

ANALYTICAL REPORT

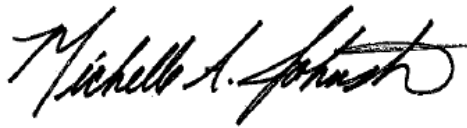
Job Number: 280-67484-2

Job Description: Fort Wingate, New Mexico

For:

Sundance Consulting, Inc
6700 Jefferson Blvd NE
Albuquerque, NM 87109

Attention: John Nance



Approved for release.
Michelle A. Johnston
Project Manager II
5/1/2015 3:02 PM

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05/01/2015

cc: Elizabeth Farias
Jim Lockhart
Ben Moayyad
Mr. Doug Scott

The test results in this report relate only to the samples in this report and meet all requirements of NELAP, 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.

TestAmerica Laboratories, Inc.

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CASE NARRATIVE
Client: Sundance Consulting, Inc.
Project: Fort Wingate, New Mexico
Report Number: 280-67484-2

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.

Sample Receipt

The following report contains the analytical results for two water samples received April 8, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 2.5°C, 0.3°C, 4.8°C, 0.3°C, 3.5°C, 1.3°C and 1.0°C.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67484-1).

No other anomalies were encountered during sample receipt.

GC/MS Semivolatiles - 8270D

Samples MW23042015 (280-67484-5) and DMW23042015 (280-67484-6) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/09/2015 and analyzed on 04/18/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

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

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Instrument ID: SMS_G6 Analysis Batch Number: 272059Lab Sample ID: ICIS 280-272059/3 Client Sample ID: _____Date Analyzed: 02/25/15 11:53 Lab File ID: G6_16637.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	6.43	Split Peak	kiekeld	04/10/15 08:28
Indeno[1,2,3-cd]pyrene	21.13	Shouldering	kiekeld	04/10/15 08:28

Lab Sample ID: STD020 280-272059/6 IC Client Sample ID: _____Date Analyzed: 02/25/15 13:12 Lab File ID: G6_16640.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	6.41	Split Peak	hoeflera	04/10/15 09:04

Lab Sample ID: STD050 280-272059/7 IC Client Sample ID: _____Date Analyzed: 02/25/15 13:39 Lab File ID: G6_16641.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	6.42	Split Peak	hoeflera	04/10/15 09:09
Indeno[1,2,3-cd]pyrene	21.12	Shouldering	hoeflera	04/10/15 09:09

Lab Sample ID: STD120 280-272059/8 IC Client Sample ID: _____Date Analyzed: 02/25/15 14:06 Lab File ID: G6_16642.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	6.43	Split Peak	hoeflera	04/10/15 09:12
Indeno[1,2,3-cd]pyrene	21.13	Shouldering	hoeflera	04/10/15 09:12

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Instrument ID: SMS_G6 Analysis Batch Number: 272059Lab Sample ID: STD160 280-272059/9 IC Client Sample ID: _____Date Analyzed: 02/25/15 14:32 Lab File ID: G6_16643.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	6.45	Split Peak	hoeflera	04/10/15 09:14
Indeno[1,2,3-cd]pyrene	21.15	Shouldering	hoeflera	04/10/15 09:14

Lab Sample ID: STD200 280-272059/10 IC Client Sample ID: _____Date Analyzed: 02/25/15 14:59 Lab File ID: G6_16644.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	6.45	Split Peak	hoeflera	04/10/15 09:22
Indeno[1,2,3-cd]pyrene	21.16	Shouldering	hoeflera	04/10/15 09:22

Lab Sample ID: ICV 280-272059/11 Client Sample ID: _____Date Analyzed: 02/25/15 15:26 Lab File ID: G6_16645.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	21.13	Shouldering	hoeflera	04/10/15 09:24

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Instrument ID: SMS_G6 Analysis Batch Number: 273264Lab Sample ID: CCV 280-273264/3 Client Sample ID: _____Date Analyzed: 04/17/15 18:13 Lab File ID: G6_17382.D GC Column: Vf-5MS (30.25) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	20.83	Shouldering	hoeflera	04/20/15 10:53

SAMPLE SUMMARY

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-67484-5	MW23042015	Water	04/07/2015 0940	04/08/2015 0910
280-67484-5MS	MW23042015	Water	04/07/2015 0940	04/08/2015 0910
280-67484-5MSD	MW23042015	Water	04/07/2015 0940	04/08/2015 0910
280-67484-6	DMW23042015	Water	04/07/2015 0940	04/08/2015 0910

EXECUTIVE SUMMARY - Detections

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method

No Detections

METHOD SUMMARY

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270D	
Liquid-Liquid Extraction (Continuous)	TAL DEN		SW846 3520C

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: Sundance Consulting, Inc

Job Number: 280-67484-2

Method	Analyst	Analyst ID
SW846 8270D	Hoefer, Alexandra F	AFH

Analytical Data

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Client Sample ID: MW23042015

Lab Sample ID: 280-67484-5

Client Matrix: Water

Date Sampled: 04/07/2015 0940

Date Received: 04/08/2015 0910

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	280-273264	Instrument ID:	SMS_G6
Prep Method:	3520C	Prep Batch:	280-272762	Lab File ID:	G6_17400.D
Dilution:	1.0			Initial Weight/Volume:	1003.9 mL
Analysis Date:	04/18/2015 0203			Final Weight/Volume:	1 mL
Prep Date:	04/09/2015 1530			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Caprolactam	2.5	U	2.5	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	87		48 - 135
2-Fluorobiphenyl	83		48 - 135
2-Fluorophenol (Surr)	87		41 - 135
Nitrobenzene-d5 (Surr)	83		42 - 135
Phenol-d5 (Surr)	85		46 - 135
Terphenyl-d14 (Surr)	52		20 - 135

Analytical Data

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Client Sample ID: DMW23042015

Lab Sample ID: 280-67484-6

Date Sampled: 04/07/2015 0940

Client Matrix: Water

Date Received: 04/08/2015 0910

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	280-273264	Instrument ID:	SMS_G6
Prep Method:	3520C	Prep Batch:	280-272762	Lab File ID:	G6_17403.D
Dilution:	1.0			Initial Weight/Volume:	1033.3 mL
Analysis Date:	04/18/2015 0324			Final Weight/Volume:	1 mL
Prep Date:	04/09/2015 1530			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Caprolactam	2.4	U	2.4	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	82		48 - 135
2-Fluorobiphenyl	78		48 - 135
2-Fluorophenol (Surr)	75		41 - 135
Nitrobenzene-d5 (Surr)	76		42 - 135
Phenol-d5 (Surr)	75		46 - 135
Terphenyl-d14 (Surr)	43		20 - 135

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Surrogate Recovery Report**8270D Semivolatile Organic Compounds (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
280-67484-5	MW23042015	87	85	83	83	87	52
280-67484-6	DMW23042015	75	75	76	78	82	43
MB 280-272762/1-A		87	87	87	84	80	84
LCS 280-272762/2-A		95	94	94	91	96	89
280-67484-5 MS	MW23042015 MS	73	75	74	77	89	72
280-67484-5 MSD	MW23042015 MSD	84	82	82	81	86	62

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol (Surr)	41-135
PHL = Phenol-d5 (Surr)	46-135
NBZ = Nitrobenzene-d5 (Surr)	42-135
FBP = 2-Fluorobiphenyl	48-135
TBP = 2,4,6-Tribromophenol (Surr)	48-135
TPH = Terphenyl-d14 (Surr)	20-135

Quality Control Results

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Method Blank - Batch: 280-272762

Method: 8270D Preparation: 3520C

Lab Sample ID: MB 280-272762/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/17/2015 1949
Prep Date: 04/09/2015 1530
Leach Date: N/A

Analysis Batch: 280-273264
Prep Batch: 280-272762
Leach Batch: N/A
Units: ug/L

Instrument ID: SMS_G6
Lab File ID: G6_17386.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume: 0.5 uL

Analyte	Result	Qual	MDL	RL
Caprolactam	2.5	U	2.5	5.0

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	80	48 - 135
2-Fluorobiphenyl	84	48 - 135
2-Fluorophenol (Surr)	87	41 - 135
Nitrobenzene-d5 (Surr)	87	42 - 135
Phenol-d5 (Surr)	87	46 - 135
Terphenyl-d14 (Surr)	84	20 - 135

Lab Control Sample - Batch: 280-272762

Method: 8270D Preparation: 3520C

Lab Sample ID: LCS 280-272762/2-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/17/2015 2016
Prep Date: 04/09/2015 1530
Leach Date: N/A

Analysis Batch: 280-273264
Prep Batch: 280-272762
Leach Batch: N/A
Units: ug/L

Instrument ID: SMS_G6
Lab File ID: G6_17387.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume: 0.5 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Caprolactam	80.0	72.4	90	64 - 120	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	96	48 - 135
2-Fluorobiphenyl	91	48 - 135
2-Fluorophenol (Surr)	95	41 - 135
Nitrobenzene-d5 (Surr)	94	42 - 135
Phenol-d5 (Surr)	94	46 - 135
Terphenyl-d14 (Surr)	89	20 - 135

Quality Control Results

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272762**

**Method: 8270D
Preparation: 3520C**

MS Lab Sample ID:	280-67484-5	Analysis Batch:	280-273264	Instrument ID:	SMS_G6
Client Matrix:	Water	Prep Batch:	280-272762	Lab File ID:	G6_17401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	998.5 mL
Analysis Date:	04/18/2015 0230			Final Weight/Volume:	1 mL
Prep Date:	04/09/2015 1530			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-67484-5	Analysis Batch:	280-273264	Instrument ID:	SMS_G6
Client Matrix:	Water	Prep Batch:	280-272762	Lab File ID:	G6_17402.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	965.4 mL
Analysis Date:	04/18/2015 0257			Final Weight/Volume:	1 mL
Prep Date:	04/09/2015 1530			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Caprolactam	85	82	64 - 120	1	30		
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
2,4,6-Tribromophenol (Surr)	89		86	48 - 135			
2-Fluorobiphenyl	77		81	48 - 135			
2-Fluorophenol (Surr)	73		84	41 - 135			
Nitrobenzene-d5 (Surr)	74		82	42 - 135			
Phenol-d5 (Surr)	75		82	46 - 135			
Terphenyl-d14 (Surr)	72		62	20 - 135			

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272762**

**Method: 8270D
Preparation: 3520C**

MS Lab Sample ID:	280-67484-5	Units:	ug/L	MSD Lab Sample ID:	280-67484-5
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/18/2015 0230			Analysis Date:	04/18/2015 0257
Prep Date:	04/09/2015 1530			Prep Date:	04/09/2015 1530
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Caprolactam	2.5 U	80.1	82.9	68.5	67.7

DATA REPORTING QUALIFIERS

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Lab Section	Qualifier	Description
GC/MS Semi VOA	U	Indicates the analyte was analyzed for but not detected.

Quality Control Results

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-272762					
LCS 280-272762/2-A	Lab Control Sample	T	Water	3520C	
MB 280-272762/1-A	Method Blank	T	Water	3520C	
280-67484-5	MW23042015	T	Water	3520C	
280-67484-5MS	Matrix Spike	T	Water	3520C	
280-67484-5MSD	Matrix Spike Duplicate	T	Water	3520C	
280-67484-6	DMW23042015	T	Water	3520C	
Analysis Batch:280-273264					
LCS 280-272762/2-A	Lab Control Sample	T	Water	8270D	280-272762
MB 280-272762/1-A	Method Blank	T	Water	8270D	280-272762
280-67484-5	MW23042015	T	Water	8270D	280-272762
280-67484-5MS	Matrix Spike	T	Water	8270D	280-272762
280-67484-5MSD	Matrix Spike Duplicate	T	Water	8270D	280-272762
280-67484-6	DMW23042015	T	Water	8270D	280-272762

Report Basis

T = Total

Quality Control Results

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Laboratory Chronicle

Lab ID: 280-67484-5

Client ID: MW23042015

Sample Date/Time: 04/07/2015 09:40

Received Date/Time: 04/08/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67484-D-5-B		280-273264	280-272762	04/09/2015 15:30	1	TAL DEN	JRK
A:8270D	280-67484-D-5-B		280-273264	280-272762	04/18/2015 02:03	1	TAL DEN	AFH

Lab ID: 280-67484-5

Client ID: MW23042015

Sample Date/Time: 04/07/2015 09:40

Received Date/Time: 04/08/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67484-F-5-B MS		280-273264	280-272762	04/09/2015 15:30	1	TAL DEN	JRK
A:8270D	280-67484-F-5-B MS		280-273264	280-272762	04/18/2015 02:30	1	TAL DEN	AFH

Lab ID: 280-67484-5

Client ID: MW23042015

Sample Date/Time: 04/07/2015 09:40

Received Date/Time: 04/08/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67484-J-5-B MSD		280-273264	280-272762	04/09/2015 15:30	1	TAL DEN	JRK
A:8270D	280-67484-J-5-B MSD		280-273264	280-272762	04/18/2015 02:57	1	TAL DEN	AFH

Lab ID: 280-67484-6

Client ID: DMW23042015

Sample Date/Time: 04/07/2015 09:40

Received Date/Time: 04/08/2015 09:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67484-C-6-B		280-273264	280-272762	04/09/2015 15:30	1	TAL DEN	JRK
A:8270D	280-67484-C-6-B		280-273264	280-272762	04/18/2015 03:24	1	TAL DEN	AFH

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:3520C	MB 280-272762/1-A		280-273264	280-272762	04/09/2015 15:30	1	TAL DEN	JRK
A:8270D	MB 280-272762/1-A		280-273264	280-272762	04/17/2015 19:49	1	TAL DEN	AFH

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:3520C	LCS 280-272762/2-A		280-273264	280-272762	04/09/2015 15:30	1	TAL DEN	JRK
A:8270D	LCS 280-272762/2-A		280-273264	280-272762	04/17/2015 20:16	1	TAL DEN	AFH

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Laboratory Chronicle

Lab References:

TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8270_LCS_Main_00019	02/12/16	02/12/15	P&T Methanol, Lot MethanolP&T_00107	250 mL	MS-569729_00005	5 mL	1,1'-Biphenyl	80.244 ug/mL
							1,2,4,5-Tetrachlorobenzene	80.008 ug/mL
							1,2,4-Trichlorobenzene	80.024 ug/mL
							1,2-Dichlorobenzene	80.26 ug/mL
							1,3-Dichlorobenzene	80.08 ug/mL
							1,3-Dinitrobenzene	80.256 ug/mL
							1,4-Dichlorobenzene	80.212 ug/mL
							1,4-Dioxane	80.176 ug/mL
							1-Methylnaphthalene	80 ug/mL
							2,2'-oxybis[1-chloropropane]	80 ug/mL
							2,3,4,6-Tetrachlorophenol	80.084 ug/mL
							2,4,5-Trichlorophenol	80 ug/mL
							2,4,6-Trichlorophenol	80.056 ug/mL
							2,4-Dichlorophenol	80 ug/mL
							2,4-Dimethylphenol	80.128 ug/mL
							2,4-Dinitrophenol	160.348 ug/mL
							2,4-Dinitrotoluene	80.068 ug/mL
							2,6-Dichlorophenol	80.004 ug/mL
							2,6-Dinitrotoluene	80.064 ug/mL
							2-Chloronaphthalene	80 ug/mL
							2-Chlorophenol	80.032 ug/mL
							2-Methylnaphthalene	79.944 ug/mL
							2-Methylphenol	80.144 ug/mL
							2-Nitroaniline	80.184 ug/mL
							2-Nitrophenol	80 ug/mL
							3 & 4 Methylphenol	80.024 ug/mL
							3-Methylphenol	80.024 ug/mL
							3-Nitroaniline	80.052 ug/mL
							4,6-Dinitro-2-methylphenol	160.08 ug/mL
							4-Bromophenyl phenyl ether	80.02 ug/mL
							4-Chloro-3-methylphenol	80.052 ug/mL
							4-Chloroaniline	80.012 ug/mL
							4-Chlorophenyl phenyl ether	80.016 ug/mL
							4-Methylphenol	80.024 ug/mL
							4-Nitroaniline	80.112 ug/mL
							4-Nitrophenol	160.04 ug/mL
							Acenaphthene	80.072 ug/mL
							Acenaphthylene	80 ug/mL
							Acetophenone	80.108 ug/mL
							Aniline	80.092 ug/mL
							Anthracene	80 ug/mL
							Azobenzene	80.092 ug/mL
							Benzo[a]anthracene	80.056 ug/mL
							Benzo[a]pyrene	80.052 ug/mL
							Benzo[b]fluoranthene	80.004 ug/mL
							Benzo[g,h,i]perylene	80 ug/mL
							Benzo[k]fluoranthene	80.132 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl alcohol	80.016 ug/mL
							Bis (2-chloroethoxy)methane	80.18 ug/mL
							Bis (2-chloroethyl) ether	80.056 ug/mL
							Bis (2-ethylhexyl) phthalate	80.02 ug/mL
							Butyl benzyl phthalate	80.048 ug/mL
							Carbazole	80.004 ug/mL
							Chrysene	80.26 ug/mL
							Di-n-butyl phthalate	80 ug/mL
							Di-n-octyl phthalate	80.084 ug/mL
							Dibenz (a,h) anthracene	80.176 ug/mL
							Dibenzofuran	80.072 ug/mL
							Diethyl phthalate	80.044 ug/mL
							Dimethyl phthalate	80.04 ug/mL
							Diphenylamine	137.072 ug/mL
							Fluoranthene	79.988 ug/mL
							Fluorene	80.02 ug/mL
							Hexachlorobenzene	80.084 ug/mL
							Hexachlorobutadiene	79.996 ug/mL
							Hexachlorocyclopentadiene	80.096 ug/mL
							Hexachloroethane	80.236 ug/mL
							Hexadecane	80.088 ug/mL
							Indeno[1,2,3-cd]pyrene	80.024 ug/mL
							Isophorone	79.972 ug/mL
							n-Decane	80.02 ug/mL
							N-Nitrosodi-n-propylamine	80.156 ug/mL
							N-Nitrosodimethylamine	80.008 ug/mL
							N-Nitrosodiphenylamine	160 ug/mL
							n-Octadecane	80.26 ug/mL
							Naphthalene	80.092 ug/mL
							Nitrobenzene	80.044 ug/mL
							Pentachlorophenol	160.012 ug/mL
							Phenanthrene	79.96 ug/mL
							Phenol	80.276 ug/mL
							Pyrene	79.964 ug/mL
							Pyridine	80.04 ug/mL
					MS-569729_00006	5 mL	1,1'-Biphenyl	80.244 ug/mL
							1,2,4,5-Tetrachlorobenzene	80.008 ug/mL
							1,2,4-Trichlorobenzene	80.024 ug/mL
							1,2-Dichlorobenzene	80.26 ug/mL
							1,3-Dichlorobenzene	80.08 ug/mL
							1,3-Dinitrobenzene	80.256 ug/mL
							1,4-Dichlorobenzene	80.212 ug/mL
							1,4-Dioxane	80.176 ug/mL
							1-Methylnaphthalene	80 ug/mL
							2,2'-oxybis[1-chloropropane]	80 ug/mL
							2,3,4,6-Tetrachlorophenol	80.084 ug/mL
							2,4,5-Trichlorophenol	80 ug/mL
							2,4,6-Trichlorophenol	80.056 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichlorophenol	80 ug/mL
							2,4-Dimethylphenol	80.128 ug/mL
							2,4-Dinitrophenol	160.348 ug/mL
							2,4-Dinitrotoluene	80.068 ug/mL
							2,6-Dichlorophenol	80.004 ug/mL
							2,6-Dinitrotoluene	80.064 ug/mL
							2-Chloronaphthalene	80 ug/mL
							2-Chlorophenol	80.032 ug/mL
							2-Methylnaphthalene	79.944 ug/mL
							2-Methylphenol	80.144 ug/mL
							2-Nitroaniline	80.184 ug/mL
							2-Nitrophenol	80 ug/mL
							3 & 4 Methylphenol	80.024 ug/mL
							3-Methylphenol	80.024 ug/mL
							3-Nitroaniline	80.052 ug/mL
							4,6-Dinitro-2-methylphenol	160.08 ug/mL
							4-Bromophenyl phenyl ether	80.02 ug/mL
							4-Chloro-3-methylphenol	80.052 ug/mL
							4-Chloroaniline	80.012 ug/mL
							4-Chlorophenyl phenyl ether	80.016 ug/mL
							4-Methylphenol	80.024 ug/mL
							4-Nitroaniline	80.112 ug/mL
							4-Nitrophenol	160.04 ug/mL
							Acenaphthene	80.072 ug/mL
							Acenaphthylene	80 ug/mL
							Acetophenone	80.108 ug/mL
							Aniline	80.092 ug/mL
							Anthracene	80 ug/mL
							Azobenzene	80.092 ug/mL
							Benzo[a]anthracene	80.056 ug/mL
							Benzo[a]pyrene	80.052 ug/mL
							Benzo[b]fluoranthene	80.004 ug/mL
							Benzo[g,h,i]perylene	80 ug/mL
							Benzo[k]fluoranthene	80.132 ug/mL
							Benzyl alcohol	80.016 ug/mL
							Bis(2-chloroethoxy)methane	80.18 ug/mL
							Bis(2-chloroethyl)ether	80.056 ug/mL
							Bis(2-ethylhexyl) phthalate	80.02 ug/mL
							Butyl benzyl phthalate	80.048 ug/mL
							Carbazole	80.004 ug/mL
							Chrysene	80.26 ug/mL
							Di-n-butyl phthalate	80 ug/mL
							Di-n-octyl phthalate	80.084 ug/mL
							Dibenz(a,h)anthracene	80.176 ug/mL
							Dibenzofuran	80.072 ug/mL
							Diethyl phthalate	80.044 ug/mL
							Dimethyl phthalate	80.04 ug/mL
							Diphenylamine	137.072 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	79.988 ug/mL
							Fluorene	80.02 ug/mL
							Hexachlorobenzene	80.084 ug/mL
							Hexachlorobutadiene	79.996 ug/mL
							Hexachlorocyclopentadiene	80.096 ug/mL
							Hexachloroethane	80.236 ug/mL
							Hexadecane	80.088 ug/mL
							Indeno[1,2,3-cd]pyrene	80.024 ug/mL
							Isophorone	79.972 ug/mL
							n-Decane	80.02 ug/mL
							N-Nitrosodi-n-propylamine	80.156 ug/mL
							N-Nitrosodimethylamine	80.008 ug/mL
							N-Nitrosodiphenylamine	160 ug/mL
							n-Octadecane	80.26 ug/mL
							Naphthalene	80.092 ug/mL
							Nitrobenzene	80.044 ug/mL
							Pentachlorophenol	160.012 ug/mL
							Phenanthrene	79.96 ug/mL
							Phenol	80.276 ug/mL
							Pyrene	79.964 ug/mL
							Pyridine	80.04 ug/mL
					MS-569729_00007	5 mL	1,1'-Biphenyl	80.244 ug/mL
							1,2,4,5-Tetrachlorobenzene	80.008 ug/mL
							1,2,4-Trichlorobenzene	80.024 ug/mL
							1,2-Dichlorobenzene	80.26 ug/mL
							1,3-Dichlorobenzene	80.08 ug/mL
							1,3-Dinitrobenzene	80.256 ug/mL
							1,4-Dichlorobenzene	80.212 ug/mL
							1,4-Dioxane	80.176 ug/mL
							1-Methylnaphthalene	80 ug/mL
							2,2'-oxybis[1-chloropropane]	80 ug/mL
							2,3,4,6-Tetrachlorophenol	80.084 ug/mL
							2,4,5-Trichlorophenol	80 ug/mL
							2,4,6-Trichlorophenol	80.056 ug/mL
							2,4-Dichlorophenol	80 ug/mL
							2,4-Dimethylphenol	80.128 ug/mL
							2,4-Dinitrophenol	160.348 ug/mL
							2,4-Dinitrotoluene	80.068 ug/mL
							2,6-Dichlorophenol	80.004 ug/mL
							2,6-Dinitrotoluene	80.064 ug/mL
							2-Chloronaphthalene	80 ug/mL
							2-Chlorophenol	80.032 ug/mL
							2-Methylnaphthalene	79.944 ug/mL
							2-Methylphenol	80.144 ug/mL
							2-Nitroaniline	80.184 ug/mL
							2-Nitrophenol	80 ug/mL
							3 & 4 Methylphenol	80.024 ug/mL
							3-Methylphenol	80.024 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitroaniline	80.052 ug/mL
							4,6-Dinitro-2-methylphenol	160.08 ug/mL
							4-Bromophenyl phenyl ether	80.02 ug/mL
							4-Chloro-3-methylphenol	80.052 ug/mL
							4-Chloroaniline	80.012 ug/mL
							4-Chlorophenyl phenyl ether	80.016 ug/mL
							4-Methylphenol	80.024 ug/mL
							4-Nitroaniline	80.112 ug/mL
							4-Nitrophenol	160.04 ug/mL
							Acenaphthene	80.072 ug/mL
							Acenaphthylene	80 ug/mL
							Acetophenone	80.108 ug/mL
							Aniline	80.092 ug/mL
							Anthracene	80 ug/mL
							Azobenzene	80.092 ug/mL
							Benzo[a]anthracene	80.056 ug/mL
							Benzo[a]pyrene	80.052 ug/mL
							Benzo[b]fluoranthene	80.004 ug/mL
							Benzo[g,h,i]perylene	80 ug/mL
							Benzo[k]fluoranthene	80.132 ug/mL
							Benzyl alcohol	80.016 ug/mL
							Bis(2-chloroethoxy)methane	80.18 ug/mL
							Bis(2-chloroethyl)ether	80.056 ug/mL
							Bis(2-ethylhexyl) phthalate	80.02 ug/mL
							Butyl benzyl phthalate	80.048 ug/mL
							Carbazole	80.004 ug/mL
							Chrysene	80.26 ug/mL
							Di-n-butyl phthalate	80 ug/mL
							Di-n-octyl phthalate	80.084 ug/mL
							Dibenz(a,h)anthracene	80.176 ug/mL
							Dibenzofuran	80.072 ug/mL
							Diethyl phthalate	80.044 ug/mL
							Dimethyl phthalate	80.04 ug/mL
							Diphenylamine	137.072 ug/mL
							Fluoranthene	79.988 ug/mL
							Fluorene	80.02 ug/mL
							Hexachlorobenzene	80.084 ug/mL
							Hexachlorobutadiene	79.996 ug/mL
							Hexachlorocyclopentadiene	80.096 ug/mL
							Hexachloroethane	80.236 ug/mL
							Hexadecane	80.088 ug/mL
							Indeno[1,2,3-cd]pyrene	80.024 ug/mL
							Isophorone	79.972 ug/mL
							n-Decane	80.02 ug/mL
							N-Nitrosodi-n-propylamine	80.156 ug/mL
							N-Nitrosodimethylamine	80.008 ug/mL
							N-Nitrosodiphenylamine	160 ug/mL
							n-Octadecane	80.26 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	80.092 ug/mL
							Nitrobenzene	80.044 ug/mL
							Pentachlorophenol	160.012 ug/mL
							Phenanthrene	79.96 ug/mL
							Phenol	80.276 ug/mL
							Pyrene	79.964 ug/mL
							Pyridine	80.04 ug/mL
					MS-569729_00008	5 mL	1,1'-Biphenyl	80.244 ug/mL
							1,2,4,5-Tetrachlorobenzene	80.008 ug/mL
							1,2,4-Trichlorobenzene	80.024 ug/mL
							1,2-Dichlorobenzene	80.26 ug/mL
							1,3-Dichlorobenzene	80.08 ug/mL
							1,3-Dinitrobenzene	80.256 ug/mL
							1,4-Dichlorobenzene	80.212 ug/mL
							1,4-Dioxane	80.176 ug/mL
							1-Methylnaphthalene	80 ug/mL
							2,2'-oxybis[1-chloropropane]	80 ug/mL
							2,3,4,6-Tetrachlorophenol	80.084 ug/mL
							2,4,5-Trichlorophenol	80 ug/mL
							2,4,6-Trichlorophenol	80.056 ug/mL
							2,4-Dichlorophenol	80 ug/mL
							2,4-Dimethylphenol	80.128 ug/mL
							2,4-Dinitrophenol	160.348 ug/mL
							2,4-Dinitrotoluene	80.068 ug/mL
							2,6-Dichlorophenol	80.004 ug/mL
							2,6-Dinitrotoluene	80.064 ug/mL
							2-Chloronaphthalene	80 ug/mL
							2-Chlorophenol	80.032 ug/mL
							2-Methylnaphthalene	79.944 ug/mL
							2-Methylphenol	80.144 ug/mL
							2-Nitroaniline	80.184 ug/mL
							2-Nitrophenol	80 ug/mL
							3 & 4 Methylphenol	80.024 ug/mL
							3-Methylphenol	80.024 ug/mL
							3-Nitroaniline	80.052 ug/mL
							4,6-Dinitro-2-methylphenol	160.08 ug/mL
							4-Bromophenyl phenyl ether	80.02 ug/mL
							4-Chloro-3-methylphenol	80.052 ug/mL
							4-Chloroaniline	80.012 ug/mL
							4-Chlorophenyl phenyl ether	80.016 ug/mL
							4-Methylphenol	80.024 ug/mL
							4-Nitroaniline	80.112 ug/mL
							4-Nitrophenol	160.04 ug/mL
							Acenaphthene	80.072 ug/mL
							Acenaphthylene	80 ug/mL
							Acetophenone	80.108 ug/mL
							Aniline	80.092 ug/mL
							Anthracene	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	80.092 ug/mL
							Benzo[a]anthracene	80.056 ug/mL
							Benzo[a]pyrene	80.052 ug/mL
							Benzo[b]fluoranthene	80.004 ug/mL
							Benzo[g,h,i]perylene	80 ug/mL
							Benzo[k]fluoranthene	80.132 ug/mL
							Benzyl alcohol	80.016 ug/mL
							Bis(2-chloroethoxy)methane	80.18 ug/mL
							Bis(2-chloroethyl)ether	80.056 ug/mL
							Bis(2-ethylhexyl) phthalate	80.02 ug/mL
							Butyl benzyl phthalate	80.048 ug/mL
							Carbazole	80.004 ug/mL
							Chrysene	80.26 ug/mL
							Di-n-butyl phthalate	80 ug/mL
							Di-n-octyl phthalate	80.084 ug/mL
							Dibenz(a,h)anthracene	80.176 ug/mL
							Dibenzofuran	80.072 ug/mL
							Diethyl phthalate	80.044 ug/mL
							Dimethyl phthalate	80.04 ug/mL
							Diphenylamine	137.072 ug/mL
							Fluoranthene	79.988 ug/mL
							Fluorene	80.02 ug/mL
							Hexachlorobenzene	80.084 ug/mL
							Hexachlorobutadiene	79.996 ug/mL
							Hexachlorocyclopentadiene	80.096 ug/mL
							Hexachloroethane	80.236 ug/mL
							Hexadecane	80.088 ug/mL
							Indeno[1,2,3-cd]pyrene	80.024 ug/mL
							Isophorone	79.972 ug/mL
							n-Decane	80.02 ug/mL
							N-Nitrosodi-n-propylamine	80.156 ug/mL
							N-Nitrosodimethylamine	80.008 ug/mL
							N-Nitrosodiphenylamine	160 ug/mL
							n-Octadecane	80.26 ug/mL
							Naphthalene	80.092 ug/mL
					Nitrobenzene	80.044 ug/mL		
					Pentachlorophenol	160.012 ug/mL		
					Phenanthrene	79.96 ug/mL		
					Phenol	80.276 ug/mL		
					Pyrene	79.964 ug/mL		
					Pyridine	80.04 ug/mL		
					MS-569731_00003	5 mL	Benzoic acid	80.116 ug/mL
					MS-569731_00004	5 mL	Indene	80.028 ug/mL
							Benzoic acid	80.116 ug/mL
1,1'-Biphenyl	1000 ug/mL							
1,2,4,5-Tetrachlorobenzene	1000 ug/mL							
1,2,4-Trichlorobenzene	1000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	1713.4 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
.MS-569729_00006	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1006.1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000.2 ug/mL
							1,2,4-Trichlorobenzene	1000.6 ug/mL
							1,2-Dichlorobenzene	1006.5 ug/mL
							1,3-Dichlorobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1006.4 ug/mL
							1,4-Dichlorobenzene	1005.3 ug/mL
							1,4-Dioxane	1004.4 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1002.1 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1001.4 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1003.2 ug/mL
							2,4-Dinitrophenol	2008.7 ug/mL
							2,4-Dinitrotoluene	1001.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dichlorophenol	1000.1 ug/mL
							2,6-Dinitrotoluene	1001.6 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000.8 ug/mL
							2-Methylnaphthalene	998.6 ug/mL
							2-Methylphenol	1003.6 ug/mL
							2-Nitroaniline	1004.6 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000.6 ug/mL
							3-Methylphenol	1000.6 ug/mL
							3-Nitroaniline	1001.3 ug/mL
							4,6-Dinitro-2-methylphenol	2002 ug/mL
							4-Bromophenyl phenyl ether	1000.5 ug/mL
							4-Chloro-3-methylphenol	1001.3 ug/mL
							4-Chloroaniline	1000.3 ug/mL
							4-Chlorophenyl phenyl ether	1000.4 ug/mL
							4-Methylphenol	1000.6 ug/mL
							4-Nitroaniline	1002.8 ug/mL
							4-Nitrophenol	2001 ug/mL
							Acenaphthene	1001.8 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1002.7 ug/mL
							Aniline	1002.3 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1002.3 ug/mL
							Benzo[a]anthracene	1001.4 ug/mL
							Benzo[a]pyrene	1001.3 ug/mL
							Benzo[b]fluoranthene	1000.1 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1003.3 ug/mL
							Benzyl alcohol	1000.4 ug/mL
							Bis(2-chloroethoxy)methane	1004.5 ug/mL
							Bis(2-chloroethyl)ether	1001.4 ug/mL
							Bis(2-ethylhexyl) phthalate	1000.5 ug/mL
							Butyl benzyl phthalate	1001.2 ug/mL
							Carbazole	1000.1 ug/mL
							Chrysene	1006.5 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1002.1 ug/mL
							Dibenz(a,h)anthracene	1004.4 ug/mL
							Dibenzofuran	1001.8 ug/mL
							Diethyl phthalate	1001.1 ug/mL
							Dimethyl phthalate	1001 ug/mL
							Diphenylamine	1713.4 ug/mL
							Fluoranthene	999.7 ug/mL
							Fluorene	1000.5 ug/mL
							Hexachlorobenzene	1002.1 ug/mL
							Hexachlorobutadiene	999.9 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	1002.4 ug/mL
							Hexachloroethane	1005.9 ug/mL
							Hexadecane	1002.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1000.6 ug/mL
							Isophorone	999.3 ug/mL
							n-Decane	1000.5 ug/mL
							N-Nitrosodi-n-propylamine	1003.9 ug/mL
							N-Nitrosodimethylamine	1000.2 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							n-Octadecane	1006.5 ug/mL
							Naphthalene	1002.3 ug/mL
							Nitrobenzene	1001.1 ug/mL
							Pentachlorophenol	2000.3 ug/mL
							Phenanthrene	999 ug/mL
							Phenol	1006.9 ug/mL
							Pyrene	999.1 ug/mL
							Pyridine	1001 ug/mL
.MS-569729_00007	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1006.1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000.2 ug/mL
							1,2,4-Trichlorobenzene	1000.6 ug/mL
							1,2-Dichlorobenzene	1006.5 ug/mL
							1,3-Dichlorobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1006.4 ug/mL
							1,4-Dichlorobenzene	1005.3 ug/mL
							1,4-Dioxane	1004.4 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1002.1 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1001.4 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1003.2 ug/mL
							2,4-Dinitrophenol	2008.7 ug/mL
							2,4-Dinitrotoluene	1001.7 ug/mL
							2,6-Dichlorophenol	1000.1 ug/mL
							2,6-Dinitrotoluene	1001.6 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000.8 ug/mL
							2-Methylnaphthalene	998.6 ug/mL
							2-Methylphenol	1003.6 ug/mL
							2-Nitroaniline	1004.6 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000.6 ug/mL
							3-Methylphenol	1000.6 ug/mL
							3-Nitroaniline	1001.3 ug/mL
							4,6-Dinitro-2-methylphenol	2002 ug/mL
							4-Bromophenyl phenyl ether	1000.5 ug/mL
							4-Chloro-3-methylphenol	1001.3 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	1000.3 ug/mL
							4-Chlorophenyl phenyl ether	1000.4 ug/mL
							4-Methylphenol	1000.6 ug/mL
							4-Nitroaniline	1002.8 ug/mL
							4-Nitrophenol	2001 ug/mL
							Acenaphthene	1001.8 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1002.7 ug/mL
							Aniline	1002.3 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1002.3 ug/mL
							Benzo[a]anthracene	1001.4 ug/mL
							Benzo[a]pyrene	1001.3 ug/mL
							Benzo[b]fluoranthene	1000.1 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1003.3 ug/mL
							Benzyl alcohol	1000.4 ug/mL
							Bis (2-chloroethoxy)methane	1004.5 ug/mL
							Bis (2-chloroethyl)ether	1001.4 ug/mL
							Bis (2-ethylhexyl) phthalate	1000.5 ug/mL
							Butyl benzyl phthalate	1001.2 ug/mL
							Carbazole	1000.1 ug/mL
							Chrysene	1006.5 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1002.1 ug/mL
							Dibenz (a,h)anthracene	1004.4 ug/mL
							Dibenzofuran	1001.8 ug/mL
							Diethyl phthalate	1001.1 ug/mL
							Dimethyl phthalate	1001 ug/mL
							Diphenylamine	1713.4 ug/mL
							Fluoranthene	999.7 ug/mL
							Fluorene	1000.5 ug/mL
							Hexachlorobenzene	1002.1 ug/mL
							Hexachlorobutadiene	999.9 ug/mL
							Hexachlorocyclopentadiene	1002.4 ug/mL
							Hexachloroethane	1005.9 ug/mL
							Hexadecane	1002.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1000.6 ug/mL
							Isophorone	999.3 ug/mL
							n-Decane	1000.5 ug/mL
							N-Nitrosodi-n-propylamine	1003.9 ug/mL
							N-Nitrosodimethylamine	1000.2 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							n-Octadecane	1006.5 ug/mL
							Naphthalene	1002.3 ug/mL
							Nitrobenzene	1001.1 ug/mL
							Pentachlorophenol	2000.3 ug/mL
							Phenanthrene	999 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MS-569729_00008	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		Phenol	1006.9 ug/mL
							Pyrene	999.1 ug/mL
							Pyridine	1001 ug/mL
							1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	1713.4 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
.MS-569731_00003	06/30/16	Restek, Lot A0107943			(Purchased Reagent)		Benzoic acid	2005.8 ug/mL
.MS-569731_00004	06/30/16	Restek, Lot A0107943			(Purchased Reagent)		Indene	2001.4 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
8270_LCS_Supp_00102	04/16/15	04/09/15	P&T Methanol, Lot MethanolP&T_00112	50 mL	MS-569730_00008	2 mL	3,3'-Dichlorobenzidine	80.12 ug/mL
					MS-569732_00009	2 mL	Benzidine	80.336 ug/mL
							Atrazine	80 ug/mL
							Benzaldehyde	80 ug/mL
							Caprolactam	80 ug/mL
.MS-569730_00008	07/31/16	Restek, Lot A0108174			(Purchased Reagent)		3,3'-Dichlorobenzidine	2003 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	2008.4 ug/mL
.MS-569732_00009	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
8270Surrogate_00078	04/07/16	04/07/15	ACETONE, Lot Acetone_000115	1000 mL	8270SurStkHL_00078	5 mL	2,4,6 - Tribromophenol	100 ug/mL
							2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Phenol-d6	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
					8270SurStkHL_00103	5 mL	2,4,6 - Tribromophenol	100 ug/mL
							2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Phenol-d6	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
					8270SurStkHL_00104	5 mL	2,4,6 - Tribromophenol	100 ug/mL
							2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Phenol-d6	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
					8270SurStkHL_00105	5 mL	2,4,6 - Tribromophenol	100 ug/mL
							2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
Nitrobenzene-d5 (Surr)	100 ug/mL							
Phenol-d5 (Surr)	100 ug/mL							
Phenol-d6	100 ug/mL							
Terphenyl-d14 (Surr)	100 ug/mL							
.8270SurStkHL_00078	02/23/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6 - Tribromophenol	5000 ug/mL
							2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Phenol-d6	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
.8270SurStkHL_00103	05/31/19		Restek, Lot A0103615		(Purchased Reagent)		2,4,6 - Tribromophenol	5000 ug/mL
							2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Phenol-d6	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
.8270SurStkHL_00104	05/31/19	Restek, Lot A0103615			(Purchased Reagent)		2,4,6 - Tribromophenol	5000 ug/mL
							2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Phenol-d6	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
.8270SurStkHL_00105	05/31/19	Restek, Lot A0103615			(Purchased Reagent)		2,4,6 - Tribromophenol	5000 ug/mL
							2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Phenol-d6	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
MS-HSLA004_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	10 uL	2,4,6-Tribromophenol (Surr)	4 ug/mL
							2-Fluorobiphenyl	4 ug/mL
							2-Fluorophenol (Surr)	4 ug/mL
							Nitrobenzene-d5 (Surr)	4 ug/mL
							Phenol-d5 (Surr)	4 ug/mL
							Terphenyl-d14 (Surr)	4 ug/mL
							1,1'-Biphenyl	4 ug/mL
							1,2,4,5-Tetrachlorobenzene	4 ug/mL
							1,2,4-Trichlorobenzene	4 ug/mL
							1,2-Dichlorobenzene	4 ug/mL
							1,2-Diphenylhydrazine	4.0439 ug/mL
							1,3-Dichlorobenzene	4 ug/mL
							1,3-Dinitrobenzene	4 ug/mL
							1,4-Dichlorobenzene	4 ug/mL
							1,4-Dioxane	4 ug/mL
							1-Methylnaphthalene	4 ug/mL
							2,2'-oxybis[1-chloropropane]	4 ug/mL
							2,3,4,6-Tetrachlorophenol	4 ug/mL
							2,4,5-Trichlorophenol	4 ug/mL
							2,4,6-Trichlorophenol	4 ug/mL
							2,4-Dichlorophenol	4 ug/mL
							2,4-Dimethylphenol	4 ug/mL
							2,4-Dinitrophenol	8 ug/mL
							2,4-Dinitrotoluene	4 ug/mL
							2,6-Dinitrotoluene	4 ug/mL
							2-Chloronaphthalene	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	4 ug/mL
							2-Methylnaphthalene	4 ug/mL
							2-Methylphenol	4 ug/mL
							2-Nitroaniline	4 ug/mL
							2-Nitrophenol	4 ug/mL
							3 & 4 Methylphenol	4 ug/mL
							3-Methylphenol	4 ug/mL
							3-Nitroaniline	4 ug/mL
							4,6-Dinitro-2-methylphenol	8 ug/mL
							4-Bromophenyl phenyl ether	4 ug/mL
							4-Chloro-3-methylphenol	4 ug/mL
							4-Chloroaniline	4 ug/mL
							4-Chlorophenyl phenyl ether	4 ug/mL
							4-Methylphenol	4 ug/mL
							4-Nitroaniline	4 ug/mL
							4-Nitrophenol	8 ug/mL
							Acenaphthene	4 ug/mL
							Acenaphthylene	4 ug/mL
							Acetophenone	4 ug/mL
							Aniline	4 ug/mL
							Anthracene	4 ug/mL
							Azobenzene	4 ug/mL
							Benzo[a]anthracene	4 ug/mL
							Benzo[a]pyrene	4 ug/mL
							Benzo[b]fluoranthene	4 ug/mL
							Benzo[g,h,i]perylene	4 ug/mL
							Benzo[k]fluoranthene	4 ug/mL
							Benzyl alcohol	4 ug/mL
							Bis (2-chloroethoxy)methane	4 ug/mL
							Bis (2-chloroethyl) ether	4 ug/mL
							Bis (2-ethylhexyl) phthalate	4 ug/mL
							Butyl benzyl phthalate	4 ug/mL
							Carbazole	4 ug/mL
							Chrysene	4 ug/mL
							Di-n-butyl phthalate	4 ug/mL
							Di-n-octyl phthalate	4 ug/mL
							Dibenz (a,h) anthracene	4 ug/mL
							Dibenzofuran	4 ug/mL
							Diethyl phthalate	4 ug/mL
							Dimethyl phthalate	4 ug/mL
							Fluoranthene	4 ug/mL
							Fluorene	4 ug/mL
							Hexachlorobenzene	4 ug/mL
							Hexachlorobutadiene	4 ug/mL
							Hexachlorocyclopentadiene	4 ug/mL
							Hexachloroethane	4 ug/mL
							Indeno[1,2,3-cd]pyrene	4 ug/mL
							Isophorone	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	4 ug/mL
							N-Nitrosodimethylamine	4 ug/mL
							Naphthalene	4 ug/mL
							Nitrobenzene	4 ug/mL
							Pentachlorophenol	8 ug/mL
							Phenanthrene	4 ug/mL
							Phenol	4 ug/mL
							Pyrene	4 ug/mL
							Pyridine	4 ug/mL
							3,3'-Dichlorobenzidine	4 ug/mL
							Caprolactam	4 ug/mL
							Benzoic acid	8 ug/mL
							Famphur	4 ug/mL
							N-Nitrosodiphenylamine	4 ug/mL
					MS-IS_00007	50 uL	1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
							Phenanthrene-d10	40 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis (2-chloroethoxy)methane	200 ug/mL
							Bis (2-chloroethyl) ether	200 ug/mL
							Bis (2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz (a,h) anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
					MS-567673_00096	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					MS-567674_00038	2 mL	Caprolactam	200 ug/mL
MS-568023_00008	1 mL	Benzoic acid	400 ug/mL					
MS-568038_00008	1 mL	Famphur	200 ug/mL					
..8270SurStkHL_00002	01/31/18	Restek, Lot A092712			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
					2-Fluorobiphenyl	5000 ug/mL		
					2-Fluorophenol (Surr)	5000 ug/mL		
					Nitrobenzene-d5 (Surr)	5000 ug/mL		
					Phenol-d5 (Surr)	5000 ug/mL		
					Terphenyl-d14 (Surr)	5000 ug/mL		
..MS-567672_00091	05/31/15	Restek, Lot A093709			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
					1,2,4,5-Tetrachlorobenzene	1000 ug/mL		
					1,2,4-Trichlorobenzene	1000 ug/mL		
					1,2-Dichlorobenzene	1000 ug/mL		
					1,2-Diphenylhydrazine	1010.97 ug/mL		
					1,3-Dichlorobenzene	1000 ug/mL		
					1,3-Dinitrobenzene	1000 ug/mL		
					1,4-Dichlorobenzene	1000 ug/mL		
					1,4-Dioxane	1000 ug/mL		
					1-Methylnaphthalene	1000 ug/mL		
					2,2'-oxybis[1-chloropropane]	1000 ug/mL		
					2,3,4,6-Tetrachlorophenol	1000 ug/mL		
					2,4,5-Trichlorophenol	1000 ug/mL		
					2,4,6-Trichlorophenol	1000 ug/mL		
					2,4-Dichlorophenol	1000 ug/mL		
					2,4-Dimethylphenol	1000 ug/mL		
					2,4-Dinitrophenol	2000 ug/mL		
					2,4-Dinitrotoluene	1000 ug/mL		
					2,6-Dinitrotoluene	1000 ug/mL		
					2-Chloronaphthalene	1000 ug/mL		
					2-Chlorophenol	1000 ug/mL		
					2-Methylnaphthalene	1000 ug/mL		
					2-Methylphenol	1000 ug/mL		
					2-Nitroaniline	1000 ug/mL		
					2-Nitrophenol	1000 ug/mL		
					3 & 4 Methylphenol	1000 ug/mL		
					3-Methylphenol	1000 ug/mL		
					3-Nitroaniline	1000 ug/mL		
					4,6-Dinitro-2-methylphenol	2000 ug/mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MS-567673_00096	05/31/15	Restek, Lot A093755			(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..MS-567674_00038	02/29/16	Restek, Lot A093441			(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568023_00008	02/29/16	Restek, Lot A0101191			(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17	Restek, Lot A0101189			(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
					MS-567684_00017	15 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00016	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
..MS-567684_00017	12/31/17	Restek, Lot A092546			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-HSLA010_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	25 uL	2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
							1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,2-Diphenylhydrazine	10.1097 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							1,4-Dioxane	10 ug/mL
							1-Methylnaphthalene	10 ug/mL
							2,2'-oxybis[1-chloropropane]	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3 & 4 Methylphenol	10 ug/mL
							3-Methylphenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Methylphenol	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Azobenzene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							Bis (2-chloroethoxy)methane	10 ug/mL
							Bis (2-chloroethyl) ether	10 ug/mL
							Bis (2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz (a,h) anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Caprolactam	10 ug/mL
							Benzoic acid	20 ug/mL
							Famphur	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
					MS-IS_00007	50 uL	1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	Phenanthrene-d10	40 ug/mL
							2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
							1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis (2-chloroethoxy)methane	200 ug/mL
							Bis (2-chloroethyl) ether	200 ug/mL
							Bis (2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz (a,h) anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
							3,3'-Dichlorobenzidine	200 ug/mL
							Caprolactam	200 ug/mL
							Benzoic acid	400 ug/mL
..8270SurStkHL_00002	01/31/18		Restek, Lot A092712				Famphur	200 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							(Purchased Reagent)	2,4,6-Tribromophenol (Surr)
							2-Fluorobiphenyl	5000 ug/mL
..MS-567672_00091	05/31/15		Restek, Lot A093709				2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
							1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1010.97 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..MS-567673_00096	05/31/15		Restek, Lot A093755		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..MS-567674_00038	02/29/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568023_00008	02/29/16		Restek, Lot A0101191		(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
					MS-567684_00017	15 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00016	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
..MS-567684_00017	12/31/17		Restek, Lot A092546		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-HSLA020_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	50 uL	2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
							1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20.2195 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3 & 4 Methylphenol	20 ug/mL
							3-Methylphenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Methylphenol	20 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Azobenzene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz (a,h) anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Caprolactam	20 ug/mL
							Benzoic acid	40 ug/mL
							Famphur	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
					MS-IS_00007	50 uL	1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
							Phenanthrene-d10	40 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
							MS-567672_00091	2 mL
		1,2,4,5-Tetrachlorobenzene	200 ug/mL					
						1,2,4-Trichlorobenzene	200 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz (a, h) anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
					MS-567673_00096	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Caprolactam	200 ug/mL
					MS-567674_00038	2 mL	Benzoic acid	400 ug/mL
					MS-568023_00008	1 mL	Famphur	200 ug/mL
					MS-568038_00008	1 mL	N-Nitrosodiphenylamine	200 ug/mL
..8270SurStkHL_00002	01/31/18	Restek, Lot A092712	(Purchased Reagent)	2,4,6-Tribromophenol (Surr)	5000 ug/mL			
	2-Fluorobiphenyl			5000 ug/mL				
	2-Fluorophenol (Surr)			5000 ug/mL				
	Nitrobenzene-d5 (Surr)			5000 ug/mL				
	Phenol-d5 (Surr)			5000 ug/mL				
	Terphenyl-d14 (Surr)			5000 ug/mL				
..MS-567672_00091	05/31/15	Restek, Lot A093709	(Purchased Reagent)	1,1'-Biphenyl	1000 ug/mL			
	1,2,4,5-Tetrachlorobenzene			1000 ug/mL				
	1,2,4-Trichlorobenzene			1000 ug/mL				
	1,2-Dichlorobenzene			1000 ug/mL				
	1,2-Diphenylhydrazine			1010.97 ug/mL				
	1,3-Dichlorobenzene			1000 ug/mL				
	1,3-Dinitrobenzene			1000 ug/mL				
	1,4-Dichlorobenzene			1000 ug/mL				
	1,4-Dioxane			1000 ug/mL				
	1-Methylnaphthalene			1000 ug/mL				
	2,2'-oxybis[1-chloropropane]			1000 ug/mL				

