		7.048					ND	
60 1,1,1-Trichloroethane	97		7.076					ND	
61 Cyclohexane	56		7.162					ND	
62 1,1-Dichloropropene	75		7.183					ND	
63 Carbon tetrachloride	117		7.226					ND	
64 1,2-Dichloroethane	62		7.326					ND	
65 Tert-amyl methyl ether	73		7.348					ND	
66 Benzene	78		7.362					ND	
67 n-Heptane	43		7.448					ND	
68 n-Butanol	56		7.548					ND	
69 Trichloroethene	95		7.820					ND	
70 2-Pentanone	43		7.855					ND	
71 Methyl methacrylate	100		7.948					ND	
72 1,2-Dichloropropane	63		8.006					ND	
73 Methylcyclohexane	55		8.027					ND	
74 1,4-Dioxane	88		8.063					ND	
75 Dibromomethane	93		8.106					ND	
76 Dichlorobromomethane	83		8.177					ND	
77 2-Nitropropane	41		8.306					ND	
78 2-Chloroethyl vinyl ether	63		8.320					ND	
79 cis-1,3-Dichloropropene	75		8.499					ND	
80 4-Methyl-2-pentanone (MIBK	43		8.549					ND	
81 Toluene	91		8.785					ND	
82 Ethyl methacrylate	69		8.864					ND	
83 trans-1,3-Dichloropropene	75		8.871					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,1,2-Trichloroethane	97		9.028					ND	
85 2-Hexanone	43		9.143					ND	
86 1,3-Dichloropropane	76		9.164					ND	
87 Tetrachloroethene	164		9.200					ND	
88 Chlorodibromomethane	129		9.357					ND	
89 Tetrahydrothiophene	60		9.400					ND	
90 Ethylene Dibromide	107		9.479					ND	
91 1-Chlorohexane	91		9.715					ND	
92 Chlorobenzene	112		9.822					ND	
130 Dicyclopentadiene TIC	66	9.793	9.850	-0.057	0	9627		0.3210	
132 1,3-Butadiene TIC	39	9.793	9.850	-0.057	0	9127		0.3043	
133 Propene TIC	41	9.808	9.850	-0.042	0	1759		0.0586	
131 4-Ethyltoluene TIC	105		9.850					ND	
93 1,1,1,2-Tetrachloroethane	131		9.858					ND	
94 Ethylbenzene	106		9.865					ND	
95 m-Xylene & p-Xylene	106		9.936					ND	
97 o-Xylene	106		10.251					ND	
96 Styrene	104		10.251					ND	
98 Bromoform	173		10.444					ND	
99 Isopropylbenzene	105		10.515					ND	
100 cis-1,4-Dichloro-2-butene	53		10.523					ND	
101 Cyclohexanone	55		10.630					ND	
102 1,1,2,2-Tetrachloroethane	83		10.701					ND	
103 trans-1,4-Dichloro-2-buten	53		10.737					ND	
104 1,2,3-Trichloropropane	110		10.773					ND	
105 Bromobenzene	156		10.823					ND	
106 N-Propylbenzene	120		10.830					ND	
107 1,3,5-Trimethylbenzene	105		10.937					ND	
108 2-Chlorotoluene	126		10.952					ND	
109 4-Chlorotoluene	126		11.023					ND	
110 tert-Butylbenzene	119		11.230					ND	
111 1,2,4-Trimethylbenzene	105		11.259					ND	
112 sec-Butylbenzene	134		11.409					ND	
113 4-Isopropyltoluene	119		11.502					ND	
114 1,3-Dichlorobenzene	146		11.566					ND	
116 1,4-Dichlorobenzene	146		11.631					ND	
115 1,2,3-Trimethylbenzene	105		11.638					ND	
117 n-Butylbenzene	91		11.860					ND	
118 1,2-Dichlorobenzene	146		11.988					ND	
119 1,2-Dibromo-3-Chloropropan	157		12.710					ND	
120 1,3,5-Trichlorobenzene	180		12.932					ND	
121 1,2,4-Trichlorobenzene	180		13.647					ND	
122 Hexachlorobutadiene	225		13.812					ND	
123 Naphthalene	128		14.005					ND	
124 1,2,3-Trichlorobenzene	180		14.319					ND	
129 2-Methylhexane	1		0.000					ND	
137 2,2,3-Trimethylbutane	1		0.000					ND	
140 n-Butyl acetate	43		0.000					ND	
145 Pentachloroethane	167		0.000					ND	
139 3-Methylhexane	1		0.000					ND	
128 2,2-Dimethylpentane	1		0.000					ND	
141 3,3-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
127 2-Butoxyethanol TIC	1		0.000					ND	
144 Ethyl acrylate	55		0.000					ND	
134 2-Methylnaphthalene	142		0.000					ND	
126 Dimethyl disulfide	1		0.000					ND	
125 2,3-Dimethylpentane	1		0.000					ND	
143 n-Nonyl Aldehyde	1		0.000					ND	
142 2,4-Dimethylpentane	1		0.000					ND	
136 3-Ethylpentane	1		0.000					ND	
135 Benzyl chloride	126		0.000					ND	
147 Dichloroacetonitrile TIC	74		1.000					ND	
146 2,3-dichloro-1-propene TIC	75		1.000					ND	
148 Propene oxide TIC	58		5.334					ND	
S 149 1,2-Dichloroethene, Total	96		2.000					ND	
S 153 1,3-Dichloropropene, Total	1		0.000					ND	
S 154 1,2-Dichloroethene, Total	1		0.000					ND	
S 155 Xylenes, Total	106		0.000					ND	
S 150 Trihalomethanes, Total	1		0.000					ND	
S 151 Xylenes, Total (URS)	1		0.000					ND	
S 152 Total BTEX	1		0.000					ND	

Reagents:

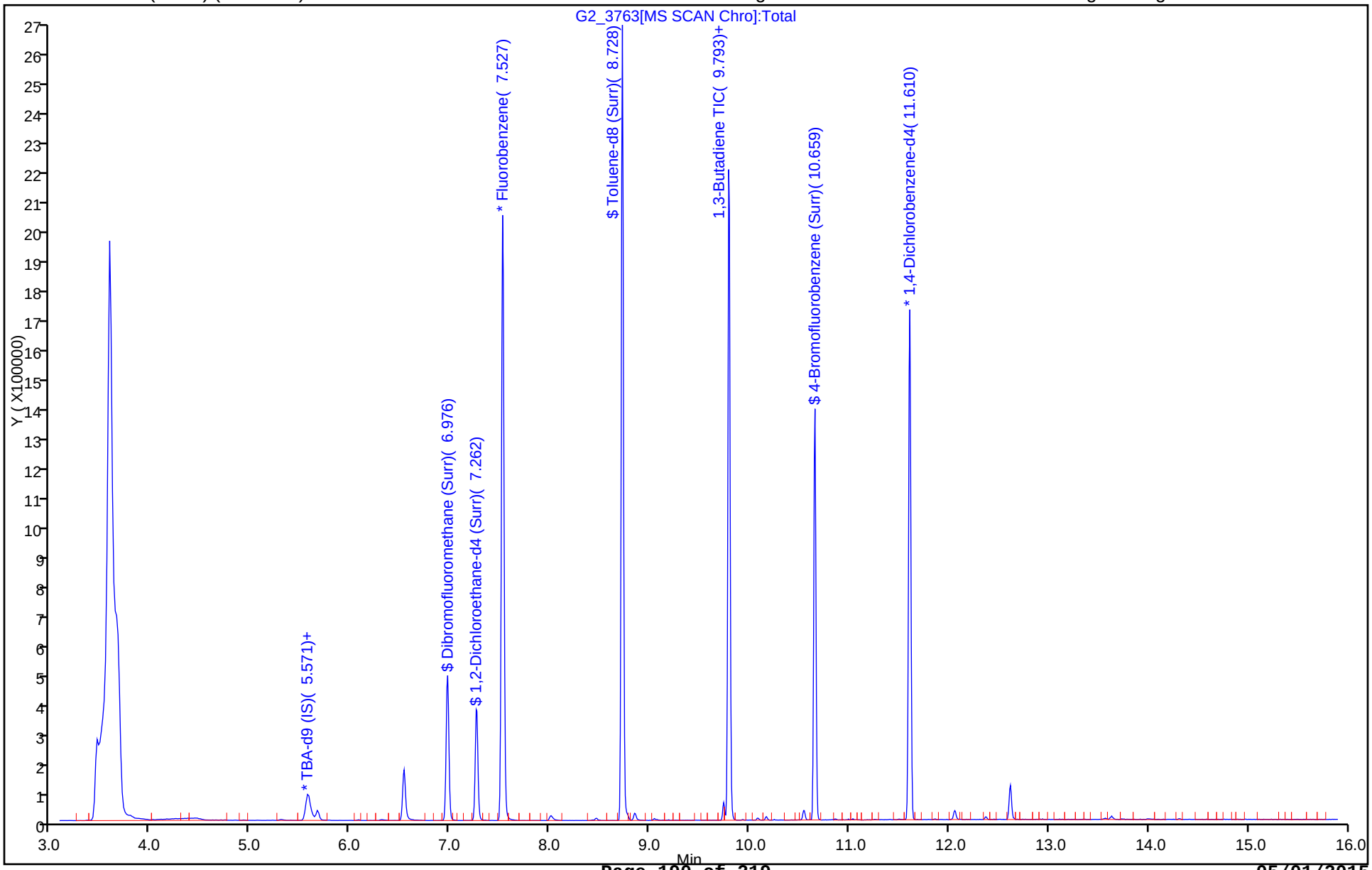
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 30-Apr-2015 15:07:36 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3763.D				
Injection Date:	30-Apr-2015 09:09:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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