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..MS-567673_00096	05/31/15		Restek, Lot A093755		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..MS-567674_00038	02/29/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568023_00008	02/29/16		Restek, Lot A0101191		(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
					MS-567684_00017	15 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00016	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
..MS-567684_00017	12/31/17		Restek, Lot A092546		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MS-HSLA050_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	125 uL	2,4,6-Tribromophenol (Surr)	50 ug/mL
							2-Fluorobiphenyl	50 ug/mL
							2-Fluorophenol (Surr)	50 ug/mL
							Nitrobenzene-d5 (Surr)	50 ug/mL
							Phenol-d5 (Surr)	50 ug/mL
							Terphenyl-d14 (Surr)	50 ug/mL
							1,1'-Biphenyl	50 ug/mL
							1,2,4,5-Tetrachlorobenzene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Diphenylhydrazine	50.5487 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	50 ug/mL
							1-Methylnaphthalene	50 ug/mL
							2,2'-oxybis[1-chloropropane]	50 ug/mL
							2,3,4,6-Tetrachlorophenol	50 ug/mL
							2,4,5-Trichlorophenol	50 ug/mL
							2,4,6-Trichlorophenol	50 ug/mL
							2,4-Dichlorophenol	50 ug/mL
							2,4-Dimethylphenol	50 ug/mL
							2,4-Dinitrophenol	100 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Chloronaphthalene	50 ug/mL
							2-Chlorophenol	50 ug/mL
							2-Methylnaphthalene	50 ug/mL
							2-Methylphenol	50 ug/mL
							2-Nitroaniline	50 ug/mL
							2-Nitrophenol	50 ug/mL
							3 & 4 Methylphenol	50 ug/mL
							3-Methylphenol	50 ug/mL
							3-Nitroaniline	50 ug/mL
							4,6-Dinitro-2-methylphenol	100 ug/mL
							4-Bromophenyl phenyl ether	50 ug/mL
							4-Chloro-3-methylphenol	50 ug/mL
							4-Chloroaniline	50 ug/mL
							4-Chlorophenyl phenyl ether	50 ug/mL
							4-Methylphenol	50 ug/mL
							4-Nitroaniline	50 ug/mL
							4-Nitrophenol	100 ug/mL
							Acenaphthene	50 ug/mL
							Acenaphthylene	50 ug/mL
							Acetophenone	50 ug/mL
							Aniline	50 ug/mL
							Anthracene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	50 ug/mL
							Benzo[a]anthracene	50 ug/mL
							Benzo[a]pyrene	50 ug/mL
							Benzo[b]fluoranthene	50 ug/mL
							Benzo[g,h,i]perylene	50 ug/mL
							Benzo[k]fluoranthene	50 ug/mL
							Benzyl alcohol	50 ug/mL
							Bis(2-chloroethoxy)methane	50 ug/mL
							Bis(2-chloroethyl)ether	50 ug/mL
							Bis(2-ethylhexyl) phthalate	50 ug/mL
							Butyl benzyl phthalate	50 ug/mL
							Carbazole	50 ug/mL
							Chrysene	50 ug/mL
							Di-n-butyl phthalate	50 ug/mL
							Di-n-octyl phthalate	50 ug/mL
							Dibenz(a,h)anthracene	50 ug/mL
							Dibenzofuran	50 ug/mL
							Diethyl phthalate	50 ug/mL
							Dimethyl phthalate	50 ug/mL
							Fluoranthene	50 ug/mL
							Fluorene	50 ug/mL
							Hexachlorobenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexachlorocyclopentadiene	50 ug/mL
							Hexachloroethane	50 ug/mL
							Indeno[1,2,3-cd]pyrene	50 ug/mL
							Isophorone	50 ug/mL
							N-Nitrosodi-n-propylamine	50 ug/mL
							N-Nitrosodimethylamine	50 ug/mL
							Naphthalene	50 ug/mL
							Nitrobenzene	50 ug/mL
							Pentachlorophenol	100 ug/mL
							Phenanthrene	50 ug/mL
							Phenol	50 ug/mL
							Pyrene	50 ug/mL
							Pyridine	50 ug/mL
							3,3'-Dichlorobenzidine	50 ug/mL
							Caprolactam	50 ug/mL
							Benzoic acid	100 ug/mL
							Famphur	50 ug/mL
							N-Nitrosodiphenylamine	50 ug/mL
					MS-IS_00007	50 uL	1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
							Phenanthrene-d10	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
					MS-567673_00096	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Caprolactam	200 ug/mL
					MS-567674_00038	2 mL	Benzoic acid	400 ug/mL
					MS-568023_00008	1 mL	Famphur	200 ug/mL
					MS-568038_00008	1 mL	N-Nitrosodiphenylamine	200 ug/mL
..8270SurStkHL_00002	01/31/18	Restek, Lot A092712			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..MS-567672_00091	05/31/15	Restek, Lot A093709			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1010.97 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy) methane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..MS-567673_00096	05/31/15		Restek, Lot A093755		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..MS-567674_00038	02/29/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568023_00008	02/29/16		Restek, Lot A0101191		(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
					MS-567684_00017	15 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00016	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MS-567684_00017	12/31/17	Restek, Lot A092546			(Purchased Reagent)		Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
							1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
MS-HSLA080_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	200 uL	2,4,6-Tribromophenol (Surr)	80 ug/mL
							2-Fluorobiphenyl	80 ug/mL
							2-Fluorophenol (Surr)	80 ug/mL
							Nitrobenzene-d5 (Surr)	80 ug/mL
							Phenol-d5 (Surr)	80 ug/mL
							Terphenyl-d14 (Surr)	80 ug/mL
							1,1'-Biphenyl	80 ug/mL
							1,2,4,5-Tetrachlorobenzene	80 ug/mL
							1,2,4-Trichlorobenzene	80 ug/mL
							1,2-Dichlorobenzene	80 ug/mL
							1,2-Diphenylhydrazine	80.878 ug/mL
							1,3-Dichlorobenzene	80 ug/mL
							1,3-Dinitrobenzene	80 ug/mL
							1,4-Dichlorobenzene	80 ug/mL
							1,4-Dioxane	80 ug/mL
							1-Methylnaphthalene	80 ug/mL
							2,2'-oxybis[1-chloropropane]	80 ug/mL
							2,3,4,6-Tetrachlorophenol	80 ug/mL
							2,4,5-Trichlorophenol	80 ug/mL
							2,4,6-Trichlorophenol	80 ug/mL
							2,4-Dichlorophenol	80 ug/mL
							2,4-Dimethylphenol	80 ug/mL
							2,4-Dinitrophenol	160 ug/mL
							2,4-Dinitrotoluene	80 ug/mL
							2,6-Dinitrotoluene	80 ug/mL
							2-Chloronaphthalene	80 ug/mL
							2-Chlorophenol	80 ug/mL
							2-Methylnaphthalene	80 ug/mL
							2-Methylphenol	80 ug/mL
							2-Nitroaniline	80 ug/mL
							2-Nitrophenol	80 ug/mL
							3 & 4 Methylphenol	80 ug/mL
							3-Methylphenol	80 ug/mL
							3-Nitroaniline	80 ug/mL
							4,6-Dinitro-2-methylphenol	160 ug/mL
							4-Bromophenyl phenyl ether	80 ug/mL
							4-Chloro-3-methylphenol	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	80 ug/mL
							4-Chlorophenyl phenyl ether	80 ug/mL
							4-Methylphenol	80 ug/mL
							4-Nitroaniline	80 ug/mL
							4-Nitrophenol	160 ug/mL
							Acenaphthene	80 ug/mL
							Acenaphthylene	80 ug/mL
							Acetophenone	80 ug/mL
							Aniline	80 ug/mL
							Anthracene	80 ug/mL
							Azobenzene	80 ug/mL
							Benzo[a]anthracene	80 ug/mL
							Benzo[a]pyrene	80 ug/mL
							Benzo[b]fluoranthene	80 ug/mL
							Benzo[g,h,i]perylene	80 ug/mL
							Benzo[k]fluoranthene	80 ug/mL
							Benzyl alcohol	80 ug/mL
							Bis (2-chloroethoxy)methane	80 ug/mL
							Bis (2-chloroethyl)ether	80 ug/mL
							Bis (2-ethylhexyl) phthalate	80 ug/mL
							Butyl benzyl phthalate	80 ug/mL
							Carbazole	80 ug/mL
							Chrysene	80 ug/mL
							Di-n-butyl phthalate	80 ug/mL
							Di-n-octyl phthalate	80 ug/mL
							Dibenz (a,h) anthracene	80 ug/mL
							Dibenzofuran	80 ug/mL
							Diethyl phthalate	80 ug/mL
							Dimethyl phthalate	80 ug/mL
							Fluoranthene	80 ug/mL
							Fluorene	80 ug/mL
							Hexachlorobenzene	80 ug/mL
							Hexachlorobutadiene	80 ug/mL
							Hexachlorocyclopentadiene	80 ug/mL
							Hexachloroethane	80 ug/mL
							Indeno[1,2,3-cd]pyrene	80 ug/mL
							Isophorone	80 ug/mL
							N-Nitrosodi-n-propylamine	80 ug/mL
							N-Nitrosodimethylamine	80 ug/mL
							Naphthalene	80 ug/mL
							Nitrobenzene	80 ug/mL
							Pentachlorophenol	160 ug/mL
							Phenanthrene	80 ug/mL
							Phenol	80 ug/mL
							Pyrene	80 ug/mL
							Pyridine	80 ug/mL
							3,3'-Dichlorobenzidine	80 ug/mL
							Caprolactam	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MS-IS_00007	50 uL	Benzoic acid	160 ug/mL
							Famphur	80 ug/mL
							N-Nitrosodiphenylamine	80 ug/mL
							1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	Phenanthrene-d10	40 ug/mL
							2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	Terphenyl-d14 (Surr)	200 ug/mL
							1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis (2-chloroethoxy)methane	200 ug/mL
							Bis (2-chloroethyl) ether	200 ug/mL
							Bis (2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz (a,h) anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
					MS-567673_00096	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					MS-567674_00038	2 mL	Caprolactam	200 ug/mL
							Benzoic acid	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MS-568023_00008	1 mL	Famphur	200 ug/mL
					MS-568038_00008	1 mL	N-Nitrosodiphenylamine	200 ug/mL
..8270SurStkHL_00002	01/31/18	Restek, Lot A092712			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..MS-567672_00091	05/31/15	Restek, Lot A093709			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1010.97 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..MS-567673_00096	05/31/15		Restek, Lot A093755		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..MS-567674_00038	02/29/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568023_00008	02/29/16		Restek, Lot A0101191		(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MS-567684_00017	15 mL	Phenanthrene-d10	400 ug/mL
							1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
..MS-567684_00016	02/28/18		Restek, Lot A093676		(Purchased Reagent)		Phenanthrene-d10	400 ug/mL
							1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
..MS-567684_00017	12/31/17		Restek, Lot A092546		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
							1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
MS-HSLA120_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	300 uL	2,4,6-Tribromophenol (Surr)	120 ug/mL
							2-Fluorobiphenyl	120 ug/mL
							2-Fluorophenol (Surr)	120 ug/mL
							Nitrobenzene-d5 (Surr)	120 ug/mL
							Phenol-d5 (Surr)	120 ug/mL
							Terphenyl-d14 (Surr)	120 ug/mL
							1,1'-Biphenyl	120 ug/mL
							1,2,4,5-Tetrachlorobenzene	120 ug/mL
							1,2,4-Trichlorobenzene	120 ug/mL
							1,2-Dichlorobenzene	120 ug/mL
							1,2-Diphenylhydrazine	121.317 ug/mL
							1,3-Dichlorobenzene	120 ug/mL
							1,3-Dinitrobenzene	120 ug/mL
							1,4-Dichlorobenzene	120 ug/mL
							1,4-Dioxane	120 ug/mL
							1-Methylnaphthalene	120 ug/mL
							2,2'-oxybis[1-chloropropane]	120 ug/mL
							2,3,4,6-Tetrachlorophenol	120 ug/mL
							2,4,5-Trichlorophenol	120 ug/mL
							2,4,6-Trichlorophenol	120 ug/mL
							2,4-Dichlorophenol	120 ug/mL
							2,4-Dimethylphenol	120 ug/mL
							2,4-Dinitrophenol	240 ug/mL
							2,4-Dinitrotoluene	120 ug/mL
							2,6-Dinitrotoluene	120 ug/mL
							2-Chloronaphthalene	120 ug/mL
							2-Chlorophenol	120 ug/mL
							2-Methylnaphthalene	120 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylphenol	120 ug/mL
							2-Nitroaniline	120 ug/mL
							2-Nitrophenol	120 ug/mL
							3 & 4 Methylphenol	120 ug/mL
							3-Methylphenol	120 ug/mL
							3-Nitroaniline	120 ug/mL
							4,6-Dinitro-2-methylphenol	240 ug/mL
							4-Bromophenyl phenyl ether	120 ug/mL
							4-Chloro-3-methylphenol	120 ug/mL
							4-Chloroaniline	120 ug/mL
							4-Chlorophenyl phenyl ether	120 ug/mL
							4-Methylphenol	120 ug/mL
							4-Nitroaniline	120 ug/mL
							4-Nitrophenol	240 ug/mL
							Acenaphthene	120 ug/mL
							Acenaphthylene	120 ug/mL
							Acetophenone	120 ug/mL
							Aniline	120 ug/mL
							Anthracene	120 ug/mL
							Azobenzene	120 ug/mL
							Benzo[a]anthracene	120 ug/mL
							Benzo[a]pyrene	120 ug/mL
							Benzo[b]fluoranthene	120 ug/mL
							Benzo[g,h,i]perylene	120 ug/mL
							Benzo[k]fluoranthene	120 ug/mL
							Benzyl alcohol	120 ug/mL
							Bis (2-chloroethoxy)methane	120 ug/mL
							Bis (2-chloroethyl) ether	120 ug/mL
							Bis (2-ethylhexyl) phthalate	120 ug/mL
							Butyl benzyl phthalate	120 ug/mL
							Carbazole	120 ug/mL
							Chrysene	120 ug/mL
							Di-n-butyl phthalate	120 ug/mL
							Di-n-octyl phthalate	120 ug/mL
							Dibenz (a,h) anthracene	120 ug/mL
							Dibenzofuran	120 ug/mL
							Diethyl phthalate	120 ug/mL
							Dimethyl phthalate	120 ug/mL
							Fluoranthene	120 ug/mL
							Fluorene	120 ug/mL
							Hexachlorobenzene	120 ug/mL
							Hexachlorobutadiene	120 ug/mL
							Hexachlorocyclopentadiene	120 ug/mL
							Hexachloroethane	120 ug/mL
							Indeno[1,2,3-cd]pyrene	120 ug/mL
							Isophorone	120 ug/mL
							N-Nitrosodi-n-propylamine	120 ug/mL
							N-Nitrosodimethylamine	120 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	120 ug/mL
							Nitrobenzene	120 ug/mL
							Pentachlorophenol	240 ug/mL
							Phenanthrene	120 ug/mL
							Phenol	120 ug/mL
							Pyrene	120 ug/mL
							Pyridine	120 ug/mL
							3,3'-Dichlorobenzidine	120 ug/mL
							Caprolactam	120 ug/mL
							Benzoic acid	240 ug/mL
							Famphur	120 ug/mL
							N-Nitrosodiphenylamine	120 ug/mL
					MS-IS_00007	50 uL	1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
							Phenanthrene-d10	40 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis (2-chloroethoxy)methane	200 ug/mL
							Bis (2-chloroethyl) ether	200 ug/mL
							Bis (2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz (a,h) anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
					MS-567673_00096	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					MS-567674_00038	2 mL	Caprolactam	200 ug/mL
					MS-568023_00008	1 mL	Benzoic acid	400 ug/mL
MS-568038_00008	1 mL	Famphur	200 ug/mL					
MS-568038_00008	1 mL	N-Nitrosodiphenylamine	200 ug/mL					
..8270SurStkHL_00002	01/31/18	Restek, Lot A092712			(Purchased Reagent)	2,4,6-Tribromophenol (Surr)	5000 ug/mL	
						2-Fluorobiphenyl	5000 ug/mL	
						2-Fluorophenol (Surr)	5000 ug/mL	
						Nitrobenzene-d5 (Surr)	5000 ug/mL	
						Phenol-d5 (Surr)	5000 ug/mL	
						Terphenyl-d14 (Surr)	5000 ug/mL	
..MS-567672_00091	05/31/15	Restek, Lot A093709			(Purchased Reagent)	1,1'-Biphenyl	1000 ug/mL	
						1,2,4,5-Tetrachlorobenzene	1000 ug/mL	
						1,2,4-Trichlorobenzene	1000 ug/mL	
						1,2-Dichlorobenzene	1000 ug/mL	
						1,2-Diphenylhydrazine	1010.97 ug/mL	
						1,3-Dichlorobenzene	1000 ug/mL	
						1,3-Dinitrobenzene	1000 ug/mL	
						1,4-Dichlorobenzene	1000 ug/mL	
						1,4-Dioxane	1000 ug/mL	
						1-Methylnaphthalene	1000 ug/mL	
						2,2'-oxybis[1-chloropropane]	1000 ug/mL	
						2,3,4,6-Tetrachlorophenol	1000 ug/mL	
						2,4,5-Trichlorophenol	1000 ug/mL	
						2,4,6-Trichlorophenol	1000 ug/mL	
						2,4-Dichlorophenol	1000 ug/mL	
						2,4-Dimethylphenol	1000 ug/mL	
						2,4-Dinitrophenol	2000 ug/mL	
						2,4-Dinitrotoluene	1000 ug/mL	
						2,6-Dinitrotoluene	1000 ug/mL	
						2-Chloronaphthalene	1000 ug/mL	
						2-Chlorophenol	1000 ug/mL	
						2-Methylnaphthalene	1000 ug/mL	
						2-Methylphenol	1000 ug/mL	
						2-Nitroaniline	1000 ug/mL	
						2-Nitrophenol	1000 ug/mL	
						3 & 4 Methylphenol	1000 ug/mL	
						3-Methylphenol	1000 ug/mL	
						3-Nitroaniline	1000 ug/mL	
						4,6-Dinitro-2-methylphenol	2000 ug/mL	
						4-Bromophenyl phenyl ether	1000 ug/mL	
						4-Chloro-3-methylphenol	1000 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl)ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..MS-567673_00096	05/31/15		Restek, Lot A093755		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Caprolactam	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MS-567674_00038	02/29/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568023_00008	02/29/16		Restek, Lot A0101191		(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
					MS-567684_00017	15 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00016	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
..MS-567684_00017	12/31/17		Restek, Lot A092546		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-HSLA160_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	400 uL	2,4,6-Tribromophenol (Surr)	160 ug/mL
							2-Fluorobiphenyl	160 ug/mL
							2-Fluorophenol (Surr)	160 ug/mL
							Nitrobenzene-d5 (Surr)	160 ug/mL
							Phenol-d5 (Surr)	160 ug/mL
							Terphenyl-d14 (Surr)	160 ug/mL
							1,1'-Biphenyl	160 ug/mL
							1,2,4,5-Tetrachlorobenzene	160 ug/mL
							1,2,4-Trichlorobenzene	160 ug/mL
							1,2-Dichlorobenzene	160 ug/mL
							1,2-Diphenylhydrazine	161.756 ug/mL
							1,3-Dichlorobenzene	160 ug/mL
							1,3-Dinitrobenzene	160 ug/mL
							1,4-Dichlorobenzene	160 ug/mL
							1,4-Dioxane	160 ug/mL
							1-Methylnaphthalene	160 ug/mL
							2,2'-oxybis[1-chloropropane]	160 ug/mL
							2,3,4,6-Tetrachlorophenol	160 ug/mL
							2,4,5-Trichlorophenol	160 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	160 ug/mL
							2,4-Dichlorophenol	160 ug/mL
							2,4-Dimethylphenol	160 ug/mL
							2,4-Dinitrophenol	320 ug/mL
							2,4-Dinitrotoluene	160 ug/mL
							2,6-Dinitrotoluene	160 ug/mL
							2-Chloronaphthalene	160 ug/mL
							2-Chlorophenol	160 ug/mL
							2-Methylnaphthalene	160 ug/mL
							2-Methylphenol	160 ug/mL
							2-Nitroaniline	160 ug/mL
							2-Nitrophenol	160 ug/mL
							3 & 4 Methylphenol	160 ug/mL
							3-Methylphenol	160 ug/mL
							3-Nitroaniline	160 ug/mL
							4,6-Dinitro-2-methylphenol	320 ug/mL
							4-Bromophenyl phenyl ether	160 ug/mL
							4-Chloro-3-methylphenol	160 ug/mL
							4-Chloroaniline	160 ug/mL
							4-Chlorophenyl phenyl ether	160 ug/mL
							4-Methylphenol	160 ug/mL
							4-Nitroaniline	160 ug/mL
							4-Nitrophenol	320 ug/mL
							Acenaphthene	160 ug/mL
							Acenaphthylene	160 ug/mL
							Acetophenone	160 ug/mL
							Aniline	160 ug/mL
							Anthracene	160 ug/mL
							Azobenzene	160 ug/mL
							Benzo[a]anthracene	160 ug/mL
							Benzo[a]pyrene	160 ug/mL
							Benzo[b]fluoranthene	160 ug/mL
							Benzo[g,h,i]perylene	160 ug/mL
							Benzo[k]fluoranthene	160 ug/mL
							Benzyl alcohol	160 ug/mL
							Bis (2-chloroethoxy)methane	160 ug/mL
							Bis (2-chloroethyl) ether	160 ug/mL
							Bis (2-ethylhexyl) phthalate	160 ug/mL
							Butyl benzyl phthalate	160 ug/mL
							Carbazole	160 ug/mL
							Chrysene	160 ug/mL
							Di-n-butyl phthalate	160 ug/mL
							Di-n-octyl phthalate	160 ug/mL
							Dibenz (a,h) anthracene	160 ug/mL
							Dibenzofuran	160 ug/mL
							Diethyl phthalate	160 ug/mL
							Dimethyl phthalate	160 ug/mL
							Fluoranthene	160 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	160 ug/mL
							Hexachlorobenzene	160 ug/mL
							Hexachlorobutadiene	160 ug/mL
							Hexachlorocyclopentadiene	160 ug/mL
							Hexachloroethane	160 ug/mL
							Indeno[1,2,3-cd]pyrene	160 ug/mL
							Isophorone	160 ug/mL
							N-Nitrosodi-n-propylamine	160 ug/mL
							N-Nitrosodimethylamine	160 ug/mL
							Naphthalene	160 ug/mL
							Nitrobenzene	160 ug/mL
							Pentachlorophenol	320 ug/mL
							Phenanthrene	160 ug/mL
							Phenol	160 ug/mL
							Pyrene	160 ug/mL
							Pyridine	160 ug/mL
							3,3'-Dichlorobenzidine	160 ug/mL
							Caprolactam	160 ug/mL
							Benzoic acid	320 ug/mL
							Famphur	160 ug/mL
							N-Nitrosodiphenylamine	160 ug/mL
					MS-IS_00007	50 uL	1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
							Phenanthrene-d10	40 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
MS-567673_00096	1 mL	3,3'-Dichlorobenzidine	200 ug/mL					
		Caprolactam	200 ug/mL					
MS-567674_00038	2 mL	Benzoic acid	400 ug/mL					
MS-568023_00008	1 mL	Famphur	200 ug/mL					
MS-568038_00008	1 mL	N-Nitrosodiphenylamine	200 ug/mL					
..8270SurStkHL_00002	01/31/18	Restek, Lot A092712			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
							..MS-567672_00091	05/31/15
		1,2,4,5-Tetrachlorobenzene	1000 ug/mL					
		1,2,4-Trichlorobenzene	1000 ug/mL					
		1,2-Dichlorobenzene	1000 ug/mL					
		1,2-Diphenylhydrazine	1010.97 ug/mL					
		1,3-Dichlorobenzene	1000 ug/mL					
		1,3-Dinitrobenzene	1000 ug/mL					
		1,4-Dichlorobenzene	1000 ug/mL					
		1,4-Dioxane	1000 ug/mL					
		1-Methylnaphthalene	1000 ug/mL					
		2,2'-oxybis[1-chloropropane]	1000 ug/mL					
		2,3,4,6-Tetrachlorophenol	1000 ug/mL					
		2,4,5-Trichlorophenol	1000 ug/mL					
		2,4,6-Trichlorophenol	1000 ug/mL					
		2,4-Dichlorophenol	1000 ug/mL					
		2,4-Dimethylphenol	1000 ug/mL					
		2,4-Dinitrophenol	2000 ug/mL					
		2,4-Dinitrotoluene	1000 ug/mL					
2,6-Dinitrotoluene		1000 ug/mL						
2-Chloronaphthalene	1000 ug/mL							
2-Chlorophenol	1000 ug/mL							
2-Methylnaphthalene	1000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..MS-567673_00096	05/31/15		Restek, Lot A093755		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
..MS-567674_00038	02/29/16		Restek, Lot A093441		(Purchased Reagent)		Caprolactam	2000 ug/mL
..MS-568023_00008	02/29/16		Restek, Lot A0101191		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
					MS-567684_00017	15 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00016	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
..MS-567684_00017	12/31/17		Restek, Lot A092546		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-HSLA200_00015	04/30/15	02/13/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	500 uL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
							1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Diphenylhydrazine	202.195 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz (a,h) anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
							3,3'-Dichlorobenzidine	200 ug/mL
							Caprolactam	200 ug/mL
							Benzoic acid	400 ug/mL
							Famphur	200 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
					MS-IS_00007	50 uL	1,4-Dichlorobenzene-d4	40 ug/mL
							Acenaphthene-d10	40 ug/mL
							Chrysene-d12	40 ug/mL
							Naphthalene-d8	40 ug/mL
							Perylene-d12	40 ug/mL
							Phenanthrene-d10	40 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	202.195 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz (a,h) anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
					MS-567673_00096	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Caprolactam	200 ug/mL
					MS-567674_00038	2 mL	Benzoic acid	400 ug/mL
					MS-568023_00008	1 mL	Famphur	200 ug/mL
					MS-568038_00008	1 mL	N-Nitrosodiphenylamine	200 ug/mL
..8270SurStkHL_00002	01/31/18	Restek, Lot A092712			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
						2-Fluorobiphenyl	5000 ug/mL	
						2-Fluorophenol (Surr)	5000 ug/mL	
						Nitrobenzene-d5 (Surr)	5000 ug/mL	
						Phenol-d5 (Surr)	5000 ug/mL	
						Terphenyl-dl4 (Surr)	5000 ug/mL	
..MS-567672_00091	05/31/15	Restek, Lot A093709			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
						1,2,4,5-Tetrachlorobenzene	1000 ug/mL	
						1,2,4-Trichlorobenzene	1000 ug/mL	
						1,2-Dichlorobenzene	1000 ug/mL	
						1,2-Diphenylhydrazine	1010.97 ug/mL	
						1,3-Dichlorobenzene	1000 ug/mL	
						1,3-Dinitrobenzene	1000 ug/mL	
						1,4-Dichlorobenzene	1000 ug/mL	
						1,4-Dioxane	1000 ug/mL	
						1-Methylnaphthalene	1000 ug/mL	
						2,2'-oxybis[1-chloropropane]	1000 ug/mL	
						2,3,4,6-Tetrachlorophenol	1000 ug/mL	
						2,4,5-Trichlorophenol	1000 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..MS-567673_00096	05/31/15		Restek, Lot A093755		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..MS-567674_00038	02/29/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MS-568023_00008	02/29/16		Restek, Lot A0101191		(Purchased Reagent)		Famphur	2000 ug/mL
..MS-568038_00008	02/28/17		Restek, Lot A0101189		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.MS-IS_00007	12/08/15	12/08/14	Methylene Chloride, Lot 71006	250 mL	MS-567684_00016	35 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
					MS-567684_00017	15 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00016	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
..MS-567684_00017	12/31/17		Restek, Lot A092546		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-HSLACCV080_00038	04/30/15	02/10/15	Methylene Chloride, Lot 87836	0.5 mL	MS-HSLA_STK_00012	200 uL	2,4,6-Tribromophenol (Surr)	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl	80 ug/mL
							2-Fluorophenol (Surr)	80 ug/mL
							Nitrobenzene-d5 (Surr)	80 ug/mL
							Phenol-d5 (Surr)	80 ug/mL
							Terphenyl-d14 (Surr)	80 ug/mL
							1,2,4-Trichlorobenzene	80 ug/mL
							1,4-Dichlorobenzene	80 ug/mL
							2,4,6-Trichlorophenol	80 ug/mL
							2,4-Dinitrotoluene	80 ug/mL
							2-Chlorophenol	80 ug/mL
							2-Methylnaphthalene	80 ug/mL
							2-Methylphenol	80 ug/mL
							4-Chloro-3-methylphenol	80 ug/mL
							4-Nitrophenol	160 ug/mL
							Acenaphthene	80 ug/mL
							Anthracene	80 ug/mL
							N-Nitrosodi-n-propylamine	80 ug/mL
							Pentachlorophenol	160 ug/mL
							Pyrene	80 ug/mL
							Caprolactam	80 ug/mL
.MS-HSLA_STK_00012	04/30/15	11/20/14	Methylene Chloride, Lot 71006	10 mL	8270SurStkHL_00002	0.4 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
					MS-567672_00091	2 mL	1,2,4-Trichlorobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Anthracene	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Pyrene	200 ug/mL
					MS-567673_00096	1 mL	Caprolactam	200 ug/mL
..8270SurStkHL_00002	01/31/18		Restek, Lot A092712		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MS-567672_00091	05/31/15	Restek, Lot A093709			(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Anthracene	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Pyrene	1000 ug/mL
..MS-567673_00096	05/31/15	Restek, Lot A093755			(Purchased Reagent)		Caprolactam	2000 ug/mL
MS-HSLB1B3SSV_00022	05/31/15	03/11/15	Methylene Chloride, Lot 87975	0.5 mL	MS-HSLB1_STK_00005	250 uL	1,2,4-Trichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Anthracene	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Pyrene	100 ug/mL
.MS-HSLB1_STK_00005	05/31/15	03/11/15	Methylene Chloride, Lot 87975	10 mL	MS-567672SEC_00012	2 mL	1,2,4-Trichlorobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Anthracene	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Pyrene	200 ug/mL
..MS-567672SEC_00012	05/31/15	Restek, Lot A094002			(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Anthracene	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Pyrene	1000 ug/mL
MS-HSLB2SSV_00020	05/16/15	03/11/15	Methylene Chloride, Lot 87975	0.5 mL	MS-HSLB2_STK_00004	250 uL	Caprolactam	100 ug/mL
.MS-HSLB2_STK_00004	05/16/15	05/16/14	Methylene Chloride, Lot 51144	10 mL	MS-567673SEC_00009	1 mL	Caprolactam	200 ug/mL
..MS-567673SEC_00009	07/31/15	Restek, Lot A0101015			(Purchased Reagent)		Caprolactam	2000 ug/mL

**Reagent ID: 8270_LCS_Main_00019**

Description: USE IN CONJUNCTION WITH 8270_LCS_S
 No. of Bottles: 2
 Storage Location: North Prep
 Reagent Volume: 250.000 mL
 Creation Date: 02/12/2015
 Open Date:
 Container(s): 3108628, 3108629
 Comment: Place all stocks in a sonication bath for 5 minutes before use.
 Dilute to 250mL in P&T MeOH
 20mL of MS-569729 "8270 List 1 Std 1 MegaMix"
 10mL of MS-569731 "Benzoic Acid"
 1 year expiration
 Exchange /MeCl2 verification
 All Standards in fridge.

Expiration Date: 02/12/2016
 Laboratory: TestAmerica Denver
 Prepared By: Scoles, Brittany M
 Solvent: P&T Methanol
 Solvent Lot: MethanolP&T_00107

Media exchanged
02/15/15

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
1,1'-Biphenyl	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.24400	ug/mL
1,2,4,5-Tetrachlorobenzene	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.00800	ug/mL
1,2,4-Trichlorobenzene	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.02400	ug/mL
1,2-Dichlorobenzene	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.26000	ug/mL
1,3-Dichlorobenzene	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.08000	ug/mL
1,3-Dinitrobenzene	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.25600	ug/mL
1,4-Dichlorobenzene	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.21200	ug/mL
1,4-Dioxane	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.17600	ug/mL
1-Methylnaphthalene	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.00000	ug/mL
2,2'-oxybis[1-chloropropane]	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.00000	ug/mL
2,3,4,6-Tetrachlorophenol	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.08400	ug/mL
2,4,5-Trichlorophenol	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.00000	ug/mL
2,4,6-Trichlorophenol	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.05600	ug/mL
2,4-Dichlorophenol	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.00000	ug/mL
2,4-Dimethylphenol	MS-569729_00005	05/31/2016	1000.00000	ug/mL	80.12800	ug/mL
2,4-Dinitrophenol	MS-569729_00005	05/31/2016	2000.00000	ug/mL	160.34800	ug/mL

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\Denchrom\ChromData\SMS_G6\20150213-32001.b\G6_16500.D

Lims ID: 8270_LCS_Main_00019

Inj. Date: 13-Feb-2015 14:19:30

Worklist ID: 280-0032001-004

Instrument: SMS_G6

Method: SMSG6_8270C

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3550C
20 1,4-Dioxane	80.2	58.7	73.3	55-135
21 N-Nitrosodimethylamine	80.0	61.2	76.5	62-150
22 Pyridine	80.0	62.7	78.4	30-135
34 Phenol	80.3	65.5	81.6	61-135
35 Aniline	80.1	65.2	81.4	22-135
37 Bis(2-chloroethyl)ether	80.1	65.5	81.9	65-135
39 n-Decane	80.0	52.3	65.4	21-135
41 2-Chlorophenol	80.0	65.3	81.6	58-135
42 1,3-Dichlorobenzene	80.1	63.6	79.4	39-135
43 1,4-Dichlorobenzene	80.2	64.7	80.7	40-135
44 Benzyl alcohol	80.0	66.2	82.7	65-135
45 1,2-Dichlorobenzene	80.3	63.8	79.5	42-135
46 2-Methylphenol	80.1	64.5	80.5	62-135
47 2,2'-oxybis[1-chloropro	80.0	52.5	65.6	55-135
48 Indene	80.0	64.0	79.9	
49 3 & 4 Methylphenol	80.0	63.4	79.2	65-135
50 3-Methylphenol	80.0	63.4	79.2	65-135
51 N-Nitrosodi-n-propylami	80.2	64.0	79.9	65-135
52 4-Methylphenol	80.0	63.4	79.2	65-135
55 Acetophenone	80.1	65.9	82.2	65-135
58 Hexachloroethane	80.2	64.9	80.9	32-135
60 Nitrobenzene	80.0	62.1	77.6	65-135
63 Isophorone	80.0	70.2	87.8	65-135
65 2-Nitrophenol	80.0	67.7	84.7	65-135
66 2,4-Dimethylphenol	80.1	67.2	83.9	44-135
69 Bis(2-chloroethoxy)meth	80.2	65.1	81.2	65-135
70 Benzoic acid	80.1	71.9	89.8	41-135
75 2,4-Dichlorophenol	80.0	65.9	82.4	62-135
77 1,2,4-Trichlorobenzene	80.0	63.6	79.5	44-135
79 Naphthalene	80.1	63.6	79.4	56-135
80 4-Chloroaniline	80.0	66.6	83.3	30-135
81 2,6-Dichlorophenol	80.0	65.5	81.9	50-150
83 Hexachlorobutadiene	80.0	60.6	75.8	35-135
90 4-Chloro-3-methylphenol	80.1	69.4	86.7	65-135
94 2-Methylnaphthalene	79.9	65.4	81.7	56-135
96 1-Methylnaphthalene	80.0	62.0	77.5	54-135
97 Hexachlorocyclopentadie	80.1	64.7	80.7	10-135
98 1,2,4,5-Tetrachlorobenz	80.0	64.0	80.0	52-135
101 2,4,6-Trichlorophenol	80.1	67.9	84.8	62-135
103 2,4,5-Trichlorophenol	80.0	67.8	84.8	64-135
105 1,1'-Biphenyl	80.2	64.1	79.9	61-135

Preliminary Report

Sample Path: \\Denchrom\ChromData\SMS_G6\20150213-32001.b\G6_16500.D

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3550C
107 2-Chloronaphthalene	80.0	64.1	80.1	59-135
109 2-Nitroaniline	80.2	68.9	85.9	65-135
112 Dimethyl phthalate	80.0	68.4	85.5	65-135
113 1,3-Dinitrobenzene	80.3	71.3	88.8	65-135
114 2,6-Dinitrotoluene	80.1	71.0	88.7	65-135
115 Acenaphthylene	80.0	69.8	87.2	63-135
116 3-Nitroaniline	80.1	68.9	86.1	38-135
117 Acenaphthene	80.1	65.9	82.3	61-135
118 2,4-Dinitrophenol	160.3	144.1	89.9	50-135
120 4-Nitrophenol	160.0	152.6	95.3	56-135
122 2,4-Dinitrotoluene	80.1	72.7	90.8	65-135
123 Dibenzofuran	80.1	66.9	83.5	64-135
127 2,3,4,6-Tetrachlorophen	80.1	69.7	87.0	64-135
128 Hexadecane	80.1	58.9	73.6	62-135
130 Diethyl phthalate	80.0	72.2	90.2	65-135
135 4-Chlorophenyl phenyl e	80.0	67.6	84.5	65-135
136 Fluorene	80.0	68.5	85.5	65-135
139 4-Nitroaniline	80.1	71.8	89.6	65-135
140 4,6-Dinitro-2-methylphe	160.1	147.5	92.1	63-135
142 Diphenylamine	137.1	114.1	83.2	50-150
143 N-Nitrosodiphenylamine	160.0	133.2	83.3	65-135
144 Azobenzene	80.1	65.4	81.6	65-135
157 4-Bromophenyl phenyl et	80.0	64.8	81.0	65-135
158 Hexachlorobenzene	80.1	64.9	81.0	65-135
162 n-Octadecane	80.3	67.0	83.5	
164 Pentachlorophenol	160.0	132.9	83.0	52-135
169 Phenanthrene	80.0	69.6	87.0	65-135
170 Anthracene	80.0	69.2	86.5	65-135
171 Carbazole	80.0	68.1	85.2	65-135
175 Di-n-butyl phthalate	80.0	70.1	87.6	65-135
182 Fluoranthene	80.0	68.1	85.1	65-135
185 Pyrene	80.0	69.6	87.1	65-135
193 Butyl benzyl phthalate	80.0	71.7	89.6	65-135
198 Benzo[a]anthracene	80.1	67.3	84.1	65-135
199 Bis(2-ethylhexyl) phtha	80.0	72.4	90.4	65-135
200 Chrysene	80.3	68.0	84.7	65-135
202 Di-n-octyl phthalate	80.1	70.1	87.5	65-135
204 Benzo[b]fluoranthene	80.0	67.1	83.9	65-135
205 Benzo[k]fluoranthene	80.1	67.6	84.4	65-135
208 Benzo[a]pyrene	80.1	68.1	85.0	65-135
214 Indeno[1,2,3-cd]pyrene	80.0	64.8	81.0	65-135
215 Dibenz(a,h)anthracene	80.2	67.2	83.9	63-135
216 Benzo[g,h,i]perylene	80.0	65.9	82.3	65-135

Reagent ID: 8270Surrogate_00078

Description:	8270 Surrogate 100ug/ml	Expiration Date:	04/07/2016
No. of Bottles:	4	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Knaub, Gentry L
Reagent Volume:	1000.000 mL	Solvent:	ACETONE
Creation Date:	04/07/2015	Solvent Lot:	Acetone_000115
Open Date:			
Container(s):	3189444, 3189445, 3189446, 3189447		
Comment:	Take 20mL of 8270SurHL and dilute to 1000mL. One year expiration date. Split into 4x250mL bottles. Requires solvent exchange to MeCl2 prior to submission for verification.		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
2,4,6 - Tribromophenol	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
2,4,6-Tribromophenol	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
2-Fluorobiphenyl	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
2-Fluorophenol	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
Nitrobenzene-d5	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
Phenol-d5	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
Phenol-d6	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
Terphenyl-d14	8270SurStkHL_00078	02/23/2018	5000.00000	ug/mL	100.00000	ug/mL
2,4,6 - Tribromophenol	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
2,4,6-Tribromophenol	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
2-Fluorobiphenyl	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
2-Fluorophenol	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
Nitrobenzene-d5	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
Phenol-d5	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
Phenol-d6	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
Terphenyl-d14	8270SurStkHL_00103	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
2,4,6 - Tribromophenol	8270SurStkHL_00104	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL
2,4,6-Tribromophenol	8270SurStkHL_00104	05/31/2019	5000.00000	ug/mL	100.00000	ug/mL

Preliminary Report

TestAmerica Denver
Recovery Report

Data File: \\denchrom\chromdata\SMS_B2\20150409-33734.b\B2-9894.D
Lims ID: 8270Surrogate_00078 Lab Sample ID: Client 280-271876/28-A
Client ID:
Sample Type: Client
Inject. Date: 09-Apr-2015 13:16:30 ALS Bottle#: 6 Worklist Smp#: 28
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: 8270Surrogate_00078
Operator ID: KIEKELD Instrument ID: SMS_B2
Method: \\denchrom\chromdata\SMS_B2\20150409-33734.b\SMSB2_8270C.m
Limit Group: MSSV - 8270C_625
Method Label: 8270C / 625
Last Update: 09-Apr-2015 14:39:10 Calib Date: 03-Apr-2015 11:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150403-33531.b\B2-9841.D
Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK011

Compound	Amount Added	Amount Recovered	% Rec.
\$ 7 2-Fluorophenol	100.0	81.4	81.43
\$ 8 Phenol-d5	100.0	80.2	80.21
\$ 9 Nitrobenzene-d5	100.0	79.9	79.88
\$ 11 2-Fluorobiphenyl	100.0	81.5	81.50
\$ 12 2,4,6-Tribromophenol	100.0	66.4	66.35
\$ 13 Terphenyl-d14	100.0	77.3	77.34



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Certificate of Composition

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. : 567685 **Lot No.:** A092712

Description : 8270 Surrogate Standard
8270 Surrogate Standard 5000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : January 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2-Fluorophenol	5,000.0 µg/mL	+/-	29.2761	µg/mL	Gravimetric
	CAS # 367-12-4		+/-	132.9947	µg/mL	Unstressed
	Purity 99%		+/-	163.4399	µg/mL	Stressed
2	Phenol-d5	5,000.0 µg/mL	+/-	29.2761	µg/mL	Gravimetric
	CAS # 4165-62-2		+/-	132.9947	µg/mL	Unstressed
	Purity 99%		+/-	163.4399	µg/mL	Stressed
3	Nitrobenzene-d5	5,000.0 µg/mL	+/-	29.2761	µg/mL	Gravimetric
	CAS # 4165-60-0		+/-	132.9947	µg/mL	Unstressed
	Purity 99%		+/-	163.4399	µg/mL	Stressed
4	2-Fluorobiphenyl	5,000.0 µg/mL	+/-	29.2761	µg/mL	Gravimetric
	CAS # 321-60-8		+/-	132.9947	µg/mL	Unstressed
	Purity 99%		+/-	163.4399	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,000.0 µg/mL	+/-	29.2761	µg/mL	Gravimetric
	CAS # 118-79-6		+/-	132.9947	µg/mL	Unstressed
	Purity 99%		+/-	163.4399	µg/mL	Stressed
6	p-Terphenyl-d14	5,000.0 µg/mL	+/-	29.2761	µg/mL	Gravimetric
	CAS # 1718-51-0		+/-	132.9947	µg/mL	Unstressed
	Purity 99%		+/-	163.4399	µg/mL	Stressed

Solvent: Methylene Chloride
 CAS # 75-09-2
 Purity 99%

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



Analytical Reference Materials
8270 Surrogate Standard

Catalog # 567685

Lot # A093638

110 Benner Circle Bellefonte, PA 16823-8812
(814) 353-1300

FOR LABORATORY USE ONLY. READ MSDS PRIOR TO USE.

RAW MATERIAL TEST INFORMATION AVAILABLE UPON REQUEST

MANUFACTURED UNDER RESTEK'S ISO 9001 REGISTERED QUALITY SYSTEM



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Bellefonte, PA 16823-8812
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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567685 **Lot No.:** A093638

Description : 8270 Surrogate Standard
8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	2-Fluorophenol		5,000.0	µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS #	367-12-4			+/-	132.9492	µg/mL	Unstressed
	Purity	99%			+/-	163.4029	µg/mL	Stressed
2	Phenol-d5		5,000.0	µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS #	4165-62-2			+/-	132.9492	µg/mL	Unstressed
	Purity	99%			+/-	163.4029	µg/mL	Stressed
3	Nitrobenzene-d5		5,000.0	µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS #	4165-60-0			+/-	132.9492	µg/mL	Unstressed
	Purity	99%			+/-	163.4029	µg/mL	Stressed
4	2-Fluorobiphenyl		5,000.0	µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS #	321-60-8			+/-	132.9492	µg/mL	Unstressed
	Purity	99%			+/-	163.4029	µg/mL	Stressed
5	2,4,6-Tribromophenol		5,000.0	µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS #	118-79-6			+/-	132.9492	µg/mL	Unstressed
	Purity	99%			+/-	163.4029	µg/mL	Stressed
6	p-Terphenyl-d14		5,000.0	µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS #	1718-51-0			+/-	132.9492	µg/mL	Unstressed
	Purity	99%			+/-	163.4029	µg/mL	Stressed
Solvent:	Methylene Chloride							
	CAS #	75-09-2						
	Purity	99%						

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:

30m x .25mm x .25um
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

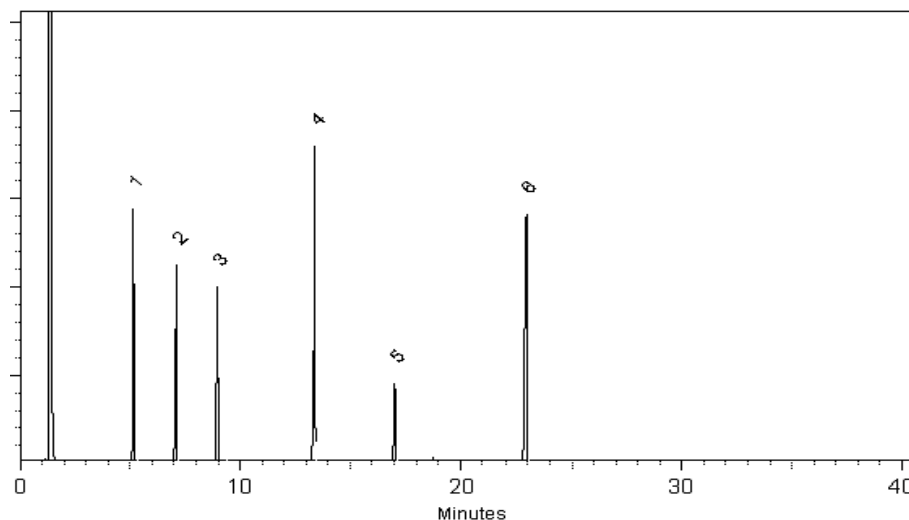
250°C

Det. Temp:

330°C

Det. Type:

FID



Diane Shaffer
Diane Shaffer - QA Analyst

Date Passed: 22-Feb-2013

Balance: 1128342313

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



Chemical Standard Batch Sheet

Lot #: A093638

Catalog #: 567685	Target: 5000 ug/mL		
Description: 8270 Surrogate Standard			
Solvent: Methylene Chloride	Solvent Lot: 127438		Final Volume: 6,000 ml

Made by: Matt Hepfer	Date: 2/19/2013 1:13:54PM		
Tested by: Jennifer Pollino	Date: 2/21/2013 11:49:35AM		
Pass	By: Diane Shaffer	Date: 2/22/2013 10:09:20A	
Packaged by: Alexandria Pavkovich / Kendra Swope	Date: 2/21/2013 10:36:16A	No. Units: 1,023	Pkg Size: 5 mL
Balance Used: BEDEARMBALPC1 XP205	Serial #: 1128342313		

<u>Compound</u>	<u>CAS</u>	<u>Storage Location</u>	<u>Lot #</u>	<u>Purity</u>	<u>Target Conc(ug/mL)</u>	<u>Target</u>	<u>Actual</u>	<u>Calc Conc(ug/mL)</u>
p-Terphenyl-d14	1718-51-0	R0504	PR-20577	0.99	5,000.00	30,000.00 mg	30,000.00 mg	5,000.0
Nitrobenzene-d5	4165-60-0	R0526	PR-20474	0.99	5,000.00	30,000.00 mg	30,000.00 mg	5,000.0
2-Fluorobiphenyl	321-60-8	R0539	E11Y047	0.99	5,000.00	30,000.00 mg	30,000.00 mg	5,000.0
2,4,6-Tribromophenol	118-79-6	R0619	1383140V	0.99	5,000.00	30,000.00 mg	30,000.00 mg	5,000.0
2-Fluorophenol	367-12-4	R0635	STBC5591V	0.99	5,000.00	30,000.00 mg	30,000.00 mg	5,000.0
Phenol-d5	4165-62-2	R1135	X479P1	0.99	5,000.00	30,000.00 mg	30,000.00 mg	5,000.0

QA Report: 8270 Surrogate Standard (Cat.#567685)

<u>COMPONENT</u>	Runs of Lot # A092712						Runs of Lot # A093638						%D MEAN	P/F
	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD		
2-Fluorophenol	3567168	3686433	3610358	3621320	60383	1.67	3740895	3706516	3740206	3729206	19653	0.53	-2.98	PASS
Phenol-d5	4151283	4284919	4199657	4211953	67661	1.61	4299218	4265705	4301647	4288857	20087	0.47	-1.83	PASS
Nitrobenzene-d5	3474347	3583156	3514256	3523920	55044	1.56	3599035	3574157	3601170	3591454	15018	0.42	-1.92	PASS
2-Fluorobiphenyl	5477353	5637195	5541430	5551993	80443	1.45	5659153	5624786	5659681	5647873	19996	0.35	-1.73	PASS
2,4,6-Tribromophenol	1317679	1355641	1333550	1335623	19066	1.43	1356813	1353676	1360571	1357020	3452	0.25	-1.60	PASS
p-Terphenyl-d14	5916769	6051268	5989106	5985714	67314	1.12	6094261	6069529	6090064	6084618	13235	0.22	-1.65	PASS



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567685 Lot No.: A0103615
Description : 8270 Surrogate Standard
8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 5 mL Pkg Amt: > 5 mL
Expiration Date : May 31, 2019 Storage: 10°C or colder
Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2-Fluorophenol	5,003.5 µg/mL	+/-	29.0892	µg/mL	Gravimetric
	CAS # 367-12-4 (Lot STBC5591V)		+/-	124.6713	µg/mL	Unstressed
	Purity 99%		+/-	156.7818	µg/mL	Stressed
2	Phenol-d5	5,002.9 µg/mL	+/-	29.0860	µg/mL	Gravimetric
	CAS # 4165-62-2 (Lot M387P4)		+/-	124.6575	µg/mL	Unstressed
	Purity 99%		+/-	156.7644	µg/mL	Stressed
3	Nitrobenzene-d5	5,001.4 µg/mL	+/-	29.0773	µg/mL	Gravimetric
	CAS # 4165-60-0 (Lot PR-20474)		+/-	124.6201	µg/mL	Unstressed
	Purity 99%		+/-	156.7174	µg/mL	Stressed
4	2-Fluorobiphenyl	5,004.4 µg/mL	+/-	29.0947	µg/mL	Gravimetric
	CAS # 321-60-8 (Lot E11Y047)		+/-	124.6949	µg/mL	Unstressed
	Purity 99%		+/-	156.8114	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,003.9 µg/mL	+/-	29.0914	µg/mL	Gravimetric
	CAS # 118-79-6 (Lot 29699MJV)		+/-	124.6805	µg/mL	Unstressed
	Purity 99%		+/-	156.7934	µg/mL	Stressed
6	p-Terphenyl-d14	5,007.1 µg/mL	+/-	29.1100	µg/mL	Gravimetric
	CAS # 1718-51-0 (Lot PR-20577)		+/-	124.7604	µg/mL	Unstressed
	Purity 99%		+/-	156.8938	µg/mL	Stressed

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567685 Lot No.: A0103615

Description : 8270 Surrogate Standard
8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL Pkg Amt: > 5 mL

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

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol CAS # 367-12-4 Purity 99% (Lot STBC5591V)	5,003.5 µg/mL	+/- 29.0892 µg/mL +/- 124.6713 µg/mL +/- 156.7818 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d5 CAS # 4165-62-2 Purity 99% (Lot M387P4)	5,002.9 µg/mL	+/- 29.0860 µg/mL +/- 124.6575 µg/mL +/- 156.7644 µg/mL	Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 CAS # 4165-60-0 Purity 99% (Lot PR-20474)	5,001.4 µg/mL	+/- 29.0773 µg/mL +/- 124.6201 µg/mL +/- 156.7174 µg/mL	Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl CAS # 321-60-8 Purity 99% (Lot E11Y047)	5,004.4 µg/mL	+/- 29.0947 µg/mL +/- 124.6949 µg/mL +/- 156.8114 µg/mL	Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99% (Lot 29699MJV)	5,003.9 µg/mL	+/- 29.0914 µg/mL +/- 124.6805 µg/mL +/- 156.7934 µg/mL	Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 CAS # 1718-51-0 Purity 99% (Lot PR-20577)	5,007.1 µg/mL	+/- 29.1100 µg/mL +/- 124.7604 µg/mL +/- 156.8938 µg/mL	Gravimetric Unstressed Stressed

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
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CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



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

Catalog No. : 567685 Lot No.: A0103615
Description : 8270 Surrogate Standard
8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 5 mL Pkg Amt: > 5 mL
Expiration Date : May 31, 2019 Storage: 10°C or colder
Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol CAS # 367-12-4 Purity 99% (Lot STBC5591V)	5,003.5 µg/mL	+/- 29.0892 µg/mL +/- 124.6713 µg/mL +/- 156.7818 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d5 CAS # 4165-62-2 Purity 99% (Lot M387P4)	5,002.9 µg/mL	+/- 29.0860 µg/mL +/- 124.6575 µg/mL +/- 156.7644 µg/mL	Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 CAS # 4165-60-0 Purity 99% (Lot PR-20474)	5,001.4 µg/mL	+/- 29.0773 µg/mL +/- 124.6201 µg/mL +/- 156.7174 µg/mL	Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl CAS # 321-60-8 Purity 99% (Lot E11Y047)	5,004.4 µg/mL	+/- 29.0947 µg/mL +/- 124.6949 µg/mL +/- 156.8114 µg/mL	Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99% (Lot 29699MJV)	5,003.9 µg/mL	+/- 29.0914 µg/mL +/- 124.6805 µg/mL +/- 156.7934 µg/mL	Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 CAS # 1718-51-0 Purity 99% (Lot PR-20577)	5,007.1 µg/mL	+/- 29.1100 µg/mL +/- 124.7604 µg/mL +/- 156.8938 µg/mL	Gravimetric Unstressed Stressed

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Standard Verification Form

Verification (New vendor or problematic Standard)	☐	Re-Verification	☒
TALS Reagent Record <i>ampules were not used they</i>			
New	☐	Copied	☐
COA Reviewed against formulary report			☒

original
IDs are
un-changed

Document instrument verification if need (Initial or re-verification):		
Department	Acceptance Criteria	
	Standard Analytes	Poor Performers* and Esterified Analytes
GC/HPLC	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb
GCMS/LCMS	≤ 35 %D	≤ 55 %D
MSVOA	≤ 25 %D	≤ 55 %D
Metals	≤ 8 %D	NA
Wet Chemistry	≤ 5 %D	NA

Standard Name	MS-567672	Standard ID	RES HSLA Magn Mix	
Verified by	M. Ho [Signature]	Instrument ID	Y	
Verification Date	8/11/14	Method Reference	B210C	
Reference Standard ID	567672SEC	Batch #	A094002	
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
Sec Attached	Report.			All compounds pass.
				pass 8/15
New Expiration Date:	5/2015	New TALS ID	★	
New expiration date can be no greater than 1/2 the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.				
Comment:	test one ampule of lot A093709 & apply to all ampules of that lot.			

ps 8/15 14

1st Level Review

THU

Date:

8/14/14

2nd Level Review

Handwritten signature

Date:

8/14/14

QA Review (Re-verification only)	<i>Madduri</i>	Date: 8/15/14

Attach form, supporting documentation and original CoA to new verified or re-verified standard record in TALS.

*See analytical SOP for details on poor performing analytes.

* Use same TALS ID with updated expiration date. Attach this paperwork to each record.



Analytical Reference Materials
8270 List 1 / Std #1 MegaMix

Catalog # 567672

Lot # A093709

110 Benner Circle Bellefonte, PA 16823-8812
(814) 353-1300

FOR LABORATORY USE ONLY. READ MSDS PRIOR TO USE.

RAW MATERIAL TEST INFORMATION AVAILABLE UPON REQUEST

MANUFACTURED UNDER RESTEK'S ISO 9001 REGISTERED QUALITY SYSTEM



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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ 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.: 567672 Lot No.: A093709
Description: 8270 List 1 / Std #1 MegaMix
8270 List 1 / Std #1 MegaMix 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size: 5 mL Pkg Amt: > 5 mL
Expiration Date: August 2014 Storage: 10°C or colder
Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,4-Dioxane	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 123-91-1		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
2	Pyridine	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 110-86-1		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
3	N-Nitrosodimethylamine	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 62-75-9		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
4	Aniline	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 62-53-3		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
5	Phenol	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-95-2		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
6	Bis(2-chloroethyl)ether	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 111-44-4		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
7	2-Chlorophenol	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-57-8		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
8	1,3-Dichlorobenzene	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 541-73-1		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
9	1,4-Dichlorobenzene	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-46-7		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed

10	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Benzyl alcohol CAS # 100-51-6 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Bis(2-chloroisopropyl)ether CAS # 108-60-1 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2-Methylphenol (o-cresol) CAS # 95-48-7 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Acetophenone CAS # 98-86-2 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Hexachloroethane CAS # 67-72-1 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	N-Nitroso-di-n-propylamine CAS # 621-64-7 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	4-Methylphenol (p-cresol) CAS # 106-44-5 Purity 99%	500.0	µg/mL	+/- +/- +/-	2.9070 4.3978 8.6943	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	3-Methylphenol (m-cresol) CAS # 108-39-4 Purity 99%	500.0	µg/mL	+/- +/- +/-	2.9070 4.3978 8.6943	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	n-Decane (C10) CAS # 124-18-5 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	n-Octadecane (C18) CAS # 593-45-3 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Nitrobenzene CAS # 98-95-3 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Isophorone CAS # 78-59-1 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2-Nitrophenol CAS # 88-75-5 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
24	2,4-Dimethylphenol CAS # 105-67-9 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	2,4-Dichlorophenol CAS # 120-83-2 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Naphthalene CAS # 91-20-3 Purity 99%	1,000.0	µg/mL	+/- +/- +/-	5.8141 8.7957 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

29	4-Chloroaniline CAS # 106-47-8 Purity 98%	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
				+/-	8.7956	µg/mL	Unstressed
				+/-	17.3885	µg/mL	Stressed
30	Hexachlorobutadiene CAS # 87-68-3 Purity 97%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7956	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
31	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3887	µg/mL	Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
33	1-Methylnaphthalene CAS # 90-12-0 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4 Purity 98%	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
				+/-	8.7956	µg/mL	Unstressed
				+/-	17.3885	µg/mL	Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
38	2-Chloronaphthalene CAS # 91-58-7 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
39	Biphenyl CAS # 92-52-4 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
40	2-Nitroaniline CAS # 88-74-4 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
41	Acenaphthylene CAS # 208-96-8 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0 Purity 97%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7956	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
43	Dimethylphthalate CAS # 131-11-3 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
45	Acenaphthene CAS # 83-32-9 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
46	3-Nitroaniline CAS # 99-09-2 Purity 97%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7956	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
47	2,4-Dinitrophenol CAS # 51-28-5 Purity 99%	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
				+/-	17.5913	µg/mL	Unstressed
				+/-	34.7772	µg/mL	Stressed

48	Dibenzofuran CAS # 132-64-9 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 17.5913 +/- 34.7772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Diethylphthalate CAS # 84-66-2 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	4-Nitroaniline CAS # 100-01-6 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
56	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 17.5913 +/- 34.7772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Azobenzene CAS # 103-33-3 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	Hexachlorobenzene CAS # 118-74-1 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	Pentachlorophenol CAS # 87-86-5 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 17.5913 +/- 34.7772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Phenanthrene CAS # 85-01-8 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Anthracene CAS # 120-12-7 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	n-Hexadecane (C16) CAS # 544-76-3 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	Carbazole CAS # 86-74-8 Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Fluoranthene CAS # 206-44-0 Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

67	Pyrene CAS # 129-00-0 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
68	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
69	Benz(a)anthracene CAS # 56-55-3 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
70	Chrysene CAS # 218-01-9 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
71	Bis(2-ethylhexyl)phthalate CAS # 117-81-7 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
72	Di-n-octyl phthalate CAS # 117-84-0 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
73	Benzo(b)fluoranthene CAS # 205-99-2 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
74	Benzo(k)fluoranthene CAS # 207-08-9 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
75	Benzo(a)pyrene CAS # 50-32-8 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
76	Indeno(1,2,3-cd)pyrene CAS # 193-39-5 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
77	Dibenz(a,h)anthracene CAS # 53-70-3 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
78	Benzo(g,h,i)perylene CAS # 191-24-2 Purity 99%	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	8.7957	µg/mL	Unstressed
				+/-	17.3886	µg/mL	Stressed
Solvent:	Methylene Chloride CAS # 75-09-2 Purity 99%						

Column:

30m x .25mm x .25um
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi

Temp. Program:

35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:

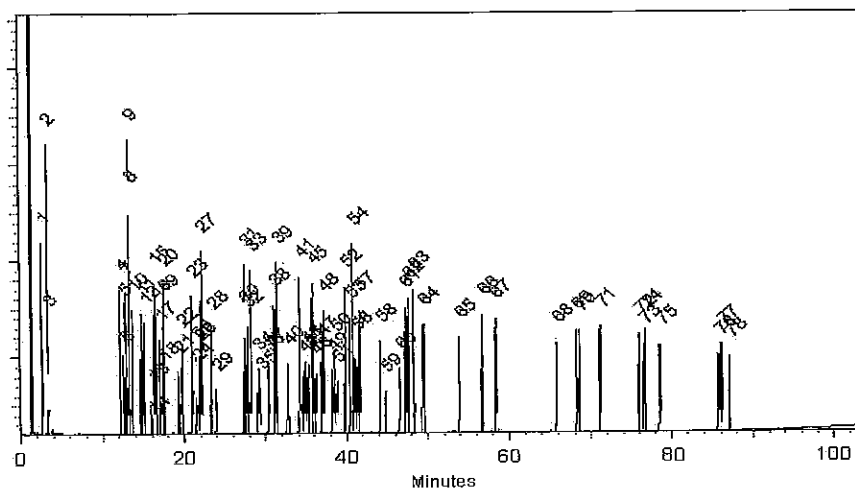
250°C

Det. Temp:

300°C

Det. Type:

FID



General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



Chemical Standard Batch Sheet

Lot #: A093709

Catalog #: 567672	Target: 500-2000 ug/mL		
Description: 8270 List 1 / Std #1 MegaMix			
Solvent: Methylene Chloride	Solvent Lot: 127788	Final Volume:	4,000 ml

Made by: Matt Hepfer	Date: 3/8/2013 12:21:16PM		
Tested by: Jodi Breon	Date: 3/11/2013 3:28:30PM		
Pass	By: Jodi Breon	Date: 3/11/2013 3:28:33PM	
Packaged by: Brandon Reish / Matt Hepfer	Date: 3/10/2013 5:08:52PM	No. Units: 666	Pkg Size: 5 mL
Balance Used: BEDEARMBALPC1 XP205	Serial #: 1128342313		

Compound	CAS	Storage Location	Lot #	Purity	Target Conc(ug/mL)	Target	Actual	Calc Conc(ug/mL)
N-Nitrosodimethylamine	62-75-9	CAL012	1260200	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Pyridine	110-86-1	F0049	02718MW	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Bis(2-chloroethoxy)methane	111-91-1	R0253	317200	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
4-Bromophenyl phenyl ether	101-55-3	R0254	STBB9729V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
4-Chlorophenyl phenyl ether	7005-72-3	R0255	MKBL1347V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2,4-Dimethylphenol	105-67-9	R0256	I0165155	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2-Nitrophenol	88-75-5	R0263	02611AH	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Benz(a)anthracene	56-55-3	R0469	ER121707-01	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Benzo(b)fluoranthene	205-99-2	R0470	ER022008-02	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Benzo(k)fluoranthene	207-08-9	R0471	ER061608-02	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Benzo(g,h,i)perylene	191-24-2	R0473	ER020708-08	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Benzo(a)pyrene	50-32-8	R0474	ER071309-02	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Benzyl butyl phthalate	85-68-7	R0475	03027HV	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Bis(2-ethylhexyl)phthalate	117-81-7	R0479	MKBH9511V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Carbazole	86-74-8	R0480	S42950-417	0.98	1,000.00	4,081.63 mg	4,081.60 mg	1,000.0
1,2-Dichlorobenzene	95-50-1	R0484	68996CMV	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
1,3-Dichlorobenzene	541-73-1	R0485	BCBC1891V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
1,4-Dichlorobenzene	106-46-7	R0486	MKBG7690V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2,4-Dinitrotoluene	121-14-2	R0488	MKAA0690V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2,6-Dinitrotoluene	606-20-2	R0489	1437483V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2-Methylnaphthalene	91-57-6	R0490	19399MJV	0.96	1,000.00	4,166.67 mg	4,166.70 mg	1,000.0
2-Nitroaniline	88-74-4	R0491	MKBF9132V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
3-Nitroaniline	99-09-2	R0492	MKBH5131V	0.97	1,000.00	4,123.71 mg	4,123.70 mg	1,000.0
4-Nitroaniline	100-01-6	R0493	BCBG4702V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
4-Nitrophenol	100-02-7	R0494	MKBF5564V	0.99	2,000.00	8,000.00 mg	8,000.00 mg	2,000.0
1,2,4-Trichlorobenzene	120-82-1	R0496	26896BM	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Acenaphthylene	208-96-8	R0497	ER030707-01	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Anthracene	120-12-7	R0499	MKBK5208V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Pentachlorophenol	87-86-5	R0501	I30201JLM	0.99	2,000.00	8,000.00 mg	8,000.00 mg	2,000.0
Phenanthrene	85-01-8	R0502	MKBJ4205V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Pyrene	129-00-0	R0503	S22012V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Chrysene	218-01-9	R0505	ER120810-02	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Dibenz(a,h)anthracene	53-70-3	R0507	ER032211-01	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Di-n-butylphthalate	84-74-2	R0508	MKBG1851V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Fluoranthene	206-44-0	R0514	00828AJ	0.98	1,000.00	4,081.63 mg	4,081.60 mg	1,000.0
Fluorene	86-73-7	R0515	1326187	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Hexachlorocyclopentadiene	77-47-4	R0517	14752	0.98	1,000.00	4,081.63 mg	4,081.60 mg	1,000.0
Hexachlorobenzene	118-74-1	R0518	LB93343V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Hexachlorobutadiene	87-68-3	R0519	K22W009	0.97	1,000.00	4,123.71 mg	4,123.70 mg	1,000.0
Hexachloroethane	67-72-1	R0520	4H3SF	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Indeno(1,2,3-cd)pyrene	193-39-5	R0521	ER082107-02	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Naphthalene	91-20-3	R0524	MKBF8633V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Nitrobenzene	98-95-3	R0525	65096APV	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
N-Nitroso-di-n-propylamine	621-64-7	R0527	OPAGF-LS	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2,3,4,6-Tetrachlorophenol	58-90-2	R0528	ER100206-01	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0