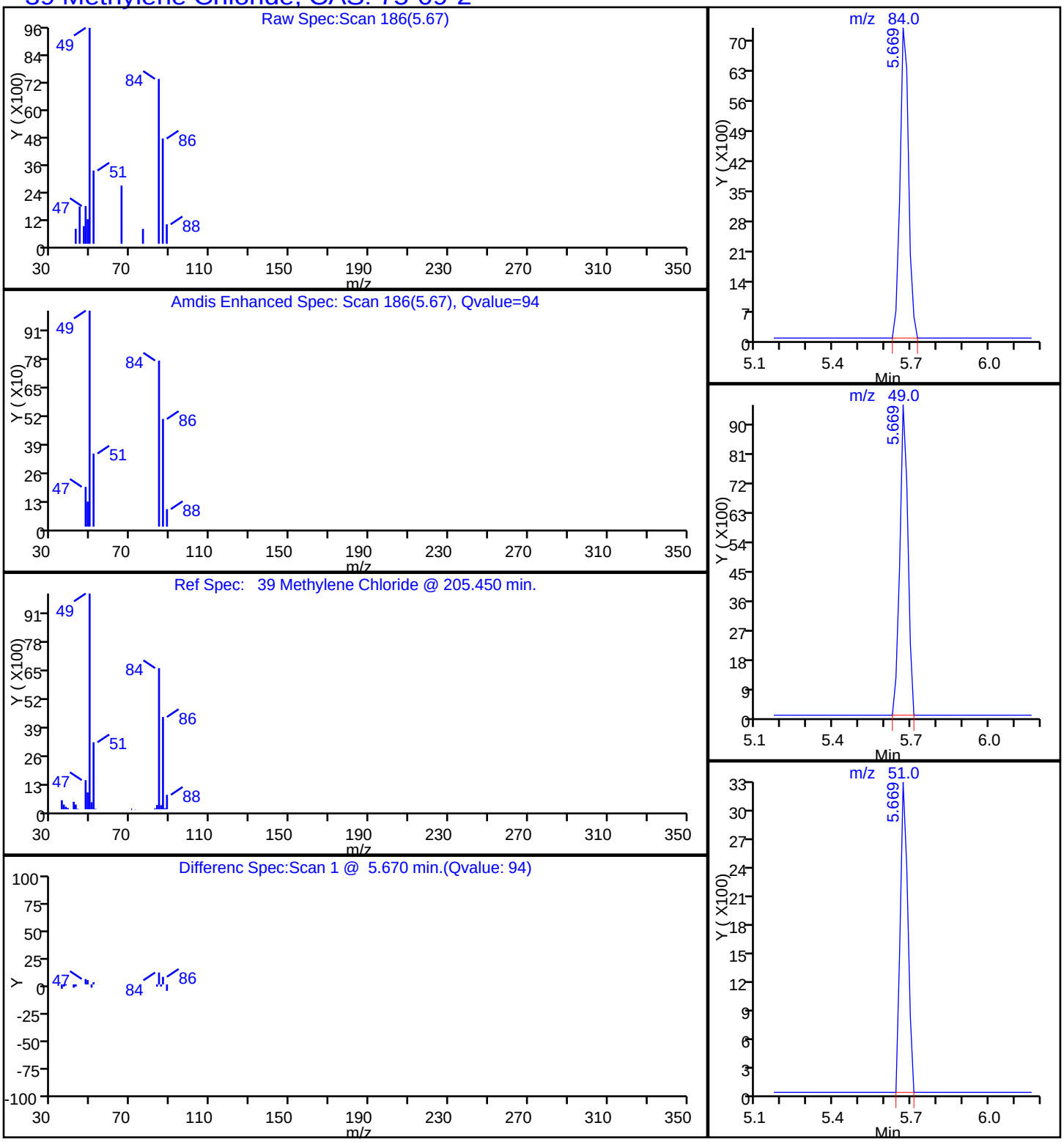


Report Date: 30-Apr-2015 15:07:36 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3763.D				
Injection Date:	30-Apr-2015 09:09:30	Instrument ID:	VMS_G2		
Lims ID:	MB				
Client ID:					
Operator ID:	ilczyszynd	ALS Bottle#:	13	Worklist Smp#:	5
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