<u>Compound</u>	<u>CAS</u>	<u>Storage Location</u>	<u>Lot #</u>	<u>Purity</u>	<u>Target Conc(ug/mL)</u>	<u>Target</u>	<u>Actual</u>	<u>Calc Conc(ug/mL)</u>
n-Decane (C10)	124-18-5	R0531	SHBB8486V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Acenaphthene	83-32-9	R0537	MKBH3748V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
n-Octadecane (C18)	593-45-3	R0549	EGG01-YPFG	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
1,2,4,5-Tetrachlorobenzene	95-94-3	R0555	06024AIV	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Acetophenone	98-86-2	R0561	MKBH7920V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Biphenyl	92-52-4	R0562	1277976	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
n-Hexadecane (C16)	544-76-3	R0563	SHBC3991V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
1-Methylnaphthalene	90-12-0	R0571	5250.00-10	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
1,4-Dioxane	123-91-1	R0581	SHBC3639V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Benzyl alcohol	100-51-6	R0606	02236CC	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Bis(2-chloroethyl)ether	111-44-4	R0607	45296HKV	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Bis(2-chloroisopropyl)ether	108-60-1	R0608	LB95678V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
4-Chloroaniline	106-47-8	R0609	12528PH	0.98	1,000.00	4,081.63 mg	4,081.60 mg	1,000.0
4-Chloro-3-methylphenol	59-50-7	R0610	STBC0769V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2-Chloronaphthalene	91-58-7	R0611	FIJ01	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2-Chlorophenol	95-57-8	R0612	MKBD3900V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2,4-Dichlorophenol	120-83-2	R0614	BCBH1617V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	R0615	13212DW	0.99	2,000.00	8,000.00 mg	8,000.00 mg	2,000.0
2,4-Dinitrophenol	51-28-5	R0616	MKBH0709V	0.99	2,000.00	8,000.00 mg	8,000.00 mg	2,000.0
2-Methylphenol (o-cresol)	95-48-7	R0617	29996EK	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
4-Methylphenol (p-cresol)	106-44-5	R0618	49396APV	0.99	500.00	2,000.00 mg	2,000.00 mg	500.0
2,4,5-Trichlorophenol	95-95-4	R0620	FHM01	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
2,4,6-Trichlorophenol	88-06-2	R0621	MKBH7393V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Phenol	108-95-2	R0627	BCBC0688	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Dibenzofuran	132-64-9	R0630	MKBK2375V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Diethylphthalate	84-66-2	R0631	MKBG0599V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Dimethylphthalate	131-11-3	R0632	10117699	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Di-n-octyl phthalate	117-84-0	R0633	36100	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Isophorone	78-59-1	R0636	06705DE	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Azobenzene	103-33-3	R0645	130305JLM	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
Aniline	62-53-3	R0647	BCBG3682V	0.99	1,000.00	4,000.00 mg	4,000.00 mg	1,000.0
3-Methylphenol (m-cresol)	108-39-4	R0648	04627KA	0.99	500.00	2,000.00 mg	2,000.00 mg	500.0
1,3-Dinitrobenzene	99-65-0	R0690	0001338960	0.97	1,000.00	4,123.71 mg	4,123.70 mg	1,000.0

QA Report: 8270 List 1/ Std #1 MegaMix (Cat.#567672)

COMPONENT	Runs of Lot # A094002						Runs of Lot # A093709						P/F
	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	
1,4-Dioxane	188646	192821	191880	191116	2190	1.15	192336	189609	189679	190508	1585	0.83	PASS
pyridine	415451	428642	427105	423733	7213	1.70	415345	408462	408591	410799	3937	0.96	PASS
n-nitrosodimethylamine	223317	225514	225683	224838	1320	0.59	230349	230199	229641	230063	373	0.16	PASS
aniline	493725	503628	503624	500326	5716	1.14	500907	496113	495103	497374	3101	0.62	PASS
phenol	817868	839195	837639	831567	11889	1.43	835201	826269	822169	827880	6664	0.80	PASS
Bis(2-chloroethy) ether	149557	150074	151312	150314	902	0.60	151577	151758	151779	151705	111	0.07	PASS
2-chlorophenol	555903	568972	568346	564407	7371	1.31	569567	561806	562793	564722	4225	0.75	PASS
1,3-dichlorobenzene	315458	322043	321021	319507	3544	1.11	322065	319592	317894	319850	2097	0.66	PASS
1,4-dichlorobenzene	330944	338234	337988	335722	4140	1.23	334527	331280	330934	332247	1982	0.60	PASS
1,2-dichlorobenzene	330894	338189	337997	335693	4157	1.24	336250	333171	332806	334076	1892	0.57	PASS
benzyl alcohol	495115	507587	507493	503398	7174	1.43	497826	493630	493743	495066	2391	0.48	PASS
bis(2-chloroisopropyl) ether	172397	176239	175001	174546	1961	1.12	234012	231770	230920	232234	1597	0.69	PASSES per customer ap...
2-methylphenol	571992	584082	581689	579254	6402	1.11	508833	504219	502597	505216	3235	0.64	PASSES per customer ap...
Acetophenone & hexachloroethane	491568	505669	499327	497721	7220	1.45	493188	488122	492221	491177	2590	0.55	PASS
N-Nitroso-di-n-propylamine	361179	368406	366589	365391	3759	1.03	368628	365316	363726	365890	2501	0.68	PASS
4 & 3-methylphenol	483616	493737	491316	489556	5285	1.08	486478	482308	480327	483038	3140	0.65	PASS
nitrobenzene	386839	393863	391993	390898	3638	0.93	390916	387583	385700	388066	2641	0.68	PASS
isophorone	480255	491568	489148	486990	5957	1.22	469515	467260	464590	467155	2514	0.54	PASS
2-nitrophenol	301545	309268	305582	305798	3921	1.28	307220	305842	303776	305613	1733	0.57	PASS
2,4-dimethylphenol	497531	508856	507673	504687	6225	1.23	508912	504842	502705	505486	3153	0.62	PASS
bis(2-chloroethox) methane	155792	159441	158707	157980	1930	1.22	163541	162149	161852	162514	902	0.55	PASS
2,4-dichlorophenol	272471	278784	279120	276792	3746	1.35	277729	275396	274832	275986	1536	0.56	PASS
1,2,4-trichlorobenzene	274752	280745	280628	278708	3427	1.23	275719	273362	271330	273470	2197	0.80	PASS
naphthalene	632713	647089	644183	641328	7601	1.19	645901	640789	638935	641875	3608	0.56	PASS
4-chloroaniline	364745	372864	372918	370176	4703	1.27	378204	377330	375425	376986	1421	0.38	PASS
hexachlorobutadiene	130937	133892	133787	132872	1677	1.26	134118	131409	131706	132411	1486	1.12	PASS
2-methylnaphthalene	627310	643366	643371	638016	9271	1.45	650394	645347	644288	646856	3571	0.55	PASS
4-chloro-3-methylphenol	363509	372177	373094	369593	5289	1.43	370470	367322	366997	368263	1918	0.52	PASS
1-methylnaphthalene	605609	618871	620998	615159	8339	1.36	629048	623146	622223	624806	3703	0.59	PASS
1,2,4,5-Tetrachlorobenzene	241238	245964	245232	244145	2544	1.04	243630	242510	241372	242504	1129	0.47	PASS
hexachlorocyclopentadiene	116601	120591	119462	118885	2057	1.73	116395	116227	115501	116041	475	0.41	PASS
2,4,6-trichlorophenol	234196	239699	239132	237676	3027	1.27	234520	233876	232573	233656	992	0.42	PASS
2,4,5-trichlorophenol	228868	234109	233717	232231	2919	1.26	232088	231980	230147	231405	1091	0.47	PASS
2-chloronaphthalene	512484	523485	523317	519762	6303	1.21	521500	518502	516177	518726	2669	0.51	PASS
Biphenyl	649641	663720	663441	658934	8049	1.22	660072	656120	653319	656504	3393	0.52	PASS
2-nitroaniline	340217	347361	346641	344740	3933	1.14	343896	340835	339983	341571	2058	0.60	PASS
1,4-dinitrobenzene	653793	665831	665803	661809	6942	1.05	654825	649138	646348	650104	4320	0.66	PASS
acenaphthylene	275967	282442	280456	279622	3317	1.19	291597	289220	288137	289651	1770	0.61	PASS
1,3-dinitrobenzene	334868	340560	340949	338792	3404	1.00	342476	339715	337599	339930	2446	0.72	PASS
dimethylphthalate	300923	306038	306893	304618	3228	1.06	306806	304219	302295	304440	2264	0.74	PASS
2,6-dinitrotoluene	655538	678708	677791	674012	7353	1.09	667927	662763	659031	663240	4467	0.67	PASS

acenaphthene	328807	335342	334538	332896	3564	1.07	343085	340825	338826	340912	2131	0.63	-2.41	PASS
3-nitroaniline	403212	420082	423890	415728	11005	2.65	431022	430954	428441	430139	1471	0.34	-3.47	PASS
2,4-dinitrophenol	554539	566141	565341	562007	6480	1.15	565280	561042	558344	561555	3496	0.62	0.08	PASS
dibenzofuran	483565	494357	486748	488223	5545	1.14	487703	490962	482122	489929	4471	0.92	0.27	PASS
2,4-dinitrotoluene	411655	419196	423575	418142	6029	1.44	422350	415647	418494	418830	3364	0.80	-0.16	PASS
4-nitrophenol	196668	202431	201931	200343	3193	1.59	199923	197906	197053	198294	1474	0.74	1.02	PASS
2,3,4,6-tetrachlorophenol	657087	672353	669979	666473	8215	1.23	656335	653469	650119	653308	3111	0.48	1.98	PASS
Fluorene	450667	459779	468548	456331	4944	1.08	457658	454118	451948	454575	2882	0.63	0.38	PASS
4-chlorophenyl phenyl ether	951920	972861	972060	965614	11866	1.23	971107	961700	961700	964836	5431	0.56	0.08	PASS
Diethylphthalate	333909	345775	348870	342851	7897	2.30	353496	350700	342723	348973	5590	1.60	-1.79	PASS
4-nitroaniline	435113	442519	436284	437972	3981	0.91	430065	430765	427725	429518	1592	0.37	1.93	PASS
4,6-dinitro-2-methylphenol	528898	539833	538390	535707	5941	1.11	534553	531043	528139	531245	3212	0.60	0.83	PASS
azobenzene	367392	374621	372888	371634	3774	1.02	373338	370643	367579	370520	2881	0.78	0.30	PASS
4-bromophenyl phenyl ester	180139	182859	182855	181951	1569	0.86	181000	181096	179710	180602	774	0.43	0.74	PASS
hexachlorobenzene	349415	356979	355983	354126	4110	1.16	342216	338859	339126	340067	1866	0.55	3.97	PASS
pentachlorophenol	645355	657962	655899	653072	6762	1.04	655020	650361	645902	650428	4559	0.70	0.40	PASS
phenanthrene	662496	675758	672344	670199	6886	1.03	670067	665965	662600	666211	3740	0.56	0.60	PASS
anthracene	585500	598538	597645	593894	7283	1.23	597987	593007	590910	593968	3635	0.61	-0.01	PASS
carbazole	586303	599793	595925	594007	5947	1.17	603232	599000	595798	599343	3729	0.62	-0.90	PASS
di-n-butyl phthalate	410246	419359	416547	415384	4666	1.12	418935	416137	414943	416538	2092	0.50	-0.30	PASS
fluoranthene	654471	666002	664254	661576	6215	0.94	668549	666073	661948	665523	3335	0.50	-0.60	PASS
pyrene	650967	665685	661682	659445	7610	1.15	656710	654800	650047	653852	3431	0.52	0.85	PASS
benzyl butyl phthalate	450042	459622	457648	455771	5058	1.11	452073	448100	447363	449179	2534	0.56	1.45	PASS
benzo(a) anthracene	635549	647464	650178	644397	7782	1.21	645231	642038	635647	640972	4880	0.76	0.53	PASS
chrysene	657355	670946	671586	666629	8038	1.21	642404	638898	633711	638271	4362	0.68	4.25	PASS
bis(2-ethylhexyl) phthalate	463772	473038	471516	469442	4969	1.06	472580	468287	465366	468778	3682	0.79	0.14	PASS
di-n-octyl phthalate	462265	470733	469244	467414	4521	0.97	458612	456339	453427	456126	2599	0.57	2.41	PASS
benzo(b) fluoroanthene	601072	611440	610799	607770	5810	0.96	612725	608324	609303	610117	2311	0.38	-0.39	PASS
benzo(k) fluoroanthene	637653	651057	648645	645785	7145	1.11	667310	660680	657980	661990	4801	0.73	-2.51	PASS
benzo(a) pyrene	598863	608918	610923	606235	6462	1.07	618065	613693	610326	614028	3880	0.63	-1.29	PASS
indeno(1,2,3-cd) pyrene	463837	479874	471869	471860	8019	1.70	504977	499671	499953	501534	2985	0.60	-6.29	PASS
dibenz(a,h) anthracene	578298	595218	586668	586461	8476	1.45	596694	586078	589414	594129	4103	0.69	-1.31	PASS
benzo(g,h,i) perylene	532334	548831	541334	540833	8260	1.53	543819	533453	532600	536824	6246	1.16	0.78	PASS

TestAmerica Laboratories
ICV, ICal Verification Report

Data Path: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0576.D
 Worklist Name: 080814-HSL Worklist Num: 26258
 Instrument: SMS_Y Method: SMSY_8270C
 Limit Group: MSSV - 8270C_625
 Analysis Type: SemiVOA
 Inj Volume: 0.50 Inj Vol Units: ul

Detector 1: MS SCAN

Compound	Amount Added	Amount Recovered	%Drift
27 1,4-Dioxane	100.0	97.3	-2.66
28 N-Nitrosodimethylamine	100.0	96.2	-3.83
29 Pyridine	100.0	104.4	4.40
40 Phenol	100.0	97.4	-2.58
43 Aniline	100.0	94.0	-5.96
44 Alpha Methyl Styrene	100.0	101.2	1.20
45 Bis(2-chloroethyl)ether	100.0	105.2	5.20
47 n-Decane	100.0	97.4	-2.63
48 2-Chlorophenol	100.0	100.0	0.00
49 1,3-Dichlorobenzene	100.0	99.2	-0.80
50 1,4-Dichlorobenzene	100.0	102.4	2.40
51 Benzyl alcohol	100.0	103.8	3.80
52 1,2-Dichlorobenzene	100.0	97.4	-2.65
54 2-Methylphenol	100.0	101.0	1.00
55 2,2'-oxybis[1-chloropropane]	72.0	72.6	0.82
56 Indene	100.0	100.5	0.50
58 3-Methylphenol	100.0	101.1	1.10
59 4-Methylphenol	100.0	101.1	1.10
60 3 & 4 Methylphenol	100.0	101.1	1.10
61 N-Nitrosodi-n-propylamine	100.0	104.3	4.30
63 Acetophenone	100.0	100.2	0.20
66 Hexachloroethane	100.0	98.8	-1.21
67 Nitrobenzene	100.0	97.4	-2.59
71 Isophorone	100.0	108.5	8.50
73 2,4-Dimethylphenol	100.0	93.0	-7.01
74 2-Nitrophenol	100.0	103.5	3.50
77 Benzoic acid	200.0	203.2	1.60
78 Bis(2-chloroethoxy)methane	100.0	95.0	-5.00
79 3,5-Dimethylphenol	100.0	98.9	-1.10

Data File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0576.D

Compound	Amount Added	Amount Recovered	%Drift
82 2,4-Dichlorophenol	100.0	98.2	-1.79
84 1,2,4-Trichlorobenzene	100.0	99.5	-0.47
87 Naphthalene	100.0	98.3	-1.68
88 4-Chloroaniline	100.0	95.9	-4.12
91 Hexachlorobutadiene	100.0	99.4	-0.63
97 4-Chloro-3-methylphenol	100.0	100.1	0.10
101 2-Methylnaphthalene	100.0	98.7	-1.26
103 1-Methylnaphthalene	100.0	97.7	-2.29
105 Hexachlorocyclopentadiene	100.0	112.7	12.70
106 1,2,4,5-Tetrachlorobenzene	100.0	98.1	-1.89
108 2,4,6-Trichlorophenol	100.0	103.6	3.60
109 2,3-Dichlorobenzenamine	100.0	96.5	-3.50
110 2,4,5-Trichlorophenol	100.0	101.0	1.00
112 1,1'-Biphenyl	100.0	96.7	-3.32
114 2-Chloronaphthalene	100.0	96.0	-4.05
116 2-Nitroaniline	100.0	101.1	1.10
119 Dimethyl phthalate	100.0	97.3	-2.66
120 1,3-Dinitrobenzene	100.0	99.3	-0.67
121 2,6-Dinitrotoluene	100.0	105.5	5.50
122 Acenaphthylene	100.0	104.0	4.00
123 3-Nitroaniline	100.0	97.2	-2.82
124 Acenaphthene	100.0	97.8	-2.21
126 2,4-Dinitrophenol	200.0	188.8	-5.60
127 4-Nitrophenol	200.0	207.0	3.50
130 2,4-Dinitrotoluene	100.0	104.9	4.90
132 Dibenzofuran	100.0	94.6	-5.43
134 2,3,4,6-Tetrachlorophenol	100.0	103.9	3.90
136 Hexadecane	100.0	97.3	-2.70
139 Diethyl phthalate	100.0	96.2	-3.78
142 4-Chlorophenyl phenyl ether	100.0	97.2	-2.80
143 Fluorene	100.0	100.0	0.00
146 4-Nitroaniline	100.0	101.2	1.20
147 4,6-Dinitro-2-methylphenol	200.0	202.7	1.35
150 N-Nitrosodiphenylamine	100.0	94.5	-5.52
151 1,2-Diphenylhydrazine	101.1	100.2	-0.89
152 Azobenzene	100.0	99.1	-0.90

Data File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0576.D

Compound	Amount Added	Amount Recovered	%Drift
164 4-Bromophenyl phenyl ether	100.0	98.4	-1.61
165 Hexachlorobenzene	100.0	94.7	-5.27
169 n-Octadecane	100.0	103.0	3.00
171 Pentachlorophenol	200.0	202.5	1.25
176 Phenanthrene	100.0	95.9	-4.11
177 Anthracene	100.0	100.2	0.20
178 Carbazole	100.0	96.6	-3.39
179 Alachlor	100.0	102.5	2.50
181 Di-n-butyl phthalate	100.0	105.1	5.10
188 Fluoranthene	100.0	102.3	2.30
191 Pyrene	100.0	99.8	-0.19
198 Butyl benzyl phthalate	100.0	94.9	-5.10
203 Bis(2-ethylhexyl) phthalate	100.0	91.4	-8.62
206 Benzo[a]anthracene	100.0	100.9	0.90
207 Chrysene	100.0	103.5	3.50
209 Di-n-octyl phthalate	100.0	95.0	-5.04
211 Benzo[b]fluoranthene	100.0	96.7	-3.31
212 Benzo[k]fluoranthene	100.0	105.4	5.40
214 Benzo[e]pyrene	100.0	118.7	18.70
215 Benzo[a]pyrene	100.0	98.1	-1.94
221 Dibenz(a,h)anthracene	100.0	102.0	2.00
222 Indeno[1,2,3-cd]pyrene	100.0	94.8	-5.20
223 Benzo[g,h,i]perylene	100.0	107.0	7.00

Mega Mix ICV

Standard Verification Form

Verification (New vendor or problematic Standard)	☐	Re-Verification	☒
TALS Reagent Record			
New	☐	Copied	☐
COA Reviewed against formulary report		☒	

Document instrument verification if need (Initial or re-verification):		
Department	Acceptance Criteria	
	Standard Analytes	Poor Performers* and Esterified Analytes
GC/HPLC	$\leq 15\% D$	$\leq 35\% D$ or $\leq 50\% D$ for dinoseb
GCMS/LCMS ✓	$\leq 35\% D$	$\leq 55\% D$
MSVOA	$\leq 25\% D$	$\leq 55\% D$
Metals	$\leq 8\% D$	NA
Wet Chemistry	$\leq 5\% D$	NA

Standard Name	MS-567672 SEC		Standard ID	
Verified by	M. Hoffman		Instrument ID	Y
Verification Date	8/14/14		Method Reference	B270C
Reference Standard ID	MS-567672		Batch #	A093709
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
See Attached report				All compounds pass.
	2/2015	08/28/14		
New Expiration Date:	May 2015	New TALS ID	Same with new exp. date.	
New expiration date can be no greater than 1/2 the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.				
Comment:				

1st Level Review

M.H.

Date:

8/28/14

2nd Level Review

⑧

Date:

08/28/14

QA Review (Re-verification only)	<i>[Signature]</i>	Date: 8/28/14

Attach form, supporting documentation and original CoA to new verified or re-verified standard record in TALS.

*See analytical SOP for details on poor performing analytes.



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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ 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.: 567672.sec Lot No.: A094002
Description: 8270 List 1 / Std #1 MegaMix
8270 List 1 / Std #1 MegaMix 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size: 5 mL Pkg Amt: > 5 mL
Expiration Date: September 2014 Storage: 10°C or colder
Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,4-Dioxane	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 123-91-1.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
2	Pyridine	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 110-86-1.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
3	N-Nitrosodimethylamine	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 62-75-9.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
4	Aniline	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 62-53-3.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
5	Phenol	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-95-2.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
6	Bis(2-chloroethyl)ether	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 111-44-4.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
7	2-Chlorophenol	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-57-8.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
8	1,3-Dichlorobenzene	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 541-73-1.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed
9	1,4-Dichlorobenzene	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-46-7.SEC		+/-	8.7957	µg/mL	Unstressed
	Purity 99%		+/-	17.3886	µg/mL	Stressed

10	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Benzyl alcohol CAS # 100-51-6.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Bis(2-chloroisopropyl)ether CAS # 108-60-1.SEC Purity 72%	720.0 µg/mL	+/- 4.1861 +/- 6.3329 +/- 12.5198	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2-Methylphenol (o-cresol) CAS # 95-48-7.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Acetophenone CAS # 98-86-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Hexachloroethane CAS # 67-72-1.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	N-Nitroso-di-n-propylamine CAS # 621-64-7.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	4-Methylphenol (p-cresol) CAS # 106-44-5.SEC Purity 99%	500.0 µg/mL	+/- 2.9138 +/- 4.4023 +/- 8.6966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	3-Methylphenol (m-cresol) CAS # 108-39-4.SEC Purity 99%	500.0 µg/mL	+/- 2.9138 +/- 4.4023 +/- 8.6966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	n-Decane (C10) CAS # 124-18-5.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	n-Octadecane (C18) CAS # 593-45-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Nitrobenzene CAS # 98-95-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Isophorone CAS # 78-59-1.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2-Nitrophenol CAS # 88-75-5.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
24	2,4-Dimethylphenol CAS # 105-67-9.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	2,4-Dichlorophenol CAS # 120-83-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Naphthalene CAS # 91-20-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

29	4-Chloroaniline CAS # 106-47-8.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	1,000.0 µg/mL	+/- 5.8139 +/- 8.7954 +/- 17.3881	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	2-Methylnaphthalene CAS # 91-57-6.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	1-Methylnaphthalene CAS # 90-12-0.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	2-Chloronaphthalene CAS # 91-58-7.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Biphenyl CAS # 92-52-4.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
40	2-Nitroaniline CAS # 88-74-4.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene CAS # 208-96-8.SEC Purity 97%	1,000.0 µg/mL	+/- 5.8139 +/- 8.7954 +/- 17.3881	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate CAS # 131-11-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene CAS # 83-32-9.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	3-Nitroaniline CAS # 99-09-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	2,4-Dinitrophenol CAS # 51-28-5.SEC Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 17.5913 +/- 34.7772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

48	Dibenzofuran CAS # 132-64-9.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7.SEC Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 17.5913 +/- 34.7772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Diethylphthalate CAS # 84-66-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	4-Nitroaniline CAS # 100-01-6.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
56	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1.SEC Purity 98%	2,000.0 µg/mL	+/- 11.6281 +/- 17.5912 +/- 34.7769	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Azobenzene CAS # 103-33-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Bromophenyl phenyl ether CAS # 101-55-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	Hexachlorobenzene CAS # 118-74-1.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	Pentachlorophenol CAS # 87-86-5.SEC Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 17.5913 +/- 34.7772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Phenanthrene CAS # 85-01-8.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Anthracene CAS # 120-12-7.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	n-Hexadecane (C16) CAS # 544-76-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	Carbazole CAS # 86-74-8.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Di-n-butylphthalate CAS # 84-74-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Fluoranthene CAS # 206-44-0.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

67	Pyrene CAS # 129-00-0.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Benzyl butyl phthalate CAS # 85-68-7.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Benz(a)anthracene CAS # 56-55-3.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	chrysene CAS # 218-01-9.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Bis(2-ethylhexyl)phthalate CAS # 117-81-7.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
72	Di-n-octyl phthalate CAS # 117-84-0.SEC Purity 98%	1,000.0 µg/mL	+/- 5.8140 +/- 8.7956 +/- 17.3885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
73	Benzo(b)fluoranthene CAS # 205-99-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Benzo(k)fluoranthene CAS # 207-08-9.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Benzo(a)pyrene CAS # 50-32-8.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Indeno(1,2,3-cd)pyrene CAS # 193-39-5.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
77	Dibenz(a,h)anthracene CAS # 53-70-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
78	Benzo(g,h,i)perylene CAS # 191-24-2 Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent:	Methylene Chloride CAS # 75-09-2 Purity 99%				

Specific Reference Material Notes:

The Bis(2-chloroisopropyl)ether contains a 28% impurity of Propane, 1,1'oxybis,, 3-chloro.

Preliminary Report

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0571.D
 Lims ID: ICIS HSLA080
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 08-Aug-2014 09:55:30 ALS Bottle#: 5 Worklist Smp#: 22
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: ICIS HSLA080
 Operator ID: hoffmann Instrument ID: SMS_Y
 Sublist: chrom-SMSY_8270C*sub20
 Method: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\SMSY_8270C.m
 Limit Group: MSSV - 8270C_625
 Method Label: 8270C / 625
 Last Update: 12-Aug-2014 08:24:06 Calib Date: 08-Aug-2014 11:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0575.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: hoffmann

Date: 11-Aug-2014 11:55:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.357	4.357	0.000	96	208751	40.0	40.0	
* 2 Naphthalene-d8	136	5.391	5.391	0.000	100	830145	40.0	40.0	
* 3 Acenaphthene-d10	164	6.865	6.865	0.000	92	463953	40.0	40.0	
* 4 Phenanthrene-d10	188	8.128	8.128	0.000	97	764844	40.0	40.0	
* 5 Chrysene-d12	240	11.870	11.870	0.000	96	722208	40.0	40.0	
* 6 Perylene-d12	264	15.964	15.964	0.000	95	563515	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.335	3.335	0.000	93	574536	80.0	82.3	
\$ 8 Phenol-d5	99	4.016	4.016	0.000	93	752107	80.0	83.1	
\$ 9 Nitrobenzene-d5	82	4.797	4.797	0.000	91	675640	80.0	83.2	
\$ 11 2-Fluorobiphenyl	172	6.266	6.266	0.000	99	1196587	80.0	79.0	
\$ 12 2,4,6-Tribromophenol	330	7.535	7.535	0.000	91	135458	80.0	83.7	p
\$ 13 Terphenyl-d14	244	9.826	9.826	0.000	98	1140380	80.0	82.6	
27 1,4-Dioxane	88	2.177	2.170	0.000	96	261983	80.0	77.7	
28 N-Nitrosodimethylamine	74	2.389	2.389	0.000	91	395689	80.0	82.1	
29 Pyridine	79	2.436	2.436	0.000	95	689782	80.0	82.8	
40 Phenol	94	4.028	4.028	0.000	99	776997	80.0	81.7	
43 Aniline	93	4.092	4.092	0.000	97	998990	80.0	84.4	
44 Alpha Methyl Styrene	118	4.122	4.122	0.000	94	625968	80.0	82.6	
45 Bis(2-chloroethyl)ether	93	4.116	4.116	0.000	91	581149	80.0	78.9	
47 n-Decane	43	4.163	4.163	0.000	90	618794	80.0	80.6	
48 2-Chlorophenol	128	4.186	4.186	0.000	97	602527	80.0	81.8	
49 1,3-Dichlorobenzene	146	4.316	4.316	0.000	97	660171	80.0	81.3	
50 1,4-Dichlorobenzene	146	4.368	4.368	0.000	93	667498	80.0	81.7	
51 Benzyl alcohol	108	4.439	4.439	0.000	92	393559	80.0	84.3	
52 1,2-Dichlorobenzene	146	4.492	4.492	0.000	97	637403	80.0	79.8	
54 2-Methylphenol	108	4.509	4.509	0.000	96	593564	80.0	83.4	
55 2,2'-oxybis[1-chloropropan	45	4.533	4.534	0.000	93	850367	80.0	81.9	
56 Indene	116	4.562	4.562	0.000	90	994182	80.0	80.8	
58 3-Methylphenol	108	4.627	4.627	0.000	96	606414	80.0	82.2	p

Preliminary Report

Data File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0571.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
59 4-Methylphenol	108	4.627	4.627	0.000	96	606414	80.0	82.2	p
60 3 & 4 Methylphenol	108	4.627	4.627	0.000	96	606414	80.0	82.2	p
61 N-Nitrosodi-n-propylamine	70	4.639	4.639	0.000	91	436567	80.0	83.8	
63 Acetophenone	105	4.662	4.662	0.000	95	834675	80.0	80.1	
66 Hexachloroethane	117	4.768	4.768	0.000	97	250173	80.0	78.4	
67 Nitrobenzene	77	4.815	4.815	0.000	89	659580	80.0	80.6	
71 Isophorone	82	4.991	4.991	0.000	99	1133316	80.0	84.1	
73 2,4-Dimethylphenol	107	5.062	5.062	0.000	96	606986	80.0	82.4	
74 2-Nitrophenol	139	5.073	5.073	0.000	94	324183	80.0	85.2	
77 Benzoic acid	105	5.109	5.109	0.000	88	885035	160.0	164.5	
78 Bis(2-chloroethoxy)methane	93	5.144	5.144	0.000	99	689223	80.0	79.8	
79 3,5-Dimethylphenol	107	5.167	5.167	0.000	94	631749	80.0	81.4	
82 2,4-Dichlorophenol	162	5.255	5.255	0.000	96	468005	80.0	80.3	
84 1,2,4-Trichlorobenzene	180	5.332	5.332	0.000	94	512810	80.0	79.6	
87 Naphthalene	128	5.408	5.408	0.000	98	1733746	80.0	79.8	
88 4-Chloroaniline	127	5.438	5.438	0.000	95	762624	80.0	81.7	
91 Hexachlorobutadiene	225	5.485	5.485	0.000	97	266105	80.0	80.2	
94 Caprolactam	55	5.720	5.723	0.000	79	290670	80.0	84.0	
97 4-Chloro-3-methylphenol	107	5.808	5.808	0.000	97	519526	80.0	82.8	
101 2-Methylnaphthalene	142	5.978	5.978	0.000	93	1158573	80.0	80.9	
103 1-Methylnaphthalene	142	6.066	6.066	0.000	94	1088630	80.0	80.2	
105 Hexachlorocyclopentadiene	237	6.096	6.096	0.000	95	260664	80.0	83.7	
106 1,2,4,5-Tetrachlorobenzene	216	6.119	6.119	0.000	98	439813	80.0	79.2	
108 2,4,6-Trichlorophenol	196	6.207	6.207	0.000	94	311636	80.0	84.4	
109 2,3-Dichlorobenzenamine	161	6.219	6.219	0.000	96	581729	80.0	79.1	
110 2,4,5-Trichlorophenol	196	6.236	6.236	0.000	92	335663	80.0	83.5	
112 1,1'-Biphenyl	154	6.360	6.360	0.000	95	1358617	80.0	79.4	
114 2-Chloronaphthalene	162	6.395	6.395	0.000	98	1028753	80.0	79.2	
116 2-Nitroaniline	65	6.477	6.477	0.000	83	369274	80.0	86.8	
119 Dimethyl phthalate	163	6.589	6.589	0.000	98	1151460	80.0	81.4	
120 1,3-Dinitrobenzene	168	6.648	6.648	0.000	83	192745	80.0	86.1	
121 2,6-Dinitrotoluene	165	6.665	6.665	0.000	94	273407	80.0	86.7	
122 Acenaphthylene	152	6.753	6.753	0.000	99	1638049	80.0	82.9	
123 3-Nitroaniline	138	6.818	6.818	0.000	93	354630	80.0	85.5	
124 Acenaphthene	153	6.894	6.894	0.000	94	1073421	80.0	80.3	
126 2,4-Dinitrophenol	184	6.900	6.900	0.000	80	322324	160.0	158.6	
127 4-Nitrophenol	109	6.930	6.930	0.000	88	400576	160.0	176.3	
130 2,4-Dinitrotoluene	165	7.006	7.006	0.000	91	356996	80.0	85.6	
132 Dibenzofuran	168	7.035	7.035	0.000	96	1460457	80.0	78.5	
134 2,3,4,6-Tetrachlorophenol	232	7.129	7.129	0.000	81	258810	80.0	85.8	
136 Hexadecane	57	7.135	7.135	0.000	94	784967	80.0	82.3	
139 Diethyl phthalate	149	7.171	7.171	0.000	98	1175652	80.0	80.8	
142 4-Chlorophenyl phenyl ethe	204	7.300	7.300	0.000	97	513056	80.0	79.0	
143 Fluorene	166	7.323	7.323	0.000	95	1200615	80.0	80.2	
146 4-Nitroaniline	138	7.341	7.341	0.000	85	356465	80.0	86.8	
147 4,6-Dinitro-2-methylphenol	198	7.353	7.353	0.000	84	405535	160.0	162.6	
150 N-Nitrosodiphenylamine	169	7.400	7.400	0.000	62	878554	80.0	82.0	
151 1,2-Diphenylhydrazine	77	7.435	7.435	0.000	99	1346090	80.9	82.1	p
152 Azobenzene	77	7.435	7.435	0.000	100	1346090	80.0	81.2	p
155 2,4,6 - Tribromophenol	330	7.535	7.535	0.000	91	136633	80.0	84.4	p
164 4-Bromophenyl phenyl ether	248	7.717	7.717	0.000	72	278581	80.0	80.8	

Preliminary Report

Data File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0571.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Hexachlorobenzene	284	7.793	7.793	0.000	90	279985	80.0	78.6	
167 Atrazine	200	7.823	7.823	0.000	90	257443	80.0	85.9	
169 n-Octadecane	85	7.905	7.905	0.000	94	328683	80.0	85.9	
171 Pentachlorophenol	266	7.952	7.952	0.000	89	372171	160.0	162.4	
176 Phenanthrene	178	8.146	8.146	0.000	98	1721546	80.0	78.5	
177 Anthracene	178	8.193	8.193	0.000	98	1777401	80.0	82.8	
178 Carbazole	167	8.322	8.322	0.000	96	1689104	80.0	83.5	
179 Alachlor	188	8.387	8.387	0.000	97	211290	80.0	86.4	
181 Di-n-butyl phthalate	149	8.551	8.551	0.000	100	1921614	80.0	87.2	
188 Fluoranthene	202	9.356	9.356	0.000	99	1712847	80.0	85.3	
191 Pyrene	202	9.667	9.667	0.000	97	1801637	80.0	83.0	
197 Famphur	218	10.513	10.514	0.000	87	553352	80.0	83.8	
198 Butyl benzyl phthalate	149	10.595	10.595	0.000	98	823791	80.0	82.3	
203 Bis(2-ethylhexyl) phthalat	149	11.782	11.782	0.000	98	1007930	80.0	79.4	
205 3,3'-Dichlorobenzidine	252	11.794	11.794	0.000	76	546183	80.0	82.0	
206 Benzo[a]anthracene	228	11.847	11.847	0.000	99	1575300	80.0	83.4	
207 Chrysene	228	11.935	11.935	0.000	98	1485182	80.0	79.7	
209 Di-n-octyl phthalate	149	13.574	13.574	0.000	99	1436762	80.0	78.6	
211 Benzo[b]fluoranthene	252	14.760	14.760	0.000	99	1286907	80.0	80.6	
212 Benzo[k]fluoranthene	252	14.842	14.842	0.000	98	1490888	80.0	89.1	
214 Benzo[e]pyrene	252	15.612	15.612	0.000	97	1160559	80.0	86.7	
215 Benzo[a]pyrene	252	15.782	15.782	0.000	80	1332291	80.0	81.8	
221 Dibenz(a,h)anthracene	278	19.372	19.372	0.000	94	1030012	80.0	79.6	
222 Indeno[1,2,3-cd]pyrene	276	19.307	19.306	0.000	96	958528	80.0	76.2	M
223 Benzo[g,h,i]perylene	276	19.842	19.842	0.000	95	1208264	80.0	87.7	
S 225 Methyl Phenols, Total	108				0			165.6	
S 226 Total Cresols	108				0			165.6	

QC Flag Legend

Processing Flags

p - Peak ID'ed as Multiple Compounds

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA080_00009

Amount Added: 200.00

Units: uL

Preliminary Report

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0576.D

Lims ID: ICV HSLB1B3

Client ID:

Sample Type: ICV

Inject. Date: 08-Aug-2014 12:15:30

ALS Bottle#:

10

Worklist Smp#:

27

Injection Vol: 0.5 ul

Dil. Factor:

1.0000

Sample Info: ICV HSLB1B3

Operator ID: hoffmann

Instrument ID:

SMS_Y

Sublist:

Method: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\SMSY_8270C.m

Limit Group: MSSV - 8270C_625

Method Label: 8270C / 625

Last Update: 12-Aug-2014 08:24:06

Calib Date:

08-Aug-2014 11:47:30

Integrator: RTE

ID Type:

Deconvolution ID

Quant Method: Internal Standard

Quant By:

Initial Calibration

Last ICal File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0575.D

Column 1 : VF-5ms (0.50 mm)

Det: MS SCAN

Process Host: XAWRK049

First Level Reviewer: hoffmann

Date:

11-Aug-2014 12:37:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.358	4.357	0.001	96	205437	40.0	40.0	
* 2 Naphthalene-d8	136	5.392	5.391	0.001	100	816575	40.0	40.0	
* 3 Acenaphthene-d10	164	6.867	6.865	0.002	91	466874	40.0	40.0	
* 4 Phenanthrene-d10	188	8.130	8.128	0.002	97	771135	40.0	40.0	
* 5 Chrysene-d12	240	11.872	11.870	0.002	96	718207	40.0	40.0	
* 6 Perylene-d12	264	15.960	15.964	-0.004	95	568555	40.0	40.0	
27 1,4-Dioxane	88	2.179	2.170	0.002	97	322864	100.0	97.3	
28 N-Nitrosodimethylamine	74	2.384	2.389	-0.005	89	456191	100.0	96.2	
29 Pyridine	79	2.431	2.436	-0.005	93	856044	100.0	104.4	
40 Phenol	94	4.029	4.028	0.001	99	912317	100.0	97.4	
43 Aniline	93	4.094	4.092	0.002	97	1095396	100.0	94.0	
44 Alpha Methyl Styrene	118	4.117	4.122	-0.005	97	754840	100.0	101.2	
45 Bis(2-chloroethyl)ether	93	4.117	4.116	0.001	92	762976	100.0	105.2	
47 n-Decane	43	4.164	4.163	0.001	89	735348	100.0	97.4	
48 2-Chlorophenol	128	4.188	4.186	0.002	97	725564	100.0	100.0	
49 1,3-Dichlorobenzene	146	4.317	4.316	0.001	98	793068	100.0	99.2	
50 1,4-Dichlorobenzene	146	4.370	4.368	0.002	93	822895	100.0	102.4	
51 Benzyl alcohol	108	4.440	4.439	0.001	92	476820	100.0	103.8	
52 1,2-Dichlorobenzene	146	4.493	4.492	0.001	96	764893	100.0	97.4	
54 2-Methylphenol	108	4.511	4.509	0.002	95	707591	100.0	101.0	
55 2,2'-oxybis[1-chloropropan	45	4.534	4.534	0.001	94	741917	72.0	72.6	M
56 Indene	116	4.564	4.562	0.002	90	1217387	100.0	100.5	
58 3-Methylphenol	108	4.628	4.627	0.001	96	733385	100.0	101.1	p
59 4-Methylphenol	108	4.628	4.627	0.001	96	733385	100.0	101.1	p
60 3 & 4 Methylphenol	108	4.628	4.627	0.001	96	733385	100.0	101.1	p
61 N-Nitrosodi-n-propylamine	70	4.640	4.639	0.001	90	535145	100.0	104.3	
63 Acetophenone	105	4.664	4.662	0.002	96	1027514	100.0	100.2	
66 Hexachloroethane	117	4.769	4.768	0.001	97	310425	100.0	98.8	
67 Nitrobenzene	77	4.816	4.815	0.001	90	784602	100.0	97.4	

Preliminary Report

Data File: \\Denchrom\ChromData\SMS_Y20140811-26258.b\Y0576.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
71 Isophorone	82	4.987	4.991	-0.004	99	1437028	100.0	108.5	
73 2,4-Dimethylphenol	107	5.063	5.062	0.001	95	673746	100.0	93.0	
74 2-Nitrophenol	139	5.075	5.073	0.002	87	387526	100.0	103.5	
77 Benzoic acid	105	5.116	5.109	0.007	89	1082193	200.0	203.2	
78 Bis(2-chloroethoxy)methane	93	5.145	5.144	0.001	98	807079	100.0	95.0	
79 3,5-Dimethylphenol	107	5.169	5.167	0.002	93	755199	100.0	98.9	
82 2,4-Dichlorophenol	162	5.257	5.255	0.002	96	563277	100.0	98.2	
84 1,2,4-Trichlorobenzene	180	5.333	5.332	0.001	94	630381	100.0	99.5	
87 Naphthalene	128	5.410	5.408	0.002	98	2100466	100.0	98.3	
88 4-Chloroaniline	127	5.439	5.438	0.001	96	880373	100.0	95.9	
91 Hexachlorobutadiene	225	5.486	5.485	0.001	97	324239	100.0	99.4	
97 4-Chloro-3-methylphenol	107	5.809	5.808	0.001	97	617768	100.0	100.1	
101 2-Methylnaphthalene	142	5.980	5.978	0.002	93	1391634	100.0	98.7	
103 1-Methylnaphthalene	142	6.068	6.066	0.002	94	1305488	100.0	97.7	
105 Hexachlorocyclopentadiene	237	6.097	6.096	0.001	95	353292	100.0	112.7	
106 1,2,4,5-Tetrachlorobenzene	216	6.115	6.119	-0.004	97	536150	100.0	98.1	
108 2,4,6-Trichlorophenol	196	6.203	6.207	-0.004	95	384640	100.0	103.6	
109 2,3-Dichlorobenzenamine	161	6.220	6.219	0.001	96	714148	100.0	96.5	
110 2,4,5-Trichlorophenol	196	6.238	6.236	0.002	95	408739	100.0	101.0	
112 1,1'-Biphenyl	154	6.361	6.360	0.001	95	1663971	100.0	96.7	
114 2-Chloronaphthalene	162	6.397	6.395	0.002	98	1254267	100.0	95.9	
116 2-Nitroaniline	65	6.479	6.477	0.002	85	432654	100.0	101.1	
119 Dimethyl phthalate	163	6.590	6.589	0.001	98	1385368	100.0	97.3	
120 1,3-Dinitrobenzene	168	6.649	6.648	0.001	83	223654	100.0	99.3	
121 2,6-Dinitrotoluene	165	6.667	6.665	0.002	94	334796	100.0	105.5	
122 Acenaphthylene	152	6.749	6.753	-0.004	99	2068095	100.0	104.0	
123 3-Nitroaniline	138	6.820	6.818	0.002	94	405573	100.0	97.2	
124 Acenaphthene	153	6.896	6.894	0.002	93	1315482	100.0	97.8	
126 2,4-Dinitrophenol	184	6.902	6.900	0.002	82	389678	200.0	188.8	
127 4-Nitrophenol	109	6.925	6.930	-0.005	89	473433	200.0	207.0	
130 2,4-Dinitrotoluene	165	7.008	7.006	0.002	91	440180	100.0	104.9	
132 Dibenzofuran	168	7.037	7.035	0.002	96	1770687	100.0	94.6	
134 2,3,4,6-Tetrachlorophenol	232	7.131	7.129	0.002	75	315432	100.0	103.9	
136 Hexadecane	57	7.137	7.135	0.002	95	934416	100.0	97.3	
139 Diethyl phthalate	149	7.172	7.171	0.001	97	1408488	100.0	96.2	
142 4-Chlorophenyl phenyl ethe	204	7.301	7.300	0.001	96	635053	100.0	97.2	
143 Fluorene	166	7.325	7.323	0.002	95	1506037	100.0	100.0	
146 4-Nitroaniline	138	7.342	7.341	0.001	83	418243	100.0	101.2	
147 4,6-Dinitro-2-methylphenol	198	7.354	7.353	0.001	84	512742	200.0	202.7	
150 N-Nitrosodiphenylamine	169	7.401	7.400	0.001	63	1020409	100.0	94.5	
151 1,2-Diphenylhydrazine	77	7.436	7.435	0.001	99	1653504	101.1	100.2	p
152 Azobenzene	77	7.436	7.435	0.001	100	1653504	100.0	99.1	p
164 4-Bromophenyl phenyl ether	248	7.718	7.717	0.001	72	341920	100.0	98.4	
165 Hexachlorobenzene	284	7.795	7.793	0.002	89	340065	100.0	94.7	
169 n-Octadecane	85	7.906	7.905	0.001	94	397489	100.0	103.0	
171 Pentachlorophenol	266	7.953	7.952	0.001	89	470038	200.0	202.5	
176 Phenanthrene	178	8.147	8.146	0.001	98	2121286	100.0	95.9	
177 Anthracene	178	8.194	8.193	0.001	98	2166945	100.0	100.2	
178 Carbazole	167	8.323	8.322	0.001	96	1970178	100.0	96.6	
179 Alachlor	188	8.388	8.387	0.001	97	252689	100.0	102.5	
181 Di-n-butyl phthalate	149	8.553	8.551	0.001	100	2335645	100.0	105.1	

Preliminary Report

Data File: \\Denchrom\ChromData\SMS_Y\20140811-26258.b\Y0576.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
188 Fluoranthene	202	9.357	9.356	0.001	99	2072557	100.0	102.3	
191 Pyrene	202	9.669	9.667	0.002	96	2155864	100.0	99.8	
198 Butyl benzyl phthalate	149	10.591	10.595	-0.004	97	948010	100.0	94.9	
203 Bis(2-ethylhexyl) phthalat	149	11.783	11.782	0.001	98	1161370	100.0	91.4	
206 Benzo[a]anthracene	228	11.842	11.847	-0.005	99	1896853	100.0	100.9	
207 Chrysene	228	11.936	11.935	0.001	98	1917451	100.0	103.5	
209 Di-n-octyl phthalate	149	13.581	13.574	0.007	99	1779825	100.0	95.0	
211 Benzo[b]fluoranthene	252	14.762	14.760	0.002	98	1563440	100.0	96.7	
212 Benzo[k]fluoranthene	252	14.844	14.842	0.002	99	1780662	100.0	105.4	
214 Benzo[e]pyrene	252	15.619	15.612	0.007	96	1603512	100.0	118.7	
215 Benzo[a]pyrene	252	15.778	15.782	-0.004	80	1618192	100.0	98.1	
221 Dibenz(a,h)anthracene	278	19.373	19.372	0.001	94	1339673	100.0	102.0	
222 Indeno[1,2,3-cd]pyrene	276	19.309	19.306	0.002	96	1196951	100.0	94.8	
223 Benzo[g,h,i]perylene	276	19.843	19.842	0.001	94	1486786	100.0	107.0	

QC Flag Legend

Processing Flags

p - Peak ID'd as Multiple Compounds

Review Flags

M - Manually Integrated

Reagents:

MS-HSLB1B3SSV_00011

Amount Added: 200.00

Units: uL



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567673.SEC Lot No.: A0101015
Description : 8270 List 1 / Std #2 Amines
8270 List 1 / Std #2 Amines 2,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 10 mL Pkg Amt: > 5 mL
Expiration Date : July 31, 2015 Storage: 10°C or colder
Handling: Contains carcinogen

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	epsilon-Caprolactam CAS # 105-60-2.SEC (Lot BLJTB) Purity 99%	2,010.0 µg/mL	+/- 11.7958 µg/mL Gravimetric +/- 22.0652 µg/mL Unstressed +/- 37.3617 µg/mL Stressed
2	Atrazine CAS # 1912-24-9.SEC (Lot 1132400) Purity 99%	2,009.3 µg/mL	+/- 11.7919 µg/mL Gravimetric +/- 22.0579 µg/mL Unstressed +/- 37.3493 µg/mL Stressed
3	Benzidine CAS # 92-87-5.SEC (Lot 1301900) Purity 99%	2,018.0 µg/mL	+/- 11.8428 µg/mL Gravimetric +/- 22.1530 µg/mL Unstressed +/- 37.5104 µg/mL Stressed
4	3,3'-Dichlorobenzidine CAS # 91-94-1.SEC (Lot 2010900) Purity 99%	2,016.7 µg/mL	+/- 11.8349 µg/mL Gravimetric +/- 22.1384 µg/mL Unstressed +/- 37.4856 µg/mL Stressed
Solvent:	Methylene Chloride CAS # 75-09-2 Purity 99%		

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

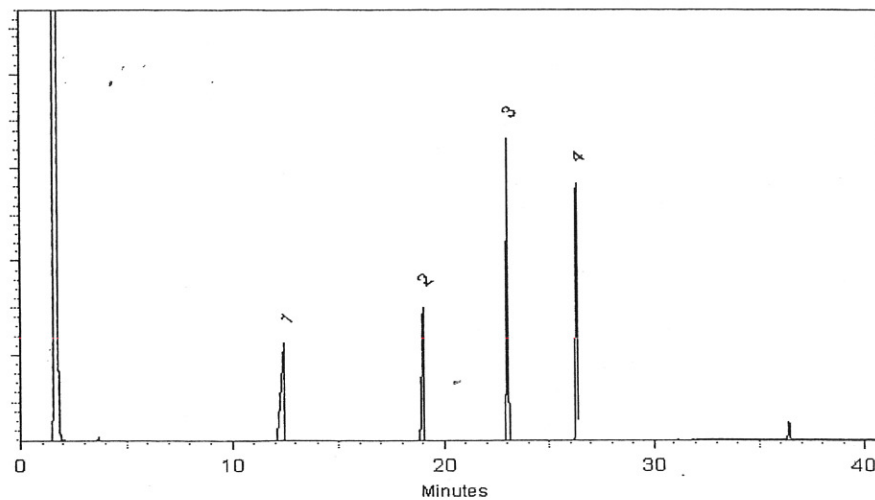
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 30-Jan-2014

Balance: B345965662

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 03-Feb-2014

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



Analytical Reference Materials
8270 List 1 / Std #3 Benzoic Acid

Catalog # 567674.sec

Lot # A093654 & A093441

110 Benner Circle Bellefonte, PA 16823-8812

(814) 353-1300

FOR LABORATORY USE ONLY. READ MSDS PRIOR TO USE.

RAW MATERIAL TEST INFORMATION AVAILABLE UPON REQUEST

MANUFACTURED UNDER RESTEK'S ISO 9001 REGISTERED QUALITY SYSTEM



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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ 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. : 567674.sec **Lot No.:** A093654

Description : 8270 List 1 / Std #3 Benzoic Acid

8270 List 1 / Std #3 Benzoic Acid 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : February 2016 **Storage:** 10°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Benzoic acid		2,000.0 μg/mL	+/-	11.6284	μg/mL	Gravimetric
	CAS #	65-85-0.SEC		+/-	96.5270	μg/mL	Unstressed
	Purity	97%		+/-	96.6098	μg/mL	Stressed
Solvent:	Methylene Chloride						
	CAS #	75-09-2					
	Purity	99%					

Column:

30m x .25mm x .25um
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

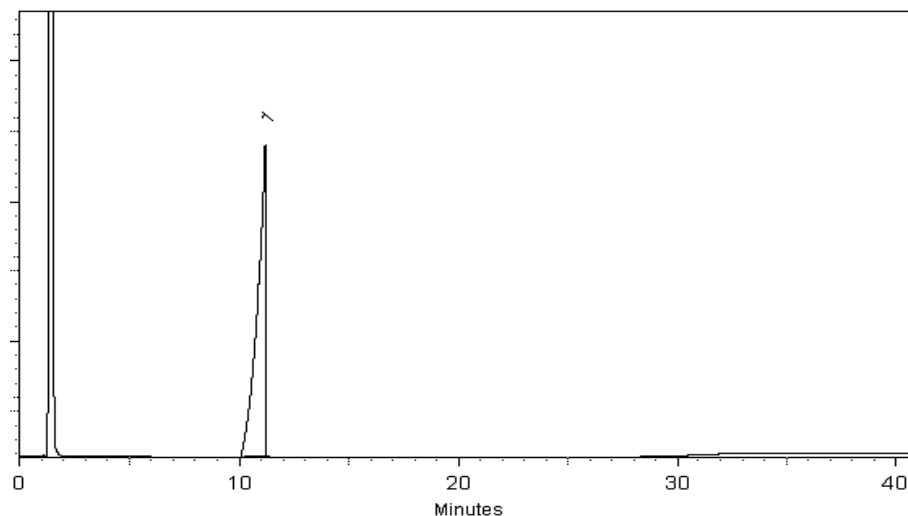
250°C

Det. Temp:

330°C

Det. Type:

FID



Jodi E. Breon
Jodi E. Breon - QA Analyst

Date Passed: 22-Feb-2013

Balance: 1128353505

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



Chemical Standard Batch Sheet

Lot #: A093654

Catalog #: 567674.sec	Target: 2000 ug/mL		
Description: 8270 List 1 / Std #3 Benzoic Acid			
Solvent: Methylene Chloride	Solvent Lot: 126244	Final Volume:	1,000 ml

Made by: Mary Ellen Wood	Date: 2/19/2013 3:12:24PM		
Tested by: Jennifer Pollino	Date: 2/21/2013 11:48:51AM		
Pass	By: Jodi Breon	Date: 2/22/2013 12:34:09PM	
Packaged by: Alexandria Pavkovich / Alexandria Pavkov	Date: 2/21/2013 8:30:06AM	No. Units: 161	Pkg Size: 5 mL
Balance Used: BEDEARMBALPC2 XP205	Serial #: 1128353505		

<u>Compound</u>	<u>CAS</u>	<u>Storage Location</u>	<u>Lot #</u>	<u>Purity</u>	<u>Target Conc(ug/mL)</u>	<u>Target</u>	<u>Actual</u>	<u>Calc Conc(ug/mL)</u>
Benzoic acid	65-85-0.SEC	RS063	QD3UO	0.97	2,000.00	2,061.86 mg	2,061.90 mg	2,000.0



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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567674 **Lot No.:** A093441

Description : 8270 List 1 / Std #3 Benzoic Acid

8270 List 1 / Std #3 Benzoic Acid 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : February 2016 **Storage:** 10°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Benzoic acid		2,000.0 μg/mL	+/-	11.6282	μg/mL	Gravimetric
	CAS #	65-85-0		+/-	96.5249	μg/mL	Unstressed
	Purity	99%		+/-	96.6077	μg/mL	Stressed
Solvent:	Methylene Chloride						
	CAS #	75-09-2					
	Purity	99%					

Column:

30m x .25mm x .25um
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

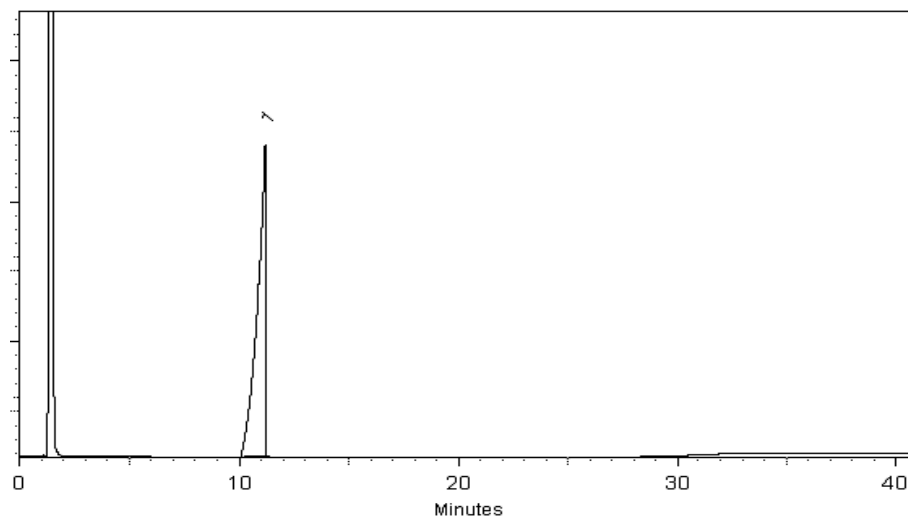
250°C

Det. Temp:

330°C

Det. Type:

FID



Jodi E. Breon
Jodi E. Breon - QA Analyst

Date Passed: 22-Feb-2013

Balance: 1128342313

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Certificate #FM 80397

General Certified Reference Material Notes

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Chemical Standard Batch Sheet

Lot #: A093441

Catalog #: 567674	Target: 2000 ug/mL		
Description: 8270 List 1 / Std #3 Benzoic Acid			
Solvent: Methylene Chloride	Solvent Lot: 127438	Final Volume:	4,000 ml

Made by: Matt Hepfer	Date: 2/7/2013 1:17:18PM		
Tested by: Jodi Breon	Date: 2/8/2013 3:42:28PM		
Pass	By: Jodi Breon	Date: 2/22/2013 12:33:55PM	
Packaged by: Kendra Swope / Alexandria Pavkovich	Date: 2/8/2013 10:02:22AM	No. Units: 615	Pkg Size: 5 mL
Balance Used: BEDEARMBALPC1 XP205	Serial #: 1128342313		

<u>Compound</u>	<u>CAS</u>	<u>Storage Location</u>	<u>Lot #</u>	<u>Purity</u>	<u>Target Conc(ug/mL)</u>	<u>Target</u>	<u>Actual</u>	<u>Calc Conc(ug/mL)</u>
Benzoic acid	65-85-0	R0472	MKBG9391V	0.99	2,000.00	8,000.00 mg	8,000.00 mg	2,000.0

QA Report: 8270 List 1/ Std. #3 Benzoic Acid (Cat.#567674)

<u>COMPONENT</u>	Runs of Lot # A093441						Runs of Lot # A093654						%D MEAN	P/F
	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD		
Benzoic acid	5123644	5100875	5144322	5122947	21732	0.42	5288104	5295526	5370045	5317892	45318	0.85	-3.81	PASS



CERTIFIED REFERENCE MATERIAL

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Gravimetric Certificate



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. : 568023 Lot No.: A0101191
Description : 8270 Famphur Standard
8270 Famphur Standard 2,000 µg/ml, Methylene Chloride, 1 ml/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : February 29, 2016 Storage: 10°C or colder
Handling: This product is photosensitive.

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Famphur CAS # 52-85-7 (Lot 1269600) Purity 94%	2,011.6 µg/mL	+/- 20.2643 µg/mL Gravimetric +/- 74.2962 µg/mL Unstressed +/- 74.2987 µg/mL Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Michael Maje

Date Mixed: 06-Feb-2014

Balance: 1128353505

Manufactured under Restek's ISO 9001:2008
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Gravimetric Certificate



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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.: 568038 Lot No.: A0101189
Description: Diphenylamine Standard
Diphenylamine Standard 1708 µg/ml, Methylene Chloride, 1 ml/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: February 28, 2017 Storage: 10°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Diphenylamine CAS # 122-39-4 Purity 99% (Lot 07525MP)	1,712.0 µg/mL	+/- 17.2462 µg/mL Gravimetric +/- 23.4457 µg/mL Unstressed +/- 34.7730 µg/mL Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Michael J. Mage

Date Mixed: 06-Feb-2014 Balance: 1128353505

Manufactured under Restek's ISO 9001:2008
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Tech Tips:

N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine. N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.