39 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-68269-2

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-275238/4

Matrix: Water | Lab File ID: G2_3762.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 04/30/2015 08:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 275238 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	4.92		1.0	0.80	0.17
71-55-6	1,1,1-Trichloroethane	4.70		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	4.95		1.0	0.80	0.20
79-00-5	1,1,2-Trichloroethane	4.77		1.0	0.80	0.32
75-34-3	1,1-Dichloroethane	5.12		1.0	0.80	0.16
75-35-4	1,1-Dichloroethene	4.79		1.0	0.80	0.14
563-58-6	1,1-Dichloropropene	5.41		1.0	0.40	0.15
87-61-6	1,2,3-Trichlorobenzene	4.81		1.0	0.80	0.18
96-18-4	1,2,3-Trichloropropane	4.83		3.0	0.80	0.77
120-82-1	1,2,4-Trichlorobenzene	4.98		1.0	0.80	0.32
95-63-6	1,2,4-Trimethylbenzene	5.00		1.0	0.40	0.14
96-12-8	1,2-Dibromo-3-Chloropropane	4.54	J	5.0	1.6	0.81
106-93-4	1,2-Dibromoethane	4.95		1.0	0.40	0.18
95-50-1	1,2-Dichlorobenzene	5.10		1.0	0.40	0.13
107-06-2	1,2-Dichloroethane	4.89		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	5.06		1.0	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	5.13		1.0	0.40	0.14
541-73-1	1,3-Dichlorobenzene	5.16		1.0	0.40	0.16
142-28-9	1,3-Dichloropropane	4.97		1.0	0.80	0.15
106-46-7	1,4-Dichlorobenzene	5.19		1.0	0.40	0.16
594-20-7	2,2-Dichloropropane	4.81		1.0	0.40	0.20
78-93-3	2-Butanone (MEK)	19.5		6.0	4.0	1.8
95-49-8	2-Chlorotoluene	5.26		1.0	0.40	0.17
591-78-6	2-Hexanone	17.7		5.0	4.0	1.4
106-43-4	4-Chlorotoluene	5.17		1.0	0.80	0.17
108-10-1	4-Methyl-2-pentanone (MIBK)	18.1		5.0	3.2	1.0
67-64-1	Acetone	19.1		10	6.4	1.9
71-43-2	Benzene	5.12		1.0	0.40	0.16
108-86-1	Bromobenzene	5.27		1.0	0.40	0.17
74-97-5	Bromochloromethane	5.14		1.0	0.20	0.10
75-27-4	Bromodichloromethane	4.61		1.0	0.40	0.17
75-25-2	Bromoform	4.56		1.0	0.40	0.19
74-83-9	Bromomethane	4.49		2.0	0.80	0.21
75-15-0	Carbon disulfide	5.11		2.0	1.6	0.45
56-23-5	Carbon tetrachloride	4.90		2.0	0.40	0.19
108-90-7	Chlorobenzene	5.09		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68269-2
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-275238/4
Matrix: Water
Lab File ID: G2_3762.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 04/30/2015 08:50
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 275238
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
124-48-1	Chlorodibromomethane	4.88		1.0	0.40	0.17
75-00-3	Chloroethane	4.62		2.0	1.6	0.41
67-66-3	Chloroform	4.91		1.0	0.40	0.16
74-87-3	Chloromethane	4.31		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	4.98		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	4.89		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	4.25		2.0	0.80	0.31
100-41-4	Ethylbenzene	5.04		1.0	0.40	0.16
87-68-3	Hexachlorobutadiene	5.05		1.0	0.80	0.36
98-82-8	Isopropylbenzene	5.16		1.0	0.40	0.19
1634-04-4	Methyl tert-butyl ether	4.92	J	5.0	0.80	0.25
75-09-2	Methylene Chloride	5.22		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	4.33		1.0	0.80	0.22
104-51-8	n-Butylbenzene	5.01		1.0	0.80	0.32
103-65-1	N-Propylbenzene	5.17		1.0	0.40	0.16
95-47-6	o-Xylene	5.08		1.0	0.40	0.19
99-87-6	p-Isopropyltoluene	5.13		1.0	0.40	0.17
135-98-8	sec-Butylbenzene	5.23		1.0	0.40	0.17
100-42-5	Styrene	4.89		1.0	0.40	0.17
75-65-0	tert-Butyl alcohol	46.9	J	50	32	11
98-06-6	tert-Butylbenzene	5.08		1.0	0.40	0.16
127-18-4	Tetrachloroethene	5.12		1.0	0.40	0.20
108-88-3	Toluene	5.05		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	5.07		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	5.26		1.0	0.40	0.19
79-01-6	Trichloroethene	5.00		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	4.34		2.0	0.80	0.29
75-01-4	Vinyl chloride	4.44		1.5	0.20	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-68269-2
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-275238/4
Matrix: Water
Lab File ID: G2_3762.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 20(mL)
Date Analyzed: 04/30/2015 08:50
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 (60.25) ID: 0.25(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 275238
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)	97		85-114
1868-53-7	Dibromofluoromethane (Surr)	96		80-119
2037-26-5	Toluene-d8 (Surr)	95		89-112

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3762.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Apr-2015 08:50:30 ALS Bottle#: 12 Worklist Smp#: 4
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: ilczyszynd Instrument ID: VMS_G2