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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. : 569729 Lot No.: A0107399
Description : 8270 List 1 / Std #1 MegaMix (2015)
8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 10 mL Pkg Amt: > 5 mL
Expiration Date : May 31, 2016 Storage: 10°C or colder
Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,4-Dioxane CAS # 123-91-1 (Lot SHBD8744V) Purity 99%	1,004.4 µg/mL	+/- 5.8397 µg/mL Gravimetric +/- 10.9969 µg/mL Unstressed +/- 18.6525 µg/mL Stressed
2	Pyridine CAS # 110-86-1 (Lot SHBC7174V) Purity 99%	1,001.0 µg/mL	+/- 5.8199 µg/mL Gravimetric +/- 10.9596 µg/mL Unstressed +/- 18.5894 µg/mL Stressed
3	N-Nitrosodimethylamine CAS # 62-75-9 (Lot 3213100) Purity 99%	1,000.2 µg/mL	+/- 5.8152 µg/mL Gravimetric +/- 10.9509 µg/mL Unstressed +/- 18.5745 µg/mL Stressed
4	Aniline CAS # 62-53-3 (Lot K22Z462) Purity 99%	1,002.3 µg/mL	+/- 5.8275 µg/mL Gravimetric +/- 10.9739 µg/mL Unstressed +/- 18.6135 µg/mL Stressed
5	Bis(2-chloroethyl)ether CAS # 111-44-4 (Lot 45296HKV) Purity 99%	1,001.4 µg/mL	+/- 5.8222 µg/mL Gravimetric +/- 10.9640 µg/mL Unstressed +/- 18.5968 µg/mL Stressed
6	2-Chlorophenol CAS # 95-57-8 (Lot MKBD3900V) Purity 99%	1,000.8 µg/mL	+/- 5.8187 µg/mL Gravimetric +/- 10.9575 µg/mL Unstressed +/- 18.5856 µg/mL Stressed
7	Phenol CAS # 108-95-2 (Lot SHBC6998V) Purity 99%	1,006.9 µg/mL	+/- 5.8542 µg/mL Gravimetric +/- 11.0242 µg/mL Unstressed +/- 18.6989 µg/mL Stressed

8	n-Decane (C10) CAS # 124-18-5 Purity 99%	(Lot SHBF1587V)	1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
					+/-	10.9542	µg/mL	Unstressed
					+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBL3891V)	1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
					+/-	11.0067	µg/mL	Unstressed
					+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBC1891V)	1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
					+/-	10.9706	µg/mL	Unstressed
					+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot 68996CMV)	1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
					+/-	11.0199	µg/mL	Unstressed
					+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol CAS # 100-51-6 Purity 99%	(Lot SHBC1850V)	1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
					+/-	10.9531	µg/mL	Unstressed
					+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane) CAS # 108-60-1 Purity 99%	(Lot 2-EAW-18-3)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol) CAS # 95-48-7 Purity 99%	(Lot SHBC1479V)	1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
					+/-	10.9881	µg/mL	Unstressed
					+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane CAS # 67-72-1 Purity 99%	(Lot 4H3SF)	1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
					+/-	11.0133	µg/mL	Unstressed
					+/-	18.6804	µg/mL	Stressed
16	Acetophenone CAS # 98-86-2 Purity 99%	(Lot MKBR7156V)	1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
					+/-	10.9783	µg/mL	Unstressed
					+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine CAS # 621-64-7 Purity 99%	(Lot OPAGF)	1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
					+/-	10.9914	µg/mL	Unstressed
					+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol) CAS # 106-44-5 Purity 99%	(Lot 49396APV)	500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
					+/-	5.4823	µg/mL	Unstressed
					+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol) CAS # 108-39-4 Purity 99%	(Lot SHBD0627V)	500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
					+/-	5.4801	µg/mL	Unstressed
					+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene CAS # 98-95-3 Purity 99%	(Lot 65096APV)	1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
					+/-	10.9607	µg/mL	Unstressed
					+/-	18.5912	µg/mL	Stressed
21	Isophorone CAS # 78-59-1 Purity 97%	(Lot 06705DE)	999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
					+/-	10.9410	µg/mL	Unstressed
					+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol CAS # 88-75-5 Purity 99%	(Lot BCBH7602V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol CAS # 105-67-9 Purity 99%	(Lot 10165155)	1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
					+/-	10.9837	µg/mL	Unstressed
					+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	(Lot 317200)	1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
					+/-	10.9980	µg/mL	Unstressed
					+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol CAS # 120-83-2 Purity 99%	(Lot BCBH1617V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
					+/-	10.9553	µg/mL	Unstressed
					+/-	18.5819	µg/mL	Stressed
27	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
					+/-	10.9739	µg/mL	Unstressed
					+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol CAS # 87-65-0 Purity 99%	(Lot MKBN2776V)	1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
					+/-	10.9498	µg/mL	Unstressed
					+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline CAS # 106-47-8 Purity 98%	(Lot 12528PH)	1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
					+/-	10.9518	µg/mL	Unstressed
					+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
					+/-	10.9475	µg/mL	Unstressed
					+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot 19399MJV)	998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
					+/-	10.9333	µg/mL	Unstressed
					+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7 Purity 99%	(Lot STBC0769V)	1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
					+/-	10.9629	µg/mL	Unstressed
					+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene CAS # 90-12-0 Purity 99%	(Lot 525000-10)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3 Purity 99%	(Lot 06024AIV)	1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
					+/-	10.9509	µg/mL	Unstressed
					+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4 Purity 99%	(Lot 3140300)	1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
					+/-	10.9750	µg/mL	Unstressed
					+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2 Purity 99%	(Lot MKBH7393V)	1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
					+/-	10.9640	µg/mL	Unstressed
					+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4 Purity 99%	(Lot FHM01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene CAS # 91-58-7 Purity 99%	(Lot FIJ01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
39	Biphenyl CAS # 92-52-4 Purity 99%	(Lot 1277976)	1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
					+/-	11.0155	µg/mL	Unstressed
					+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline CAS # 88-74-4 Purity 99%	(Lot MKBK7597V)	1,004.6	µg/mL	+/-	5.8408 10.9991 18.6562	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene CAS # 208-96-8 Purity 99%	(Lot ER030707-01)	1,000.0	µg/mL	+/-	5.8141 10.9487 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	(Lot BCBB1436V)	1,006.4	µg/mL	+/-	5.8513 11.0188 18.6896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate CAS # 131-11-3 Purity 99%	(Lot 10117699)	1,001.0	µg/mL	+/-	5.8199 10.9596 18.5894	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	(Lot 1437483V)	1,001.6	µg/mL	+/-	5.8234 10.9662 18.6005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene CAS # 83-32-9 Purity 99%	(Lot MKBP0384V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	2,4-Dinitrophenol CAS # 51-28-5 Purity 99%	(Lot MKBP5833V)	2,008.7	µg/mL	+/-	11.6788 21.9927 37.3031	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Dibenzofuran CAS # 132-64-9 Purity 99%	(Lot MKBK2375V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	3-Nitroaniline CAS # 99-09-2 Purity 99%	(Lot MKBH5131V)	1,001.3	µg/mL	+/-	5.8216 10.9629 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	(Lot MKAA0690V)	1,001.7	µg/mL	+/-	5.8240 10.9673 18.6024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7 Purity 99%	(Lot MKBK1842V)	2,001.0	µg/mL	+/-	11.6340 21.9083 37.1601	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2 Purity 99%	(Lot FN10221307)	1,002.1	µg/mL	+/-	5.8263 10.9717 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7 Purity 98%	(Lot 10174662)	1,000.5	µg/mL	+/-	5.8169 10.9540 18.5797	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3 Purity 99%	(Lot MKBL1347V)	1,000.4	µg/mL	+/-	5.8164 10.9531 18.5782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	n-Hexadecane (C16) CAS # 544-76-3 Purity 99%	(Lot SHBD4570V)	1,002.2	µg/mL	+/-	5.8269 10.9728 18.6116	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Diethylphthalate CAS # 84-66-2 Purity 99%	(Lot MKBJ3578V)	1,001.1	µg/mL	+/-	5.8205 10.9607 18.5912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene CAS # 103-33-3 Purity 99%	(Lot MKBS2559V)	1,002.3 µg/mL	+/- 5.8275 +/- 10.9739 +/- 18.6135	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Diphenylamine CAS # 122-39-4 Purity 99%	(Lot 07525MF)	1,713.4 µg/mL	+/- 9.9619 +/- 18.7595 +/- 31.8192	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Nitroaniline CAS # 100-01-6 Purity 99%	(Lot BCBG4702V)	1,002.8 µg/mL	+/- 5.8304 +/- 10.9794 +/- 18.6228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1 Purity 99%	(Lot LC06195V)	2,002.0 µg/mL	+/- 11.6398 +/- 21.9193 +/- 37.1787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	(Lot STBB9729V)	1,000.5 µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene CAS # 118-74-1 Purity 98%	(Lot LC04221V)	1,002.1 µg/mL	+/- 5.8260 +/- 10.9711 +/- 18.6089	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol CAS # 87-86-5 Purity 99%	(Lot 140626JLM)	2,000.3 µg/mL	+/- 11.6299 +/- 21.9007 +/- 37.1471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Phenanthrene CAS # 85-01-8 Purity 98%	(Lot MKBL6906V)	999.0 µg/mL	+/- 5.8083 +/- 10.9379 +/- 18.5524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	n-Octadecane (C18) CAS # 593-45-3 Purity 99%	(Lot OGCDK)	1,006.5 µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene CAS # 120-12-7 Purity 99%	(Lot MKBK5208V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole CAS # 86-74-8 Purity 98%	(Lot S42950-417)	1,000.1 µg/mL	+/- 5.8146 +/- 10.9497 +/- 18.5725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	(Lot MKBL8501V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene CAS # 206-44-0 Purity 98%	(Lot MKBQ6360V)	999.7 µg/mL	+/- 5.8123 +/- 10.9454 +/- 18.5652	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene CAS # 129-00-0 Purity 98%	(Lot BCBJ0984V)	999.1 µg/mL	+/- 5.8089 +/- 10.9390 +/- 18.5543	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	(Lot 03027HV)	1,001.2 µg/mL	+/- 5.8211 +/- 10.9618 +/- 18.5931	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene CAS # 56-55-3 Purity 99%	(Lot ER031412-01)	1,001.4 µg/mL	+/- 5.8222 +/- 10.9640 +/- 18.5968	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	Chrysene			1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS #	218-01-9	(Lot ER120810-02)			+/-	11.0199	µg/mL	Unstressed
	Purity	99%				+/-	18.6915	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate			1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS #	117-81-7	(Lot MKBK2695V)			+/-	10.9542	µg/mL	Unstressed
	Purity	99%				+/-	18.5801	µg/mL	Stressed
74	Di-n-octyl phthalate			1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS #	117-84-0	(Lot 3128600)			+/-	10.9717	µg/mL	Unstressed
	Purity	99%				+/-	18.6098	µg/mL	Stressed
75	Benzo(b)fluoranthene			1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS #	205-99-2	(Lot ER03101401)			+/-	10.9498	µg/mL	Unstressed
	Purity	99%				+/-	18.5726	µg/mL	Stressed
76	Benzo(k)fluoranthene			1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS #	207-08-9	(Lot ER041513-01)			+/-	10.9848	µg/mL	Unstressed
	Purity	99%				+/-	18.6321	µg/mL	Stressed
77	Benzo(a)pyrene			1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS #	50-32-8	(Lot ER071309-02)			+/-	10.9629	µg/mL	Unstressed
	Purity	99%				+/-	18.5949	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene			1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS #	193-39-5	(Lot ER082107-02)			+/-	10.9553	µg/mL	Unstressed
	Purity	99%				+/-	18.5819	µg/mL	Stressed
79	Dibenz(a,h)anthracene			1,004.4	µg/mL	+/-	5.8397	µg/mL	Gravimetric
	CAS #	53-70-3	(Lot ER032211-01)			+/-	10.9969	µg/mL	Unstressed
	Purity	99%				+/-	18.6525	µg/mL	Stressed
80	Benzo(g,h,i)perylene			1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS #	191-24-2	(Lot ER020708-08)			+/-	10.9487	µg/mL	Unstressed
	Purity	99%				+/-	18.5708	µg/mL	Stressed
Solvent:									
	Methylene Chloride								
	CAS #	75-09-2							
	Purity	99%							

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.

N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.

N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

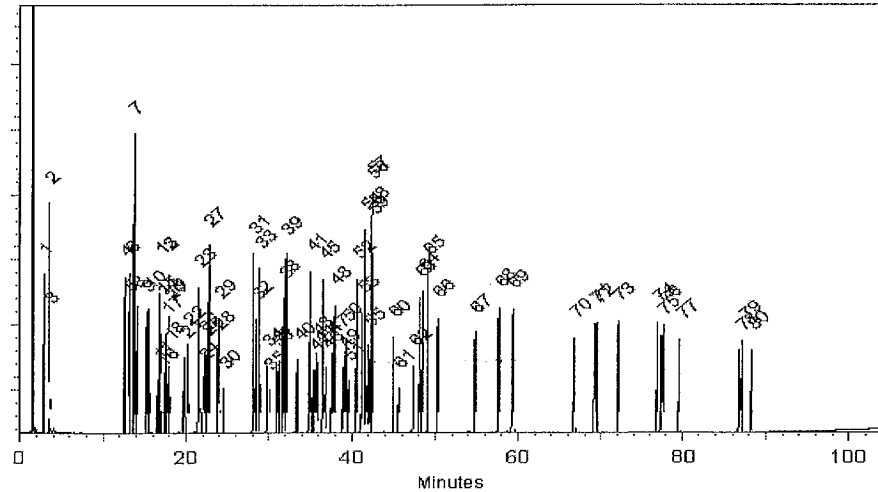
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



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


F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014 **Balance:** 1128360905


Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

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. : 569729 Lot No.: A0107399

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL Pkg Amt: > 5 mL

Expiration Date : May 31, 2016 Storage: 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane CAS # 123-91-1 (Lot SHBD8744V) Purity 99%	1,004.4 µg/mL	+/- 5.8397 µg/mL +/- 10.9969 µg/mL +/- 18.6525 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine CAS # 110-86-1 (Lot SHBC7174V) Purity 99%	1,001.0 µg/mL	+/- 5.8199 µg/mL +/- 10.9596 µg/mL +/- 18.5894 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine CAS # 62-75-9 (Lot 3213100) Purity 99%	1,000.2 µg/mL	+/- 5.8152 µg/mL +/- 10.9509 µg/mL +/- 18.5745 µg/mL	Gravimetric Unstressed Stressed
4	Aniline CAS # 62-53-3 (Lot K22Z462) Purity 99%	1,002.3 µg/mL	+/- 5.8275 µg/mL +/- 10.9739 µg/mL +/- 18.6135 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether CAS # 111-44-4 (Lot 45296HKV) Purity 99%	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 10.9640 µg/mL +/- 18.5968 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol CAS # 95-57-8 (Lot MKBD3900V) Purity 99%	1,000.8 µg/mL	+/- 5.8187 µg/mL +/- 10.9575 µg/mL +/- 18.5856 µg/mL	Gravimetric Unstressed Stressed
7	Phenol CAS # 108-95-2 (Lot SHBC6998V) Purity 99%	1,006.9 µg/mL	+/- 5.8542 µg/mL +/- 11.0242 µg/mL +/- 18.6989 µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10) CAS # 124-18-5 Purity 99%	(Lot SHBF1587V)	1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
					+/-	10.9542	µg/mL	Unstressed
					+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBL3891V)	1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
					+/-	11.0067	µg/mL	Unstressed
					+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBC1891V)	1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
					+/-	10.9706	µg/mL	Unstressed
					+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot 68996CMV)	1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
					+/-	11.0199	µg/mL	Unstressed
					+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol CAS # 100-51-6 Purity 99%	(Lot SHBC1850V)	1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
					+/-	10.9531	µg/mL	Unstressed
					+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane) CAS # 108-60-1 Purity 99%	(Lot 2-EAW-18-3)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol) CAS # 95-48-7 Purity 99%	(Lot SHBC1479V)	1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
					+/-	10.9881	µg/mL	Unstressed
					+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane CAS # 67-72-1 Purity 99%	(Lot 4H3SF)	1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
					+/-	11.0133	µg/mL	Unstressed
					+/-	18.6804	µg/mL	Stressed
16	Acetophenone CAS # 98-86-2 Purity 99%	(Lot MKBR7156V)	1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
					+/-	10.9783	µg/mL	Unstressed
					+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine CAS # 621-64-7 Purity 99%	(Lot OPAGF)	1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
					+/-	10.9914	µg/mL	Unstressed
					+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol) CAS # 106-44-5 Purity 99%	(Lot 49396APV)	500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
					+/-	5.4823	µg/mL	Unstressed
					+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol) CAS # 108-39-4 Purity 99%	(Lot SHBD0627V)	500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
					+/-	5.4801	µg/mL	Unstressed
					+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene CAS # 98-95-3 Purity 99%	(Lot 65096APV)	1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
					+/-	10.9607	µg/mL	Unstressed
					+/-	18.5912	µg/mL	Stressed
21	Isophorone CAS # 78-59-1 Purity 97%	(Lot 06705DE)	999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
					+/-	10.9410	µg/mL	Unstressed
					+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol CAS # 88-75-5 Purity 99%	(Lot BCBH7602V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol CAS # 105-67-9 Purity 99%	(Lot 10165155)	1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
					+/-	10.9837	µg/mL	Unstressed
					+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	(Lot 317200)	1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
					+/-	10.9980	µg/mL	Unstressed
					+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol CAS # 120-83-2 Purity 99%	(Lot BCBH1617V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
					+/-	10.9553	µg/mL	Unstressed
					+/-	18.5819	µg/mL	Stressed
27	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
					+/-	10.9739	µg/mL	Unstressed
					+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol CAS # 87-65-0 Purity 99%	(Lot MKBN2776V)	1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
					+/-	10.9498	µg/mL	Unstressed
					+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline CAS # 106-47-8 Purity 98%	(Lot 12528PH)	1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
					+/-	10.9518	µg/mL	Unstressed
					+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
					+/-	10.9475	µg/mL	Unstressed
					+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot 19399MJV)	998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
					+/-	10.9333	µg/mL	Unstressed
					+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7 Purity 99%	(Lot STBC0769V)	1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
					+/-	10.9629	µg/mL	Unstressed
					+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene CAS # 90-12-0 Purity 99%	(Lot 525000-10)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3 Purity 99%	(Lot 06024AIV)	1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
					+/-	10.9509	µg/mL	Unstressed
					+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4 Purity 99%	(Lot 3140300)	1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
					+/-	10.9750	µg/mL	Unstressed
					+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2 Purity 99%	(Lot MKBH7393V)	1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
					+/-	10.9640	µg/mL	Unstressed
					+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4 Purity 99%	(Lot FHM01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene CAS # 91-58-7 Purity 99%	(Lot FIJ01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
39	Biphenyl CAS # 92-52-4 Purity 99%	(Lot 1277976)	1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
					+/-	11.0155	µg/mL	Unstressed
					+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline CAS # 88-74-4 Purity 99%	(Lot MKBK7597V)	1,004.6	µg/mL	+/-	5.8408 10.9991 18.6562	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene CAS # 208-96-8 Purity 99%	(Lot ER030707-01)	1,000.0	µg/mL	+/-	5.8141 10.9487 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	(Lot BCBB1436V)	1,006.4	µg/mL	+/-	5.8513 11.0188 18.6896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate CAS # 131-11-3 Purity 99%	(Lot 10117699)	1,001.0	µg/mL	+/-	5.8199 10.9596 18.5894	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	(Lot 1437483V)	1,001.6	µg/mL	+/-	5.8234 10.9662 18.6005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene CAS # 83-32-9 Purity 99%	(Lot MKBP0384V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	2,4-Dinitrophenol CAS # 51-28-5 Purity 99%	(Lot MKBP5833V)	2,008.7	µg/mL	+/-	11.6788 21.9927 37.3031	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Dibenzofuran CAS # 132-64-9 Purity 99%	(Lot MKBK2375V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	3-Nitroaniline CAS # 99-09-2 Purity 99%	(Lot MKBH5131V)	1,001.3	µg/mL	+/-	5.8216 10.9629 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	(Lot MKAA0690V)	1,001.7	µg/mL	+/-	5.8240 10.9673 18.6024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7 Purity 99%	(Lot MKBK1842V)	2,001.0	µg/mL	+/-	11.6340 21.9083 37.1601	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2 Purity 99%	(Lot FN10221307)	1,002.1	µg/mL	+/-	5.8263 10.9717 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7 Purity 98%	(Lot 10174662)	1,000.5	µg/mL	+/-	5.8169 10.9540 18.5797	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3 Purity 99%	(Lot MKBL1347V)	1,000.4	µg/mL	+/-	5.8164 10.9531 18.5782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	n-Hexadecane (C16) CAS # 544-76-3 Purity 99%	(Lot SHBD4570V)	1,002.2	µg/mL	+/-	5.8269 10.9728 18.6116	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Diethylphthalate CAS # 84-66-2 Purity 99%	(Lot MKBJ3578V)	1,001.1	µg/mL	+/-	5.8205 10.9607 18.5912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene CAS # 103-33-3 Purity 99%	(Lot MKBS2559V)	1,002.3	µg/mL	+/-	5.8275 10.9739 18.6135	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Diphenylamine CAS # 122-39-4 Purity 99%	(Lot 07525MF)	1,713.4	µg/mL	+/-	9.9619 18.7595 31.8192	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Nitroaniline CAS # 100-01-6 Purity 99%	(Lot BCBG4702V)	1,002.8	µg/mL	+/-	5.8304 10.9794 18.6228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1 Purity 99%	(Lot LC06195V)	2,002.0	µg/mL	+/-	11.6398 21.9193 37.1787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	(Lot STBB9729V)	1,000.5	µg/mL	+/-	5.8170 10.9542 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene CAS # 118-74-1 Purity 98%	(Lot LC04221V)	1,002.1	µg/mL	+/-	5.8260 10.9711 18.6089	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol CAS # 87-86-5 Purity 99%	(Lot 140626JLM)	2,000.3	µg/mL	+/-	11.6299 21.9007 37.1471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Phenanthrene CAS # 85-01-8 Purity 98%	(Lot MKBL6906V)	999.0	µg/mL	+/-	5.8083 10.9379 18.5524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	n-Octadecane (C18) CAS # 593-45-3 Purity 99%	(Lot OGCDK)	1,006.5	µg/mL	+/-	5.8519 11.0199 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene CAS # 120-12-7 Purity 99%	(Lot MKBK5208V)	1,000.0	µg/mL	+/-	5.8141 10.9487 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole CAS # 86-74-8 Purity 98%	(Lot S42950-417)	1,000.1	µg/mL	+/-	5.8146 10.9497 18.5725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	(Lot MKBL8501V)	1,000.0	µg/mL	+/-	5.8141 10.9487 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene CAS # 206-44-0 Purity 98%	(Lot MKBQ6360V)	999.7	µg/mL	+/-	5.8123 10.9454 18.5652	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene CAS # 129-00-0 Purity 98%	(Lot BCBJ0984V)	999.1	µg/mL	+/-	5.8089 10.9390 18.5543	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	(Lot 03027HV)	1,001.2	µg/mL	+/-	5.8211 10.9618 18.5931	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene CAS # 56-55-3 Purity 99%	(Lot ER031412-01)	1,001.4	µg/mL	+/-	5.8222 10.9640 18.5968	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	Chrysene CAS # 218-01-9 Purity 99%	(Lot ER120810-02)	1,006.5	µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
73	Bis(2-ethylhexyl)phthalate CAS # 117-81-7 Purity 99%	(Lot MKBK2695V)	1,000.5	µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Di-n-octyl phthalate CAS # 117-84-0 Purity 99%	(Lot 3128600)	1,002.1	µg/mL	+/- 5.8263 +/- 10.9717 +/- 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Benzo(b)fluoranthene CAS # 205-99-2 Purity 99%	(Lot ER03101401)	1,000.1	µg/mL	+/- 5.8147 +/- 10.9498 +/- 18.5726	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Benzo(k)fluoranthene CAS # 207-08-9 Purity 99%	(Lot ER041513-01)	1,003.3	µg/mL	+/- 5.8333 +/- 10.9848 +/- 18.6321	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
77	Benzo(a)pyrene CAS # 50-32-8 Purity 99%	(Lot ER071309-02)	1,001.3	µg/mL	+/- 5.8216 +/- 10.9629 +/- 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
78	Indeno(1,2,3-cd)pyrene CAS # 193-39-5 Purity 99%	(Lot ER082107-02)	1,000.6	µg/mL	+/- 5.8176 +/- 10.9553 +/- 18.5819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
79	Dibenz(a,h)anthracene CAS # 53-70-3 Purity 99%	(Lot ER032211-01)	1,004.4	µg/mL	+/- 5.8397 +/- 10.9969 +/- 18.6525	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
80	Benzo(g,h,i)perylene CAS # 191-24-2 Purity 99%	(Lot ER020708-08)	1,000.0	µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent: Methylene Chloride CAS # 75-09-2 Purity 99%							

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.

N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.

N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi

Temp. Program:

35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:

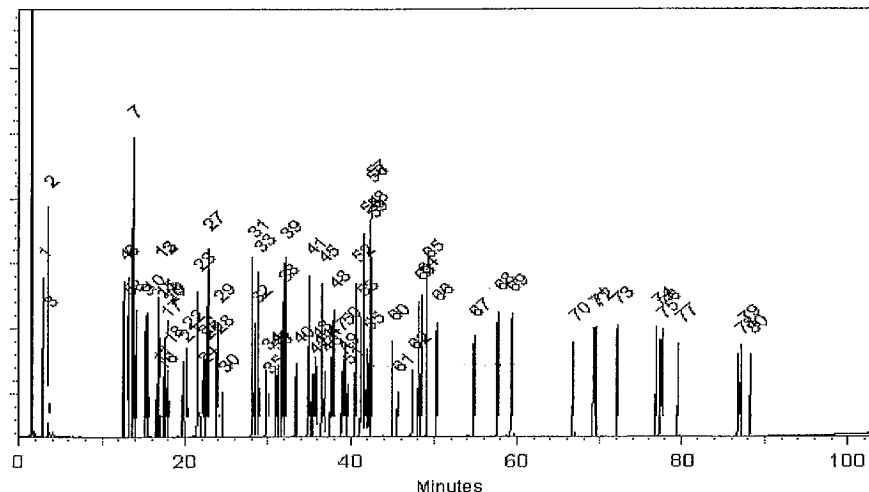
250°C

Det. Temp:

300°C

Det. Type:

FID

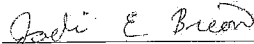


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014

Balance: 1128360905


Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569729 Lot No.: A0107399

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL Pkg Amt: > 5 mL

Expiration Date : May 31, 2016 Storage: 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane	1,004.4 µg/mL	+/- 5.8397	µg/mL Gravimetric
	CAS # 123-91-1 (Lot SHBD8744V)		+/- 10.9969	µg/mL Unstressed
	Purity 99%		+/- 18.6525	µg/mL Stressed
2	Pyridine	1,001.0 µg/mL	+/- 5.8199	µg/mL Gravimetric
	CAS # 110-86-1 (Lot SHBC7174V)		+/- 10.9596	µg/mL Unstressed
	Purity 99%		+/- 18.5894	µg/mL Stressed
3	N-Nitrosodimethylamine	1,000.2 µg/mL	+/- 5.8152	µg/mL Gravimetric
	CAS # 62-75-9 (Lot 3213100)		+/- 10.9509	µg/mL Unstressed
	Purity 99%		+/- 18.5745	µg/mL Stressed
4	Aniline	1,002.3 µg/mL	+/- 5.8275	µg/mL Gravimetric
	CAS # 62-53-3 (Lot K22Z462)		+/- 10.9739	µg/mL Unstressed
	Purity 99%		+/- 18.6135	µg/mL Stressed
5	Bis(2-chloroethyl)ether	1,001.4 µg/mL	+/- 5.8222	µg/mL Gravimetric
	CAS # 111-44-4 (Lot 45296HKV)		+/- 10.9640	µg/mL Unstressed
	Purity 99%		+/- 18.5968	µg/mL Stressed
6	2-Chlorophenol	1,000.8 µg/mL	+/- 5.8187	µg/mL Gravimetric
	CAS # 95-57-8 (Lot MKBD3900V)		+/- 10.9575	µg/mL Unstressed
	Purity 99%		+/- 18.5856	µg/mL Stressed
7	Phenol	1,006.9 µg/mL	+/- 5.8542	µg/mL Gravimetric
	CAS # 108-95-2 (Lot SHBC6998V)		+/- 11.0242	µg/mL Unstressed
	Purity 99%		+/- 18.6989	µg/mL Stressed