Method: \\Denchrom\ChromData\VMS_G2\20150430-34492.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Apr-2015 15:07:34 Calib Date: 28-Apr-2015 17:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\VMS_G2\20150428-34428.b\G2_3698.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	5.571	5.571	0.000	0	176908	250.0	250.0	
* 2 Fluorobenzene	96	7.527	7.527	0.000	99	1695401	12.5	12.5	
* 3 Chlorobenzene-d5	119	9.793	9.793	0.000	85	360518	12.5	12.5	
* 4 1,4-Dichlorobenzene-d4	152	11.610	11.609	0.001	94	465153	12.5	12.5	
$ 6 Dibromofluoromethane (Surr	111	6.976	6.976	0.000	94	282855	10.0	9.63	
$ 7 1,2-Dichloroethane-d4 (Sur	65	7.262	7.269	-0.007	99	232605	10.0	9.49	
$ 8 Toluene-d8 (Surr)	98	8.728	8.728	0.000	93	1417600	10.0	9.47	
$ 9 4-Bromofluorobenzene (Surr	95	10.659	10.658	0.001	92	424762	10.0	9.70	
13 Dichlorodifluoromethane	85	3.881	3.895	-0.014	99	212360	5.00	4.25	
14 Chloromethane	50	4.091	4.105	-0.013	99	231283	5.00	4.31	
16 Vinyl chloride	62	4.230	4.244	-0.014	98	230015	5.00	4.44	
138 Butadiene	54	4.258	4.258	0.000	0	200266	NC	NC	
19 Bromomethane	94	4.593	4.607	-0.014	90	159054	5.00	4.49	
20 Chloroethane	64	4.663	4.677	-0.014	99	161256	5.00	4.62	
21 Dichlorofluoromethane	67	4.803	4.803	0.000	97	373943	5.00	4.59	
22 Trichlorofluoromethane	101	4.887	4.887	0.000	97	271535	5.00	4.34	
25 Ethyl ether	59	5.054	5.068	-0.014	91	91612	5.00	5.01	
28 Acrolein	56	5.194	5.194	0.000	99	74907	50.0	48.2	
29 Acetone	43	5.292	5.292	0.000	100	67725	20.0	19.1	
32 1,1-Dichloroethene	96	5.334	5.334	0.000	98	205971	5.00	4.79	
31 1,1,2-Trichloro-1,2,2-trif	151	5.320	5.334	-0.014	94	169811	5.00	5.01	
34 Iodomethane	142	5.501	5.501	0.000	96	331645	5.00	5.20	
35 Methyl acetate	43	5.529	5.529	0.000	97	218339	25.0	27.0	
36 3-Chloro-1-propene	41	5.585	5.585	0.000	84	328118	5.00	4.36	
37 Carbon disulfide	76	5.599	5.613	-0.014	99	929439	5.00	5.11	
38 2-Methyl-2-propanol	59	5.627	5.641	-0.014	92	51554	50.0	46.9	
39 Methylene Chloride	84	5.669	5.669	0.000	93	193413	5.00	5.22	
40 Acrylonitrile	53	5.809	5.808	0.001	99	213852	50.0	48.1	
41 Methyl tert-butyl ether	73	5.864	5.864	0.000	96	277134	5.00	4.92	
42 trans-1,2-Dichloroethene	96	5.892	5.892	0.000	98	229398	5.00	5.07	
43 Hexane	57	6.075	6.082	-0.007	92	404654	5.00	5.08	
44 Vinyl acetate	43	6.154	6.154	0.000	97	295725	10.0	10.5	
46 1,1-Dichloroethane	63	6.211	6.218	-0.007	96	382154	5.00	5.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	6.583	6.590	-0.007	100	112632	20.0	19.5	
52 sec-Butyl Alcohol	45	6.633	6.633	0.000	95	111694	150.0	134.8	
53 cis-1,2-Dichloroethene	96	6.640	6.647	-0.007	79	209312	5.00	4.98	
54 2,2-Dichloropropane	77	6.676	6.683	-0.007	90	314711	5.00	4.81	
56 Chlorobromomethane	128	6.833	6.840	-0.007	98	66895	5.00	5.14	
57 Chloroform	83	6.847	6.847	0.000	94	303748	5.00	4.91	
58 Tetrahydrofuran	42	6.876	6.883	-0.007	88	31436	10.0	9.84	
59 Isobutyl alcohol	41	7.041	7.048	-0.008	94	39241	125.0	117.7	
60 1,1,1-Trichloroethane	97	7.076	7.076	0.000	99	293047	5.00	4.70	
61 Cyclohexane	56	7.155	7.162	-0.007	91	452989	5.00	5.00	
62 1,1-Dichloropropene	75	7.176	7.183	-0.007	96	322033	5.00	5.41	
63 Carbon tetrachloride	117	7.219	7.226	-0.007	97	250381	5.00	4.90	
64 1,2-Dichloroethane	62	7.327	7.326	0.001	97	152055	5.00	4.89	
66 Benzene	78	7.355	7.362	-0.007	95	864440	5.00	5.12	
67 n-Heptane	43	7.448	7.448	0.000	93	427657	5.00	5.11	
69 Trichloroethene	95	7.820	7.820	0.000	98	221300	5.00	5.00	
70 2-Pentanone	43	7.848	7.855	-0.007	99	159332	20.0	17.0	
72 1,2-Dichloropropane	63	7.999	8.006	-0.007	97	191446	5.00	5.06	
73 Methylcyclohexane	55	8.020	8.027	-0.007	93	357516	5.00	4.93	
74 1,4-Dioxane	88	8.056	8.063	-0.007	92	11948	100.0	107.7	
75 Dibromomethane	93	8.099	8.106	-0.007	95	58162	5.00	4.89	
76 Dichlorobromomethane	83	8.170	8.177	-0.007	99	184617	5.00	4.61	
78 2-Chloroethyl vinyl ether	63	8.313	8.320	-0.007	89	10405	5.00	4.61	
79 cis-1,3-Dichloropropene	75	8.492	8.499	-0.007	95	254711	5.00	5.11	
80 4-Methyl-2-pentanone (MIBK	43	8.549	8.549	0.000	96	208933	20.0	18.1	
81 Toluene	91	8.778	8.785	-0.007	99	937959	5.00	5.05	
82 Ethyl methacrylate	69	8.857	8.864	-0.007	93	104316	5.00	4.66	
83 trans-1,3-Dichloropropene	75	8.864	8.871	-0.007	98	180506	5.00	5.26	
84 1,1,2-Trichloroethane	97	9.028	9.028	0.000	90	89311	5.00	4.77	
85 2-Hexanone	43	9.143	9.143	0.000	94	140456	20.0	17.7	
86 1,3-Dichloropropane	76	9.157	9.164	-0.007	97	167739	5.00	4.97	
87 Tetrachloroethene	164	9.200	9.200	0.000	98	194163	5.00	5.12	
88 Chlorodibromomethane	129	9.350	9.357	-0.007	90	99903	5.00	4.88	
90 Ethylene Dibromide	107	9.479	9.479	0.000	99	81026	5.00	4.95	
91 1-Chlorohexane	91	9.715	9.715	0.000	98	356665	5.00	5.02	
92 Chlorobenzene	112	9.822	9.822	0.000	96	551633	5.00	5.09	
93 1,1,1,2-Tetrachloroethane	131	9.851	9.858	-0.007	97	151007	5.00	4.92	
94 Ethylbenzene	106	9.858	9.865	-0.007	98	339062	5.00	5.04	
95 m-Xylene & p-Xylene	106	9.936	9.936	0.000	100	415837	5.00	5.04	
97 o-Xylene	106	10.251	10.251	0.000	88	376785	5.00	5.08	
96 Styrene	104	10.251	10.251	0.000	87	550403	5.00	4.89	
98 Bromoform	173	10.444	10.444	0.000	97	44677	5.00	4.56	
99 Isopropylbenzene	105	10.508	10.515	-0.007	96	1061036	5.00	5.16	
101 Cyclohexanone	55	10.623	10.630	-0.007	93	60382	200.0	166.9	
102 1,1,2,2-Tetrachloroethane	83	10.701	10.701	0.000	92	84263	5.00	4.95	
103 trans-1,4-Dichloro-2-buten	53	10.737	10.737	0.000	88	20496	5.00	4.57	
104 1,2,3-Trichloropropane	110	10.773	10.773	0.000	86	21942	5.00	4.83	
105 Bromobenzene	156	10.823	10.823	0.000	96	191552	5.00	5.27	
106 N-Propylbenzene	120	10.823	10.830	-0.007	99	295045	5.00	5.17	
107 1,3,5-Trimethylbenzene	105	10.937	10.937	0.000	96	814786	5.00	5.13	
108 2-Chlorotoluene	126	10.945	10.952	-0.007	96	232464	5.00	5.26	
109 4-Chlorotoluene	126	11.023	11.023	0.000	97	227072	5.00	5.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	11.231	11.230	0.001	92	842527	5.00	5.08	
111 1,2,4-Trimethylbenzene	105	11.259	11.259	0.000	94	782893	5.00	5.00	
112 sec-Butylbenzene	134	11.409	11.409	0.000	94	235302	5.00	5.23	
113 4-Isopropyltoluene	119	11.502	11.502	0.000	98	929044	5.00	5.13	
114 1,3-Dichlorobenzene	146	11.567	11.566	0.001	98	387480	5.00	5.16	
116 1,4-Dichlorobenzene	146	11.631	11.631	0.000	95	372368	5.00	5.19	
117 n-Butylbenzene	91	11.860	11.860	0.000	98	834846	5.00	5.01	
118 1,2-Dichlorobenzene	146	11.981	11.988	-0.007	98	299826	5.00	5.10	
119 1,2-Dibromo-3-Chloropropan	157	12.704	12.710	-0.006	83	10397	5.00	4.54	
121 1,2,4-Trichlorobenzene	180	13.647	13.647	0.000	94	185258	5.00	4.98	
122 Hexachlorobutadiene	225	13.805	13.812	-0.007	96	153473	5.00	5.05	
123 Naphthalene	128	13.998	14.005	-0.007	97	185379	5.00	4.33	
124 1,2,3-Trichlorobenzene	180	14.312	14.319	-0.007	95	128692	5.00	4.81	
S 149 1,2-Dichloroethene, Total	96				0		10.0	10.0	
S 153 1,3-Dichloropropene, Total	1				0		10.0	10.4	
S 154 1,2-Dichloroethene, Total	1				0		10.0	10.0	
S 155 Xylenes, Total	106				0		10.0	10.1	
S 150 Trihalomethanes, Total	1				0		20.0	19.0	
S 151 Xylenes, Total (URS)	1				0		10.0	10.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

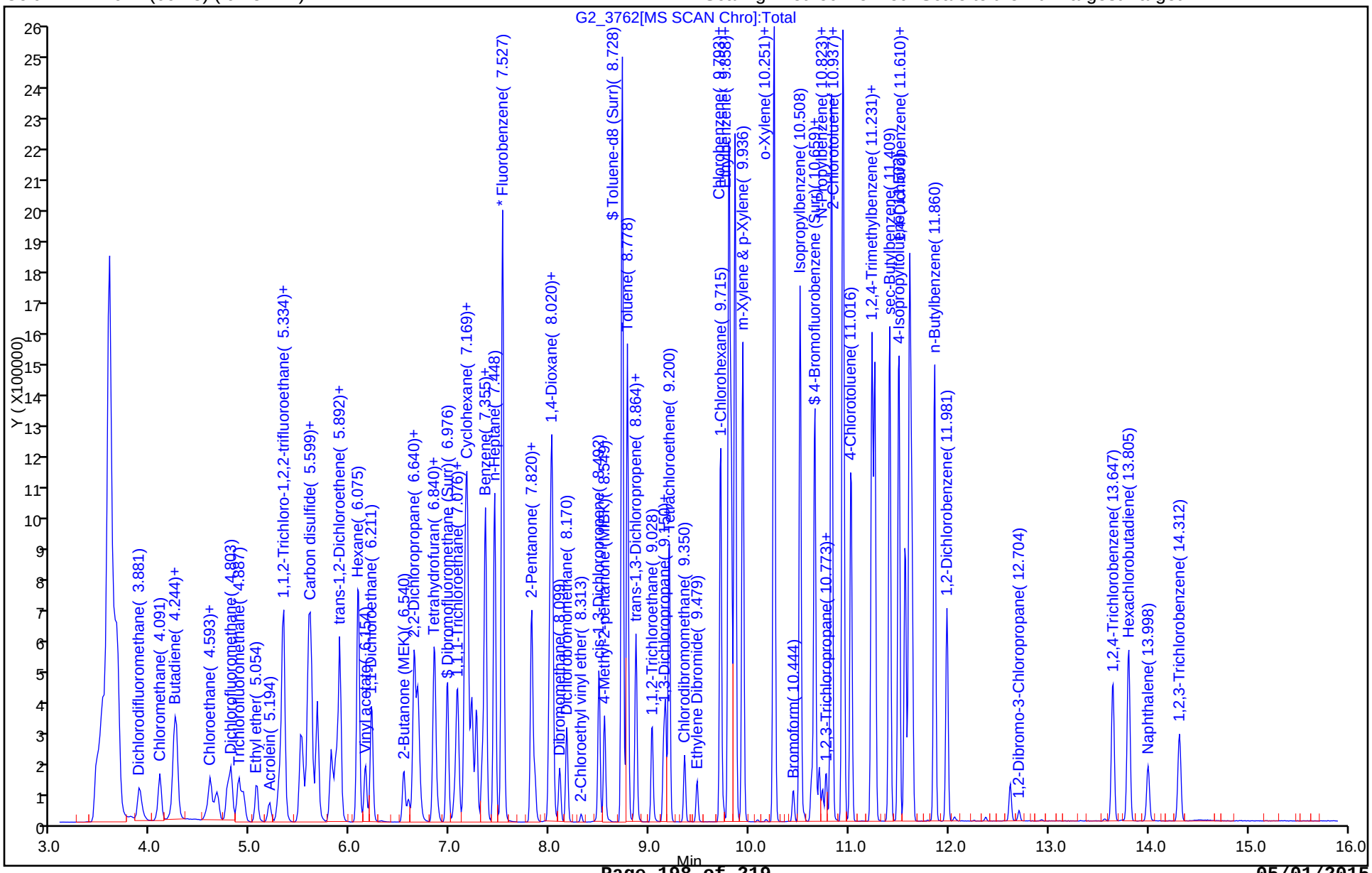
MV-SS 2-Cleve_00020	Amount Added:	2.50	Units: uL	
MV-Main B_00009	Amount Added:	2.50	Units: uL	
MV-Gas/Ket B_00017	Amount Added:	2.50	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00043	Amount Added:	0.80	Units: uL	Run Reagent

Report Date: 30-Apr-2015 15:07:35 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File:	\\Denchrom\ChromData\VMS_G2\20150430-34492.b\G2_3762.D				
Injection Date:	30-Apr-2015 08:50:30	Instrument ID:	VMS_G2	Operator ID:	ilczyszynd
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

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



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Instrument ID: VMS_G2 Start Date: 04/28/2015 13:12

Analysis Batch Number: 274898 End Date: 04/29/2015 00:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-274898/1		04/28/2015 13:12	1	G2_3684.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/9		04/28/2015 13:46	1	G2_3685.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/10		04/28/2015 14:06	1	G2_3686.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/11		04/28/2015 14:25	1	G2_3687.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/12		04/28/2015 14:44	1	G2_3688.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/13		04/28/2015 15:03	1	G2_3689.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/14		04/28/2015 15:22	1	G2_3690.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/15		04/28/2015 15:41	1	G2_3691.D	DB-624 (60.25) 0.25(mm)
ICV 280-274898/16		04/28/2015 16:00	1	G2_3692.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/17		04/28/2015 16:19	1	G2_3693.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/18		04/28/2015 16:38	1	G2_3694.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/19		04/28/2015 16:58	1	G2_3695.D	DB-624 (60.25) 0.25(mm)
ICIS 280-274898/20		04/28/2015 17:17	1	G2_3696.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/21		04/28/2015 17:36	1	G2_3697.D	DB-624 (60.25) 0.25(mm)
IC 280-274898/22		04/28/2015 17:55	1	G2_3698.D	DB-624 (60.25) 0.25(mm)
ICV 280-274898/23		04/28/2015 18:14	1	G2_3699.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 18:38	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 19:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 19:50	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 20:31	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 20:49	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 21:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 21:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 21:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 22:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 22:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 22:44	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 23:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 23:22	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/28/2015 23:41	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/29/2015 00:00	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/29/2015 00:19	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/29/2015 00:38	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-68269-2

SDG No.:

Instrument ID: VMS_G2 Start Date: 04/30/2015 07:47

Analysis Batch Number: 275238 End Date: 04/30/2015 16:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-275238/1		04/30/2015 07:47	1	G2_3759.D	DB-624 (60.25) 0.25(mm)
CCV 280-275238/2		04/30/2015 08:11	1	G2_3760.D	DB-624 (60.25) 0.25(mm)
CCV 280-275238/3		04/30/2015 08:30	1	G2_3761.D	DB-624 (60.25) 0.25(mm)
LCS 280-275238/4		04/30/2015 08:50	1	G2_3762.D	DB-624 (60.25) 0.25(mm)
MB 280-275238/5		04/30/2015 09:09	1	G2_3763.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 09:28	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 09:47	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 10:06	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 10:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 10:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 11:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 11:23	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 11:42	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 12:01	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 12:20	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 12:39	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 12:58	1		DB-624 (60.25) 0.25(mm)
280-68269-11	54400-BH0201-0415	04/30/2015 13:18	1	G2_3776.D	DB-624 (60.25) 0.25(mm)
280-68269-11 DL	54400-BH0201-0415 DL	04/30/2015 13:37	1	G2_3777.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 13:56	1		DB-624 (60.25) 0.25(mm)
CCVC 280-275238/24		04/30/2015 14:15	1	G2_3779.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 14:34	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 14:53	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 15:32	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 15:51	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 16:10	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/30/2015 16:29	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA Continuing Calibration Review Checklist *TestAmerica Denver*

Instrument ID and Date: G2 043015 Work List 34492

Check Method Used: Analysis ☐ 624 ☒ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	---- Level 1 ---- Yes	No	N/A	Level 2	Comments
Continuing Calibration					
1. BFB meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	✓			✓	
4. Does %D meet criteria for non-CCC compounds?	✓			✓	
5. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	✓			✓	
6. Label number of standard used recorded?	✓			✓	
7. Manual integrations documented and checked?			✓	✓	
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	
9. Does this CCV pass Q4 criteria?	✓			✓	Q5

1st Level Reviewer: _____ Date: 4/30/15

2nd Level Reviewer: _____ Date: 4-30-15

Revision 2
4/2/2013
G:\QA\Edit\FORMS\Data Review\MS VOA\GCMS VOA CCV Rev2.doc

Sequence Name: C:\MSDCHEM\1\SEQUENCE\043015.S
Comment:
Operator: ilczyszynd
Data Path: C:\MSDchem\1\data\043015\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: 62
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 0747
Lime Batch: 275238

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	G2_3759	BFB	BFB
2	Sample	10	G2_3760	8260B2	ccv
3	Sample	11	G2_3761	8260B2	ccv
4	Sample	12	G2_3762	8260B2	lcs
5	Sample	13	G2_3763	8260B2	mb
6	Sample	14	G2_3764	8260B2	280-67977-B-1 pH2
7	Sample	15	G2_3765	8260B2	280-67977-B-11 pH2
8	Sample	16	G2_3766	8260B2	280-68148-B-1 pH2
9	Sample	17	G2_3767	8260B2	280-68148-A-2 pH2
10	Sample	18	G2_3768	8260B2	280-68148-A-3 pH2
11	Sample	19	G2_3769	8260B2	280-68148-A-3 pH2 5ml
12	Sample	20	G2_3770	8260B2	280-68148-C-4 pH2
13	Sample	21	G2_3771	8260B2	280-68148-B-5 pH2
14	Sample	22	G2_3772	8260B2	280-68148-B-6 pH2
15	Sample	23	G2_3773	8260B2	280-68148-A-7 pH2
16	Sample	24	G2_3774	8260B2	280-68148-B-8 pH2
17	Sample	25	G2_3775	8260B2	280-68221-G-1 pH2
18	Sample	26	G2_3776	8260B2	280-68269-A-11 pH2 1ml
19	Sample	27	G2_3777	8260B2	280-68269-A-11 pH2 0.1ml
20	Sample	28	G2_3778	8260B2	280-68160-D-1 pH2
21	Sample	29	G2_3779	8260B2	ccvc
22	Sample	30	G2_3780	8260B2	280-68222-C-1 pH2
23	Sample	31	G2_3781	8260B2	280-68222-E-2 pH2
24	Sample	32	G2_3782	8260B2	280-68222-E-2 pH2 5ml
25	Sample	33	G2_3783	8260B2	280-68222-E-3 pH2
26	Sample	34	G2_3784	8260B2	280-68222-E-4 pH2
27	Sample	35	G2_3785	8260B2	280-68222-D-5 pH2
28	Sample	36	G2_3786	8260B2	280-68222-A-6 pH2

TestAmerica Laboratories
Worklist Report

Worklist Name: 043015 Worklist Number: 34492
Instrument Name: VMS_G2 Chrom Method: AQ_VMSG2_8260
Purge Volume: 20.00 Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_G2\20150430-34492.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00043 Amount Added: 0.800000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034492-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034492-002	# 2 CCV	MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	CCV		voaWater	20.00	mL	1.000000
280-0034492-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034492-004	# 4 LCS	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCS		voaWater	20.00	mL	1.000000
280-0034492-005	# 5 MB		MB		voaWater	20.00	mL	1.000000
280-0034492-006	# 6 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034492-007	# 7 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034492-008	# 8 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034492-009	# 9 280-67977-B-1		Client		voaWater	20.00	mL	1.000000
280-0034492-010	#10 280-67977-B-11		Client		voaWater	20.00	mL	1.000000
280-0034492-011	#11 280-68148-B-1		Client		voaWater	20.00	mL	1.000000
280-0034492-012	#12 280-68148-A-2		Client		voaWater	20.00	mL	1.000000
280-0034492-013	#13 280-68148-A-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
280-0034492-014	#14 280-68148-A-3		Client		voaWater	5.000000	mL	1.000000
280-0034492-015	#15 280-68148-C-4		Client		voaWater	20.00	mL	1.000000
280-0034492-016	#16 280-68148-B-5		Client		voaWater	20.00	mL	1.000000
280-0034492-017	#17 280-68148-B-6		Client		voaWater	20.00	mL	1.000000
280-0034492-018	#18 280-68148-A-7		Client		voaWater	20.00	mL	1.000000
280-0034492-019	#19 280-68148-B-8		Client		voaWater	20.00	mL	1.000000
280-0034492-020	#20 280-68221-G-1		Client		voaWater	20.00	mL	1.000000
280-0034492-021	#21 280-68269-A-11		Client		voaWater	1.000000	mL	1.000000
280-0034492-022	#22 280-68269-A-11		Client		voaWater	0.100000	mL	1.000000
280-0034492-023	#23 280-68160-D-1		Client		voaWater	20.00	mL	1.000000
280-0034492-024	#24 ccvc	MV-Main A_00022 MV-Gas/Ket A_00032 MV-2cleve+AVA_00009	CCVC		voaWater	20.00	mL	1.000000
280-0034492-025	#25 280-68222-C-1		Client		voaWater	20.00	mL	1.000000
280-0034492-026	#26 280-68222-E-2		Client		voaWater	20.00	mL	1.000000
280-0034492-027	#27 280-68222-E-2		Client		voaWater	5.000000	mL	1.000000
280-0034492-028	#28 280-68222-E-3		Client		voaWater	20.00	mL	1.000000
280-0034492-029	#29 280-68222-E-4		Client		voaWater	20.00	mL	1.000000
280-0034492-030	#30 280-68222-D-5		Client		voaWater	20.00	mL	1.000000
280-0034492-031	#31 280-68222-A-6		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034492-032	#32 Samp 32		Client		voaWater	20.00	mL	1.000000

MAIN/GAS/2CLEVE

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

TestAmerica

Instrument ID and Date: G2 04/28/15 ICAL Batch/ICV lines 274898/16
Calibration Event 22147 Work List 34428 2nd Day Batch/ICV lines —

Check Method Used: Analysis ☐ 624 ☑ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☑ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Does the Form VI match the data in the Chrom source method?	✓			✓	
4. Sufficient number of calibration points used?	✓			✓	
5. Reasons for removal of points documented?	✓			✓	Some points < RL removed
6. %RSD or correlation coefficient within method limits?	✓			✓	
7. Response factors meet criteria?	✓			✓	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	✓			✓	
9. Data checked for detector saturation?	✓			✓	
10. Label number of standards used recorded?	✓			✓	
11. Manual integrations documented and checked?			✓	✓	
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.	✓			✓	

1st Level Reviewer: [signature] Date: 04/28/15 2-CLEVE NO HIGH POINT

2nd Level Reviewer: [signature] Date: 4/29/15

Revision 4
03/27/2013
G:\QA\Edit\FORMS\Data Review\MS VOA\GCMS VOA ICAL Rev 4.doc

Sequence Name: C:\MSDCHEM\1\SEQUENCE\042815I.S
Comment:
Operator: ilczyszyn
Data Path: C:\MSDchem\1\data\042815I\
Pre-Seq Cmd:
Post-Seq Cmd:

TestAmerica Denver
Instrument: 62
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (25mL/5mL/5g) (Circle)
Tune Time: 1312 0036
Tune File: 2745998

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	50	G2_3680	8260B2	pr
2	Sample	51	G2_3681	8260B2	pr
3	Sample	52	G2_3682	8260B2	high pt ck
4	Sample	53	G2_3683	8260B2	blk
5	Sample	100	G2_3684	BFB	BFB
6	Sample	10	G2_3685	8260B2	ic
7	Sample	11	G2_3686	8260B2	ic
8	Sample	12	G2_3687	8260B2	ic
9	Sample	13	G2_3688	8260B2	ic
10	Sample	14	G2_3689	8260B2	ic
11	Sample	15	G2_3690	8260B2	ic
12	Sample	16	G2_3691	8260B2	ic
13	Sample	17	G2_3692	8260B2	icv
14	Sample	18	G2_3693	8260B2	ic
15	Sample	19	G2_3694	8260B2	ic
16	Sample	20	G2_3695	8260B2	ic
17	Sample	21	G2_3696	8260B2	icis
18	Sample	22	G2_3697	8260B2	ic
19	Sample	23	G2_3698	8260B2	ic
20	Sample	24	G2_3699	8260B2	icv
21	Sample	25	G2_3700	8260B2	mb
22	Sample	26	G2_3701	8260B2	lcs
23	Sample	27	G2_3702	8260B2	lcsd
24	Sample	28	G2_3703	8260B2	lcs rr
25	Sample	29	G2_3704	8260B2	280-67827-D-5 pH2
26	Sample	30	G2_3705	8260B2	280-67896-B-1 pH2
27	Sample	31	G2_3706	8260B2	280-67896-F-2 pH2
28	Sample	32	G2_3707	8260B2	280-67896-F-3 pH2
29	Sample	33	G2_3708	8260B2	280-67896-D-4 pH2
30	Sample	34	G2_3709	8260B2	280-67896-F-5 pH2
31	Sample	35	G2_3710	8260B2	280-67827-D-5 pH2
32	Sample	36	G2_3711	8260B2	280-67896-D-6 pH2
33	Sample	37	G2_3712	8260B2	280-67896-E-7 pH2
34	Sample	38	G2_3713	8260B2	280-67895-B-1 pH2
35	Sample	39	G2_3714	8260B2	280-67895-G-2 pH2
36	Sample	40	G2_3715	8260B2	280-67895-G-3 pH2
37	Sample	41	G2_3716	8260B2	280-67895-B-4 pH2
38	Sample	42	G2_3717	8260B2	280-67895-G-5 ph2
39	Sample	43	G2_3718	8260B2	280-67895-G-5 ph2 5mL
40	Sample	44	G2_3719	8260B2	pr
41	Sample	45	G2_3720	8260B2	pr

TestAmerica Laboratories
Worklist Report

Worklist Name: 042815I
Worklist Number: 34428
Instrument Name: VMS_G2
Chrom Method: AQ_VMSG2_8260
Purge Volume: 20.00
Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_G2\20150428-34428.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00043 Amount Added: 0.800000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034428-002	# 2 CCV	MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	CCV		voaWater	20.00	mL	1.000000
280-0034428-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034428-004	# 4 LCS	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCS		voaWater	20.00	mL	1.000000
280-0034428-024	#24 LCSD	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCSD		voaWater	20.00	mL	1.000000
280-0034428-005	# 5 MB		MB		voaWater	20.00	mL	1.000000
280-0034428-006	# 6 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034428-007	# 7 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034428-008	# 8 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034428-009	# 9 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	1	voaWater	20.00	mL	1.000000
280-0034428-010	#10 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	2	voaWater	20.00	mL	1.000000
280-0034428-011	#11 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-012	#12 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	4	voaWater	20.00	mL	1.000000
280-0034428-013	#13 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	5	voaWater	20.00	mL	1.000000
280-0034428-014	#14 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	6	voaWater	20.00	mL	1.000000
280-0034428-015	#15 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	7	voaWater	20.00	mL	1.000000
280-0034428-016	#16 icv	MV-567649-D_00001 MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket A_00032	ICV		voaWater	20.00	mL	1.000000
280-0034428-017	#17 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	2	voaWater	20.00	mL	1.000000
280-0034428-018	#18 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	3	voaWater	20.00	mL	1.000000
280-0034428-019	#19 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	4	voaWater	20.00	mL	1.000000
280-0034428-020	#20 icis	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	ICIS	5	voaWater	20.00	mL	1.000000
280-0034428-021	#21 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	6	voaWater	20.00	mL	1.000000
280-0034428-022	#22 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	7	voaWater	20.00	mL	1.000000
280-0034428-023	#23 icv	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp B_00005	ICV		voaWater	20.00	mL	1.000000
280-0034428-025	#25 280-67827-D-5		Client		voaWater	20.00	mL	1.000000
280-0034428-026	#26 280-67896-B-1		Client		voaWater	20.00	mL	1.000000
280-0034428-027	#27 280-67896-F-2		Client		voaWater	20.00	mL	1.000000
280-0034428-028	#28 280-67896-F-3		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-029	#29 280-67896-D-4		Client		voaWater	20.00	mL	1.000000
280-0034428-030	#30 280-67896-F-5		Client		voaWater	20.00	mL	1.000000
280-0034428-031	#31 280-67896-D-6		Client		voaWater	20.00	mL	1.000000
280-0034428-032	#32 280-67896-E-7		Client		voaWater	20.00	mL	1.000000
280-0034428-033	#33 280-67895-B-1		Client		voaWater	20.00	mL	1.000000
280-0034428-034	#34 280-67895-G-2		Client		voaWater	20.00	mL	1.000000
280-0034428-035	#35 280-67895-G-3		Client		voaWater	20.00	mL	1.000000
280-0034428-036	#36 280-67895-B-4		Client		voaWater	20.00	mL	1.000000
280-0034428-037	#37 280-67895-G-5		Client		voaWater	20.00	mL	1.000000
280-0034428-038	#38 280-67895-G-5		Client		voaWater	5.000000	mL	1.000000
280-0034428-039	#39 Samp 39		Client		voaWater	20.00	mL	1.000000

SUPP/SWER

TestAmerica Denver
GC/MS Initial Calibration Review Checklist

TestAmerica

Instrument ID and Date: G2 04/28/15 ICAL Batch/ICV lines 274898/ICIS 20 ICV 23
Calibration Event 22148 Work List 34428 2nd Day Batch/ICV lines —

Check Method Used: Analysis ☐ 624 ☑ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☑ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Does the Form VI match the data in the Chrom source method?	✓			✓	
4. Sufficient number of calibration points used?	✓			✓	
5. Reasons for removal of points documented?	✓			✓	Some points < RL removed
6. %RSD or correlation coefficient within method limits?	✓			✓	
7. Response factors meet criteria?	✓			✓	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane &MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane	✓			✓	
9. Data checked for detector saturation?	✓			✓	
10. Label number of standards used recorded?	✓			✓	
11. Manual integrations documented and checked?	✓			✓	Ethanol pt. 2
12. 2nd source ICV recovery 80-120% (±20%drift) for DoD projects, 65-135% (±35%,or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	✓			✓	Ethyl acetate -45.2%

1st Level Reviewer: _____ Date: 04/28/15

2nd Level Reviewer: _____ Date: 4/29/15

Revision 4
03/27/2013
G:\QA\Edit\FORMS\Data Review\MS VOA\GCMS VOA ICAL Rev 4.doc

Sequence Name: C:\MSDCHEM\1\SEQUENCE\042815I.S
Comment:
Operator: ilczyszyn
Data Path: C:\MSDchem\1\data\042815I\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: 62
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 1312 0036
2745998

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	50	G2_3680	8260B2	pr
2	Sample	51	G2_3681	8260B2	pr
3	Sample	52	G2_3682	8260B2	high pt ck
4	Sample	53	G2_3683	8260B2	blk
5	Sample	100	G2_3684	BFB	BFB
6	Sample	10	G2_3685	8260B2	ic
7	Sample	11	G2_3686	8260B2	ic
8	Sample	12	G2_3687	8260B2	ic
9	Sample	13	G2_3688	8260B2	ic
10	Sample	14	G2_3689	8260B2	ic
11	Sample	15	G2_3690	8260B2	ic
12	Sample	16	G2_3691	8260B2	ic
13	Sample	17	G2_3692	8260B2	icv
14	Sample	18	G2_3693	8260B2	ic
15	Sample	19	G2_3694	8260B2	ic
16	Sample	20	G2_3695	8260B2	ic
17	Sample	21	G2_3696	8260B2	icis
18	Sample	22	G2_3697	8260B2	ic
19	Sample	23	G2_3698	8260B2	ic
20	Sample	24	G2_3699	8260B2	icv
21	Sample	25	G2_3700	8260B2	mb
22	Sample	26	G2_3701	8260B2	lcs
23	Sample	27	G2_3702	8260B2	lcsd
24	Sample	28	G2_3703	8260B2	lcs rr
25	Sample	29	G2_3704	8260B2	280-67827-D-5 pH2
26	Sample	30	G2_3705	8260B2	280-67896-B-1 pH2
27	Sample	31	G2_3706	8260B2	280-67896-F-2 pH2
28	Sample	32	G2_3707	8260B2	280-67896-F-3 pH2
29	Sample	33	G2_3708	8260B2	280-67896-D-4 pH2
30	Sample	34	G2_3709	8260B2	280-67896-F-5 pH2
31	Sample	35	G2_3710	8260B2	280-67827-D-5 pH2
32	Sample	36	G2_3711	8260B2	280-67896-D-6 pH2
33	Sample	37	G2_3712	8260B2	280-67896-E-7 pH2
34	Sample	38	G2_3713	8260B2	280-67895-B-1 pH2
35	Sample	39	G2_3714	8260B2	280-67895-G-2 pH2
36	Sample	40	G2_3715	8260B2	280-67895-G-3 pH2
37	Sample	41	G2_3716	8260B2	280-67895-B-4 pH2
38	Sample	42	G2_3717	8260B2	280-67895-G-5 ph2
39	Sample	43	G2_3718	8260B2	280-67895-G-5 ph2 5mL
40	Sample	44	G2_3719	8260B2	pr
41	Sample	45	G2_3720	8260B2	pr

TestAmerica Laboratories
Worklist Report

Worklist Name: 042815I
Worklist Number: 34428
Instrument Name: VMS_G2
Chrom Method: AQ_VMSG2_8260
Purge Volume: 20.00
Units: mL
Analysis Type: VOA
Batch Directory: \\Denchrom\ChromData\VMS_G2\20150428-34428.b
Upload Directory: \\Corptalsapp06\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-567649-D_00001 Amount Added: 1.000000, Units: uL
Run Reagent: MV-ARCH SS A_00043 Amount Added: 0.800000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-001	# 1 BFB	MV-BFB_00018	BFB		voaWater	1.000000	uL	1.000000
280-0034428-002	# 2 CCV	MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	CCV		voaWater	20.00	mL	1.000000
280-0034428-003	# 3 CCV	MV-Supp A_00011 MV-567649-D_00001	CCV		voaWater	20.00	mL	1.000000
280-0034428-004	# 4 LCS	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCS		voaWater	20.00	mL	1.000000
280-0034428-024	#24 LCSD	MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket B_00017	LCSD		voaWater	20.00	mL	1.000000
280-0034428-005	# 5 MB		MB		voaWater	20.00	mL	1.000000
280-0034428-006	# 6 280-62974-A-1		Client		voaWater	20.00	mL	1.000000
280-0034428-007	# 7 280-62974-A-2		Client		voaWater	20.00	mL	1.000000
280-0034428-008	# 8 280-62974-A-3		Client		voaWater	20.00	mL	1.000000
280-0034428-009	# 9 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	1	voaWater	20.00	mL	1.000000
280-0034428-010	#10 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	2	voaWater	20.00	mL	1.000000
280-0034428-011	#11 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	3	voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-012	#12 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	4	voaWater	20.00	mL	1.000000
280-0034428-013	#13 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	5	voaWater	20.00	mL	1.000000
280-0034428-014	#14 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	6	voaWater	20.00	mL	1.000000
280-0034428-015	#15 ic	MV-567649-D_00001 MV-2cleve+AVA_00009 MV-Main A_00022 MV-Gas/Ket A_00032	IC	7	voaWater	20.00	mL	1.000000
280-0034428-016	#16 icv	MV-567649-D_00001 MV-SS 2-Cleve_00020 MV-Main B_00009 MV-Gas/Ket A_00032	ICV		voaWater	20.00	mL	1.000000
280-0034428-017	#17 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	2	voaWater	20.00	mL	1.000000
280-0034428-018	#18 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	3	voaWater	20.00	mL	1.000000
280-0034428-019	#19 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	4	voaWater	20.00	mL	1.000000
280-0034428-020	#20 icis	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	ICIS	5	voaWater	20.00	mL	1.000000
280-0034428-021	#21 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	6	voaWater	20.00	mL	1.000000
280-0034428-022	#22 ic	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp A_00011	IC	7	voaWater	20.00	mL	1.000000
280-0034428-023	#23 icv	MV-567649-D_00001 MV-ARCH SS A_00043 MV-Supp B_00005	ICV		voaWater	20.00	mL	1.000000
280-0034428-025	#25 280-67827-D-5		Client		voaWater	20.00	mL	1.000000
280-0034428-026	#26 280-67896-B-1		Client		voaWater	20.00	mL	1.000000
280-0034428-027	#27 280-67896-F-2		Client		voaWater	20.00	mL	1.000000
280-0034428-028	#28 280-67896-F-3		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0034428-029	#29 280-67896-D-4		Client		voaWater	20.00	mL	1.000000
280-0034428-030	#30 280-67896-F-5		Client		voaWater	20.00	mL	1.000000
280-0034428-031	#31 280-67896-D-6		Client		voaWater	20.00	mL	1.000000
280-0034428-032	#32 280-67896-E-7		Client		voaWater	20.00	mL	1.000000
280-0034428-033	#33 280-67895-B-1		Client		voaWater	20.00	mL	1.000000
280-0034428-034	#34 280-67895-G-2		Client		voaWater	20.00	mL	1.000000
280-0034428-035	#35 280-67895-G-3		Client		voaWater	20.00	mL	1.000000
280-0034428-036	#36 280-67895-B-4		Client		voaWater	20.00	mL	1.000000
280-0034428-037	#37 280-67895-G-5		Client		voaWater	20.00	mL	1.000000
280-0034428-038	#38 280-67895-G-5		Client		voaWater	5.000000	mL	1.000000
280-0034428-039	#39 Samp 39		Client		voaWater	20.00	mL	1.000000

Shipping and Receiving Documents

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

280-68269 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A Zabierek	Lab PM: Walker, Elaine M	Carrier Tracking No(s): Fedex 807724435301 Cooler 1	COC No:
Client Contact: Anna Zabierek	Phone: 512 346 4474	E-Mail: elaine.walker@testamericainc.com		Page: Page 1 of 2
Company: GSI Environmental, Inc				Job #: 3969-211
Address: 9600 Great Hills Trail, Ste 350E	Due Date Requested:			
City: Austin	TAT Requested (days): St 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-TBØ7-Ø415	4.22.15	X	A	W			X															Short Holds: Hex. Chromium (24 hr), Nitrate/Nitrite, Sulfite(48 hr)
544ØØ-BHØ2ØIS-Ø415	4.22.15	1112																				
544ØØ-BHØ2Ø3S-Ø415	4.23.15	1102																				
544ØØ-BHØ2Ø6-Ø415	4.23.15	1208																				
544ØØ-MW226-Ø415	4.23.15	1600																				
544ØØ-MW47-Ø415	4.22.15	1845																				
544ØØ-BHØ2Ø3-Ø415	4.23.15	1243																				
544ØØ-BHØ3Ø4-Ø415	4.22.15	1428																				
544ØØ-BHØ2Ø2-Ø415	4.22.15	1420																				
544Ø2-EBØ7-0415	4.22.15	1820																				
544ØØ-BHØ2Ø1-0415	4.22.15	1628																				

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]	4.23.15 1945		[signature]	4/24/15 0930	
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: Transfer by MS 3.5 IR5 TO2 4/24/15

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. Zabierele	Lab PM: Walker, Elaine M	Carrier Tracking No(s): Fedex 807774435301 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 #: 3469-211
Address: 9600 Great Hills Trail, Ste 350E	Due Date Requested:			
City: Austin	TAT Requested (days): 5d 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 3469-211			
Site: SWMU207	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	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		
4401-DUP01-0415	4.22.15	X	A	W			X															Short Holds: Hex. Chromium (24 hr), Nitrate/Nitrite, Sulfite(48 hr)
4402-EB08-0415	4.23.15	1847	↓	↓			↓															
4400-MW225-0415	4.23.15	1550	↓	↓			↓															

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

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: 4.23.15 / 1945	Company	Received by:	Date/Time: 4/24/15 930	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 280-68269-2

Login Number: 68269

List Source: TestAmerica Denver

List Number: 1

Creator: DeHerrera, Jessica H

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	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	