8	n-Decane (C10) CAS # 124-18-5 Purity 99%	(Lot SHBF1587V)	1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
					+/-	10.9542	µg/mL	Unstressed
					+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBL3891V)	1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
					+/-	11.0067	µg/mL	Unstressed
					+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBC1891V)	1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
					+/-	10.9706	µg/mL	Unstressed
					+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot 68996CMV)	1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
					+/-	11.0199	µg/mL	Unstressed
					+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol CAS # 100-51-6 Purity 99%	(Lot SHBC1850V)	1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
					+/-	10.9531	µg/mL	Unstressed
					+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane) CAS # 108-60-1 Purity 99%	(Lot 2-EAW-18-3)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol) CAS # 95-48-7 Purity 99%	(Lot SHBC1479V)	1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
					+/-	10.9881	µg/mL	Unstressed
					+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane CAS # 67-72-1 Purity 99%	(Lot 4H3SF)	1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
					+/-	11.0133	µg/mL	Unstressed
					+/-	18.6804	µg/mL	Stressed
16	Acetophenone CAS # 98-86-2 Purity 99%	(Lot MKBR7156V)	1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
					+/-	10.9783	µg/mL	Unstressed
					+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine CAS # 621-64-7 Purity 99%	(Lot OPAGF)	1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
					+/-	10.9914	µg/mL	Unstressed
					+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol) CAS # 106-44-5 Purity 99%	(Lot 49396APV)	500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
					+/-	5.4823	µg/mL	Unstressed
					+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol) CAS # 108-39-4 Purity 99%	(Lot SHBD0627V)	500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
					+/-	5.4801	µg/mL	Unstressed
					+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene CAS # 98-95-3 Purity 99%	(Lot 65096APV)	1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
					+/-	10.9607	µg/mL	Unstressed
					+/-	18.5912	µg/mL	Stressed
21	Isophorone CAS # 78-59-1 Purity 97%	(Lot 06705DE)	999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
					+/-	10.9410	µg/mL	Unstressed
					+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol CAS # 88-75-5 Purity 99%	(Lot BCBH7602V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol CAS # 105-67-9 Purity 99%	(Lot 10165155)	1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
					+/-	10.9837	µg/mL	Unstressed
					+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	(Lot 317200)	1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
					+/-	10.9980	µg/mL	Unstressed
					+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol CAS # 120-83-2 Purity 99%	(Lot BCBH1617V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
					+/-	10.9553	µg/mL	Unstressed
					+/-	18.5819	µg/mL	Stressed
27	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
					+/-	10.9739	µg/mL	Unstressed
					+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol CAS # 87-65-0 Purity 99%	(Lot MKBN2776V)	1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
					+/-	10.9498	µg/mL	Unstressed
					+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline CAS # 106-47-8 Purity 98%	(Lot 12528PH)	1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
					+/-	10.9518	µg/mL	Unstressed
					+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
					+/-	10.9475	µg/mL	Unstressed
					+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot 19399MJV)	998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
					+/-	10.9333	µg/mL	Unstressed
					+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7 Purity 99%	(Lot STBC0769V)	1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
					+/-	10.9629	µg/mL	Unstressed
					+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene CAS # 90-12-0 Purity 99%	(Lot 525000-10)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3 Purity 99%	(Lot 06024AIV)	1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
					+/-	10.9509	µg/mL	Unstressed
					+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4 Purity 99%	(Lot 3140300)	1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
					+/-	10.9750	µg/mL	Unstressed
					+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2 Purity 99%	(Lot MKBH7393V)	1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
					+/-	10.9640	µg/mL	Unstressed
					+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4 Purity 99%	(Lot FHM01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene CAS # 91-58-7 Purity 99%	(Lot FIJ01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
39	Biphenyl CAS # 92-52-4 Purity 99%	(Lot 1277976)	1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
					+/-	11.0155	µg/mL	Unstressed
					+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline CAS # 88-74-4 Purity 99%	(Lot MKBK7597V)	1,004.6	µg/mL	+/-	5.8408 10.9991 18.6562	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene CAS # 208-96-8 Purity 99%	(Lot ER030707-01)	1,000.0	µg/mL	+/-	5.8141 10.9487 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	(Lot BCBB1436V)	1,006.4	µg/mL	+/-	5.8513 11.0188 18.6896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate CAS # 131-11-3 Purity 99%	(Lot 10117699)	1,001.0	µg/mL	+/-	5.8199 10.9596 18.5894	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	(Lot 1437483V)	1,001.6	µg/mL	+/-	5.8234 10.9662 18.6005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene CAS # 83-32-9 Purity 99%	(Lot MKBP0384V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	2,4-Dinitrophenol CAS # 51-28-5 Purity 99%	(Lot MKBP5833V)	2,008.7	µg/mL	+/-	11.6788 21.9927 37.3031	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Dibenzofuran CAS # 132-64-9 Purity 99%	(Lot MKBK2375V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	3-Nitroaniline CAS # 99-09-2 Purity 99%	(Lot MKBH5131V)	1,001.3	µg/mL	+/-	5.8216 10.9629 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	(Lot MKAA0690V)	1,001.7	µg/mL	+/-	5.8240 10.9673 18.6024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7 Purity 99%	(Lot MKBK1842V)	2,001.0	µg/mL	+/-	11.6340 21.9083 37.1601	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2 Purity 99%	(Lot FN10221307)	1,002.1	µg/mL	+/-	5.8263 10.9717 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7 Purity 98%	(Lot 10174662)	1,000.5	µg/mL	+/-	5.8169 10.9540 18.5797	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3 Purity 99%	(Lot MKBL1347V)	1,000.4	µg/mL	+/-	5.8164 10.9531 18.5782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	n-Hexadecane (C16) CAS # 544-76-3 Purity 99%	(Lot SHBD4570V)	1,002.2	µg/mL	+/-	5.8269 10.9728 18.6116	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Diethylphthalate CAS # 84-66-2 Purity 99%	(Lot MKBJ3578V)	1,001.1	µg/mL	+/-	5.8205 10.9607 18.5912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene CAS # 103-33-3 Purity 99%	(Lot MKBS2559V)	1,002.3 µg/mL	+/- 5.8275 +/- 10.9739 +/- 18.6135	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Diphenylamine CAS # 122-39-4 Purity 99%	(Lot 07525MF)	1,713.4 µg/mL	+/- 9.9619 +/- 18.7595 +/- 31.8192	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Nitroaniline CAS # 100-01-6 Purity 99%	(Lot BCBG4702V)	1,002.8 µg/mL	+/- 5.8304 +/- 10.9794 +/- 18.6228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1 Purity 99%	(Lot LC06195V)	2,002.0 µg/mL	+/- 11.6398 +/- 21.9193 +/- 37.1787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	(Lot STBB9729V)	1,000.5 µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene CAS # 118-74-1 Purity 98%	(Lot LC04221V)	1,002.1 µg/mL	+/- 5.8260 +/- 10.9711 +/- 18.6089	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol CAS # 87-86-5 Purity 99%	(Lot 140626JLM)	2,000.3 µg/mL	+/- 11.6299 +/- 21.9007 +/- 37.1471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Phenanthrene CAS # 85-01-8 Purity 98%	(Lot MKBL6906V)	999.0 µg/mL	+/- 5.8083 +/- 10.9379 +/- 18.5524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	n-Octadecane (C18) CAS # 593-45-3 Purity 99%	(Lot OGCDK)	1,006.5 µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene CAS # 120-12-7 Purity 99%	(Lot MKBK5208V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole CAS # 86-74-8 Purity 98%	(Lot S42950-417)	1,000.1 µg/mL	+/- 5.8146 +/- 10.9497 +/- 18.5725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	(Lot MKBL8501V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene CAS # 206-44-0 Purity 98%	(Lot MKBQ6360V)	999.7 µg/mL	+/- 5.8123 +/- 10.9454 +/- 18.5652	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene CAS # 129-00-0 Purity 98%	(Lot BCBJ0984V)	999.1 µg/mL	+/- 5.8089 +/- 10.9390 +/- 18.5543	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	(Lot 03027HV)	1,001.2 µg/mL	+/- 5.8211 +/- 10.9618 +/- 18.5931	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene CAS # 56-55-3 Purity 99%	(Lot ER031412-01)	1,001.4 µg/mL	+/- 5.8222 +/- 10.9640 +/- 18.5968	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	Chrysene CAS # 218-01-9 Purity 99%	(Lot ER120810-02)	1,006.5	µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
73	Bis(2-ethylhexyl)phthalate CAS # 117-81-7 Purity 99%	(Lot MKBK2695V)	1,000.5	µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Di-n-octyl phthalate CAS # 117-84-0 Purity 99%	(Lot 3128600)	1,002.1	µg/mL	+/- 5.8263 +/- 10.9717 +/- 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Benzo(b)fluoranthene CAS # 205-99-2 Purity 99%	(Lot ER03101401)	1,000.1	µg/mL	+/- 5.8147 +/- 10.9498 +/- 18.5726	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Benzo(k)fluoranthene CAS # 207-08-9 Purity 99%	(Lot ER041513-01)	1,003.3	µg/mL	+/- 5.8333 +/- 10.9848 +/- 18.6321	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
77	Benzo(a)pyrene CAS # 50-32-8 Purity 99%	(Lot ER071309-02)	1,001.3	µg/mL	+/- 5.8216 +/- 10.9629 +/- 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
78	Indeno(1,2,3-cd)pyrene CAS # 193-39-5 Purity 99%	(Lot ER082107-02)	1,000.6	µg/mL	+/- 5.8176 +/- 10.9553 +/- 18.5819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
79	Dibenz(a,h)anthracene CAS # 53-70-3 Purity 99%	(Lot ER032211-01)	1,004.4	µg/mL	+/- 5.8397 +/- 10.9969 +/- 18.6525	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
80	Benzo(g,h,i)perylene CAS # 191-24-2 Purity 99%	(Lot ER020708-08)	1,000.0	µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent: Methylene Chloride CAS # 75-09-2 Purity 99%							

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.

N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.

N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

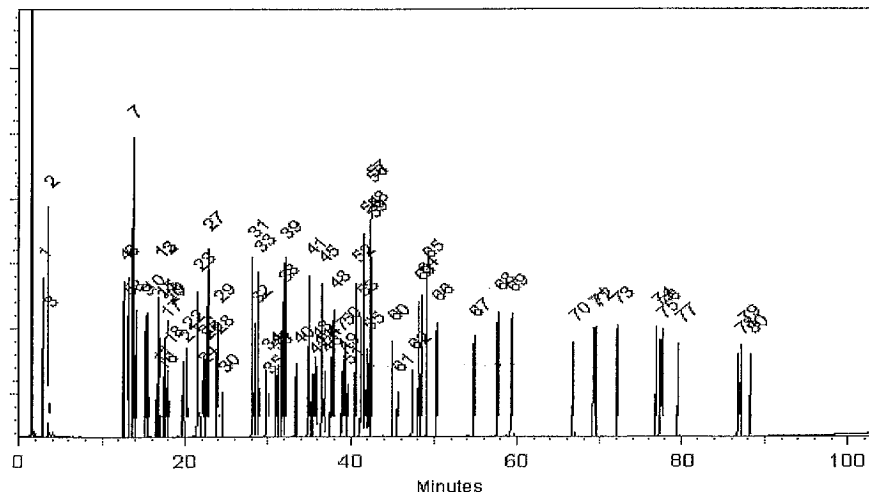
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



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


F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014 **Balance:** 1128360905


Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569729 Lot No.: A0107399

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL Pkg Amt: > 5 mL

Expiration Date : May 31, 2016 Storage: 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane	1,004.4 µg/mL	+/- 5.8397	µg/mL Gravimetric
	CAS # 123-91-1 (Lot SHBD8744V)		+/- 10.9969	µg/mL Unstressed
	Purity 99%		+/- 18.6525	µg/mL Stressed
2	Pyridine	1,001.0 µg/mL	+/- 5.8199	µg/mL Gravimetric
	CAS # 110-86-1 (Lot SHBC7174V)		+/- 10.9596	µg/mL Unstressed
	Purity 99%		+/- 18.5894	µg/mL Stressed
3	N-Nitrosodimethylamine	1,000.2 µg/mL	+/- 5.8152	µg/mL Gravimetric
	CAS # 62-75-9 (Lot 3213100)		+/- 10.9509	µg/mL Unstressed
	Purity 99%		+/- 18.5745	µg/mL Stressed
4	Aniline	1,002.3 µg/mL	+/- 5.8275	µg/mL Gravimetric
	CAS # 62-53-3 (Lot K22Z462)		+/- 10.9739	µg/mL Unstressed
	Purity 99%		+/- 18.6135	µg/mL Stressed
5	Bis(2-chloroethyl)ether	1,001.4 µg/mL	+/- 5.8222	µg/mL Gravimetric
	CAS # 111-44-4 (Lot 45296HKV)		+/- 10.9640	µg/mL Unstressed
	Purity 99%		+/- 18.5968	µg/mL Stressed
6	2-Chlorophenol	1,000.8 µg/mL	+/- 5.8187	µg/mL Gravimetric
	CAS # 95-57-8 (Lot MKBD3900V)		+/- 10.9575	µg/mL Unstressed
	Purity 99%		+/- 18.5856	µg/mL Stressed
7	Phenol	1,006.9 µg/mL	+/- 5.8542	µg/mL Gravimetric
	CAS # 108-95-2 (Lot SHBC6998V)		+/- 11.0242	µg/mL Unstressed
	Purity 99%		+/- 18.6989	µg/mL Stressed

8	n-Decane (C10) CAS # 124-18-5 Purity 99%	(Lot SHBF1587V)	1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
					+/-	10.9542	µg/mL	Unstressed
					+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBL3891V)	1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
					+/-	11.0067	µg/mL	Unstressed
					+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBC1891V)	1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
					+/-	10.9706	µg/mL	Unstressed
					+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot 68996CMV)	1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
					+/-	11.0199	µg/mL	Unstressed
					+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol CAS # 100-51-6 Purity 99%	(Lot SHBC1850V)	1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
					+/-	10.9531	µg/mL	Unstressed
					+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane) CAS # 108-60-1 Purity 99%	(Lot 2-EAW-18-3)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol) CAS # 95-48-7 Purity 99%	(Lot SHBC1479V)	1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
					+/-	10.9881	µg/mL	Unstressed
					+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane CAS # 67-72-1 Purity 99%	(Lot 4H3SF)	1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
					+/-	11.0133	µg/mL	Unstressed
					+/-	18.6804	µg/mL	Stressed
16	Acetophenone CAS # 98-86-2 Purity 99%	(Lot MKBR7156V)	1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
					+/-	10.9783	µg/mL	Unstressed
					+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine CAS # 621-64-7 Purity 99%	(Lot OPAGF)	1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
					+/-	10.9914	µg/mL	Unstressed
					+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol) CAS # 106-44-5 Purity 99%	(Lot 49396APV)	500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
					+/-	5.4823	µg/mL	Unstressed
					+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol) CAS # 108-39-4 Purity 99%	(Lot SHBD0627V)	500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
					+/-	5.4801	µg/mL	Unstressed
					+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene CAS # 98-95-3 Purity 99%	(Lot 65096APV)	1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
					+/-	10.9607	µg/mL	Unstressed
					+/-	18.5912	µg/mL	Stressed
21	Isophorone CAS # 78-59-1 Purity 97%	(Lot 06705DE)	999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
					+/-	10.9410	µg/mL	Unstressed
					+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol CAS # 88-75-5 Purity 99%	(Lot BCBH7602V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol CAS # 105-67-9 Purity 99%	(Lot 10165155)	1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
					+/-	10.9837	µg/mL	Unstressed
					+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	(Lot 317200)	1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
					+/-	10.9980	µg/mL	Unstressed
					+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol CAS # 120-83-2 Purity 99%	(Lot BCBH1617V)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
					+/-	10.9553	µg/mL	Unstressed
					+/-	18.5819	µg/mL	Stressed
27	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
					+/-	10.9739	µg/mL	Unstressed
					+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol CAS # 87-65-0 Purity 99%	(Lot MKBN2776V)	1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
					+/-	10.9498	µg/mL	Unstressed
					+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline CAS # 106-47-8 Purity 98%	(Lot 12528PH)	1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
					+/-	10.9518	µg/mL	Unstressed
					+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
					+/-	10.9475	µg/mL	Unstressed
					+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot 19399MJV)	998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
					+/-	10.9333	µg/mL	Unstressed
					+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7 Purity 99%	(Lot STBC0769V)	1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
					+/-	10.9629	µg/mL	Unstressed
					+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene CAS # 90-12-0 Purity 99%	(Lot 525000-10)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3 Purity 99%	(Lot 06024AIV)	1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
					+/-	10.9509	µg/mL	Unstressed
					+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4 Purity 99%	(Lot 3140300)	1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
					+/-	10.9750	µg/mL	Unstressed
					+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2 Purity 99%	(Lot MKBH7393V)	1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
					+/-	10.9640	µg/mL	Unstressed
					+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4 Purity 99%	(Lot FHM01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene CAS # 91-58-7 Purity 99%	(Lot FIJ01)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
					+/-	10.9487	µg/mL	Unstressed
					+/-	18.5708	µg/mL	Stressed
39	Biphenyl CAS # 92-52-4 Purity 99%	(Lot 1277976)	1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
					+/-	11.0155	µg/mL	Unstressed
					+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline CAS # 88-74-4 Purity 99%	(Lot MKBK7597V)	1,004.6	µg/mL	+/-	5.8408 10.9991 18.6562	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene CAS # 208-96-8 Purity 99%	(Lot ER030707-01)	1,000.0	µg/mL	+/-	5.8141 10.9487 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	(Lot BCBB1436V)	1,006.4	µg/mL	+/-	5.8513 11.0188 18.6896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate CAS # 131-11-3 Purity 99%	(Lot 10117699)	1,001.0	µg/mL	+/-	5.8199 10.9596 18.5894	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	(Lot 1437483V)	1,001.6	µg/mL	+/-	5.8234 10.9662 18.6005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene CAS # 83-32-9 Purity 99%	(Lot MKBP0384V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	2,4-Dinitrophenol CAS # 51-28-5 Purity 99%	(Lot MKBP5833V)	2,008.7	µg/mL	+/-	11.6788 21.9927 37.3031	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Dibenzofuran CAS # 132-64-9 Purity 99%	(Lot MKBK2375V)	1,001.8	µg/mL	+/-	5.8246 10.9684 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	3-Nitroaniline CAS # 99-09-2 Purity 99%	(Lot MKBH5131V)	1,001.3	µg/mL	+/-	5.8216 10.9629 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	(Lot MKAA0690V)	1,001.7	µg/mL	+/-	5.8240 10.9673 18.6024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7 Purity 99%	(Lot MKBK1842V)	2,001.0	µg/mL	+/-	11.6340 21.9083 37.1601	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2 Purity 99%	(Lot FN10221307)	1,002.1	µg/mL	+/-	5.8263 10.9717 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7 Purity 98%	(Lot 10174662)	1,000.5	µg/mL	+/-	5.8169 10.9540 18.5797	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3 Purity 99%	(Lot MKBL1347V)	1,000.4	µg/mL	+/-	5.8164 10.9531 18.5782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	n-Hexadecane (C16) CAS # 544-76-3 Purity 99%	(Lot SHBD4570V)	1,002.2	µg/mL	+/-	5.8269 10.9728 18.6116	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Diethylphthalate CAS # 84-66-2 Purity 99%	(Lot MKBJ3578V)	1,001.1	µg/mL	+/-	5.8205 10.9607 18.5912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene CAS # 103-33-3 Purity 99%	(Lot MKBS2559V)	1,002.3 µg/mL	+/- 5.8275 +/- 10.9739 +/- 18.6135	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Diphenylamine CAS # 122-39-4 Purity 99%	(Lot 07525MF)	1,713.4 µg/mL	+/- 9.9619 +/- 18.7595 +/- 31.8192	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Nitroaniline CAS # 100-01-6 Purity 99%	(Lot BCBG4702V)	1,002.8 µg/mL	+/- 5.8304 +/- 10.9794 +/- 18.6228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1 Purity 99%	(Lot LC06195V)	2,002.0 µg/mL	+/- 11.6398 +/- 21.9193 +/- 37.1787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	(Lot STBB9729V)	1,000.5 µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene CAS # 118-74-1 Purity 98%	(Lot LC04221V)	1,002.1 µg/mL	+/- 5.8260 +/- 10.9711 +/- 18.6089	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol CAS # 87-86-5 Purity 99%	(Lot 140626JLM)	2,000.3 µg/mL	+/- 11.6299 +/- 21.9007 +/- 37.1471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Phenanthrene CAS # 85-01-8 Purity 98%	(Lot MKBL6906V)	999.0 µg/mL	+/- 5.8083 +/- 10.9379 +/- 18.5524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	n-Octadecane (C18) CAS # 593-45-3 Purity 99%	(Lot OGCDK)	1,006.5 µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene CAS # 120-12-7 Purity 99%	(Lot MKBK5208V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole CAS # 86-74-8 Purity 98%	(Lot S42950-417)	1,000.1 µg/mL	+/- 5.8146 +/- 10.9497 +/- 18.5725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	(Lot MKBL8501V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene CAS # 206-44-0 Purity 98%	(Lot MKBQ6360V)	999.7 µg/mL	+/- 5.8123 +/- 10.9454 +/- 18.5652	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene CAS # 129-00-0 Purity 98%	(Lot BCBJ0984V)	999.1 µg/mL	+/- 5.8089 +/- 10.9390 +/- 18.5543	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	(Lot 03027HV)	1,001.2 µg/mL	+/- 5.8211 +/- 10.9618 +/- 18.5931	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene CAS # 56-55-3 Purity 99%	(Lot ER031412-01)	1,001.4 µg/mL	+/- 5.8222 +/- 10.9640 +/- 18.5968	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	Chrysene CAS # 218-01-9 Purity 99%	(Lot ER120810-02)	1,006.5	µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
73	Bis(2-ethylhexyl)phthalate CAS # 117-81-7 Purity 99%	(Lot MKBK2695V)	1,000.5	µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Di-n-octyl phthalate CAS # 117-84-0 Purity 99%	(Lot 3128600)	1,002.1	µg/mL	+/- 5.8263 +/- 10.9717 +/- 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Benzo(b)fluoranthene CAS # 205-99-2 Purity 99%	(Lot ER03101401)	1,000.1	µg/mL	+/- 5.8147 +/- 10.9498 +/- 18.5726	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Benzo(k)fluoranthene CAS # 207-08-9 Purity 99%	(Lot ER041513-01)	1,003.3	µg/mL	+/- 5.8333 +/- 10.9848 +/- 18.6321	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
77	Benzo(a)pyrene CAS # 50-32-8 Purity 99%	(Lot ER071309-02)	1,001.3	µg/mL	+/- 5.8216 +/- 10.9629 +/- 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
78	Indeno(1,2,3-cd)pyrene CAS # 193-39-5 Purity 99%	(Lot ER082107-02)	1,000.6	µg/mL	+/- 5.8176 +/- 10.9553 +/- 18.5819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
79	Dibenz(a,h)anthracene CAS # 53-70-3 Purity 99%	(Lot ER032211-01)	1,004.4	µg/mL	+/- 5.8397 +/- 10.9969 +/- 18.6525	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
80	Benzo(g,h,i)perylene CAS # 191-24-2 Purity 99%	(Lot ER020708-08)	1,000.0	µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent: Methylene Chloride CAS # 75-09-2 Purity 99%							

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.

N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.

N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi

Temp. Program:

35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:

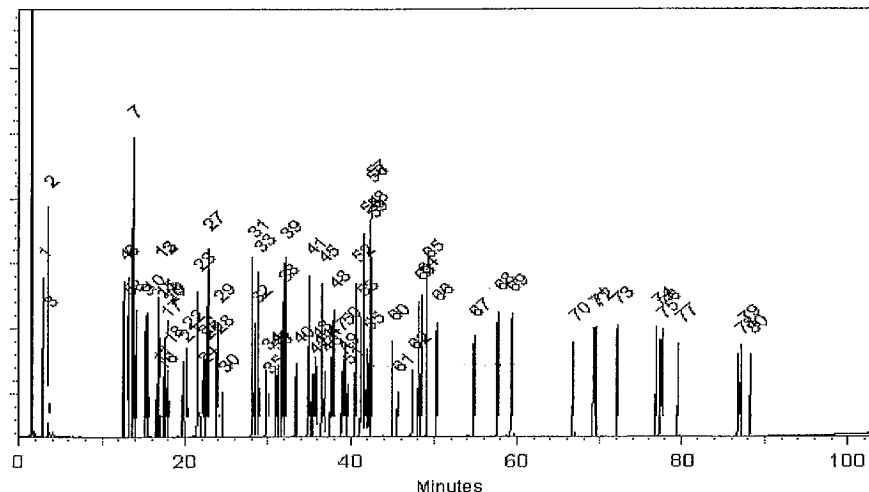
250°C

Det. Temp:

300°C

Det. Type:

FID

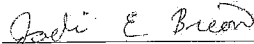


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014

Balance: 1128360905


Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569730 Lot No.: A0108174
Description : 8270 List 1 / Std #9
8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 10 mL Pkg Amt: > 5 mL
Expiration Date : July 31, 2016 Storage: 10°C or colder
Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Benzidine CAS # 92-87-5 (Lot 141208JLM) Purity 99%	2,008.4 µg/mL	+/- 11.6770 µg/mL Gravimetric +/- 21.9894 µg/mL Unstressed +/- 37.2976 µg/mL Stressed
2	3,3'-Dichlorobenzidine CAS # 91-94-1 (Lot 141205JLM) Purity 99%	2,003.0 µg/mL	+/- 11.6456 µg/mL Gravimetric +/- 21.9302 µg/mL Unstressed +/- 37.1973 µg/mL Stressed
Solvent:	Methylene Chloride CAS # 75-09-2 Purity 99%		

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

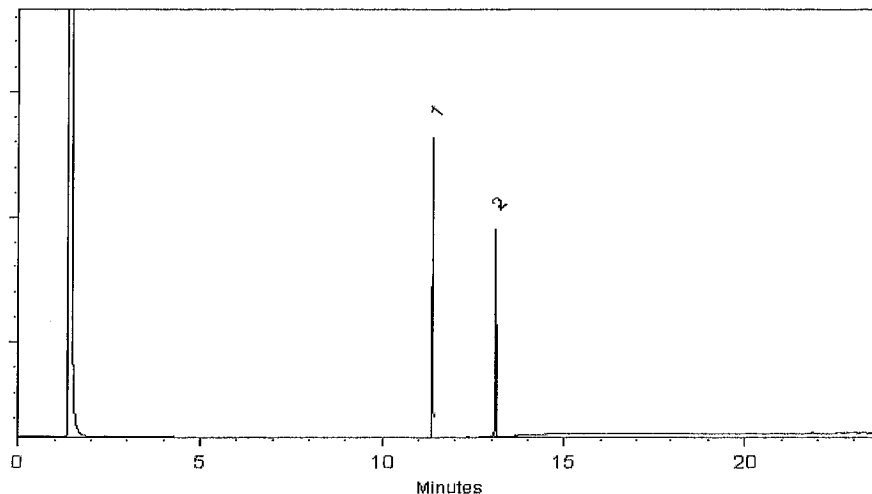
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Rebecca Hawer

Date Mixed: 07-Jan-2015

Balance: 1122030677

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 13-Jan-2015

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

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. : 569731 Lot No.: A0107943
Description : 8270 List 1 / Std #10
8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 5 mL Pkg Amt: > 5 mL
Expiration Date : June 30, 2016 Storage: 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)				
1	Indene		2,001.4 μg/mL	+/-	11.6363	μg/mL	Gravimetric	
	CAS #	95-13-6		(Lot MKBP3098V)	+/-	22.5687	μg/mL	Unstressed
	Purity	99%		+/-	25.9700	μg/mL	Stressed	
2	Benzoic acid		2,005.8 μg/mL	+/-	11.6619	μg/mL	Gravimetric	
	CAS #	65-85-0		(Lot MKBL6689V)	+/-	22.6183	μg/mL	Unstressed
	Purity	99%		+/-	26.0271	μg/mL	Stressed	
Solvent:	Methylene Chloride							
	CAS #	75-09-2						
	Purity	99%						

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

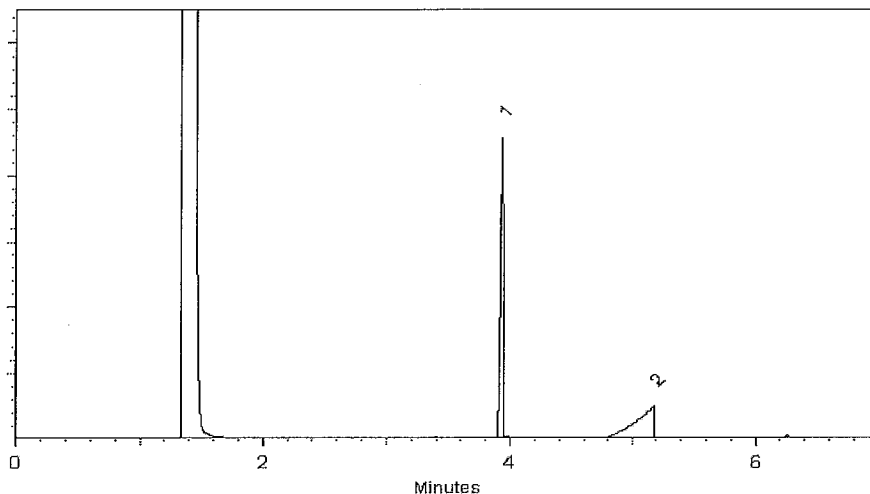
250°C

Det. Temp:

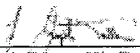
330°C

Det. Type:

FID

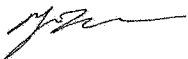


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


F. Joseph Tallon - Mix Technician

Date Mixed: 22-Dec-2014

Balance: 1128360905


Tyler Brown - QA Analyst

Date Passed: 29-Dec-2014

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

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. : 569731 Lot No.: A0107943
Description : 8270 List 1 / Std #10
8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 5 mL Pkg Amt: > 5 mL
Expiration Date : June 30, 2016 Storage: 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Indene		2,001.4 µg/mL	+/-	11.6363	µg/mL	Gravimetric
	CAS #	95-13-6 (Lot MKBP3098V)		+/-	22.5687	µg/mL	Unstressed
	Purity	99%		+/-	25.9700	µg/mL	Stressed
2	Benzoic acid		2,005.8 µg/mL	+/-	11.6619	µg/mL	Gravimetric
	CAS #	65-85-0 (Lot MKBL6689V)		+/-	22.6183	µg/mL	Unstressed
	Purity	99%		+/-	26.0271	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

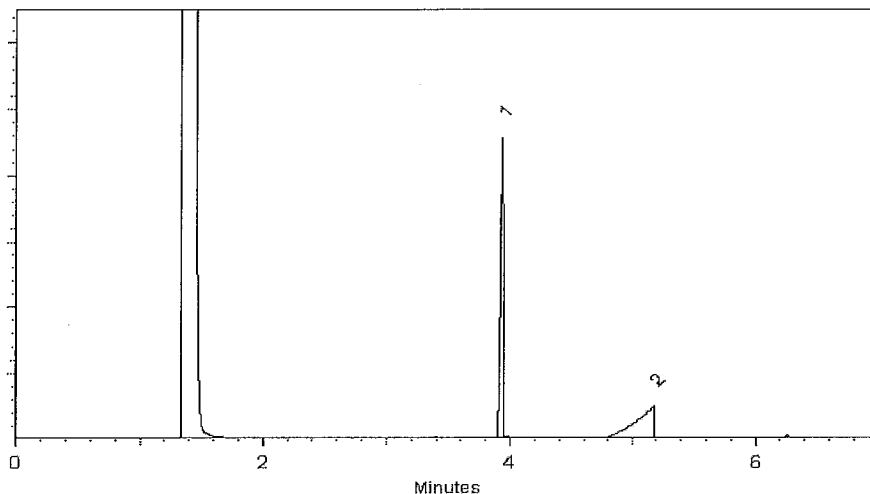
250°C

Det. Temp:

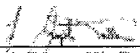
330°C

Det. Type:

FID



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


F. Joseph Tallon - Mix Technician

Date Mixed: 22-Dec-2014

Balance: 1128360905


Tyler Brown - QA Analyst

Date Passed: 29-Dec-2014

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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www.restek.com

CERTIFIED REFERENCE MATERIAL

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. : 569732 Lot No.: A0108035
Description : 8270 List 1 / Std #11
8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 5 mL Pkg Amt: > 5 mL
Expiration Date : June 30, 2016 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	Benzaldehyde CAS # 100-52-7 (Lot SHBD3510V) Purity 99%	2,000.6 µg/mL	+/- 11.6317 µg/mL Gravimetric +/- 64.1305 µg/mL Unstressed +/- 74.5493 µg/mL Stressed
2	epsilon-Caprolactam CAS # 105-60-2 (Lot I16X016) Purity 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL Gravimetric +/- 64.1498 µg/mL Unstressed +/- 74.5716 µg/mL Stressed
3	Atrazine CAS # 1912-24-9 (Lot TZ8ED) Purity 98%	2,004.3 µg/mL	+/- 11.6532 µg/mL Gravimetric +/- 64.2490 µg/mL Unstressed +/- 74.6870 µg/mL Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

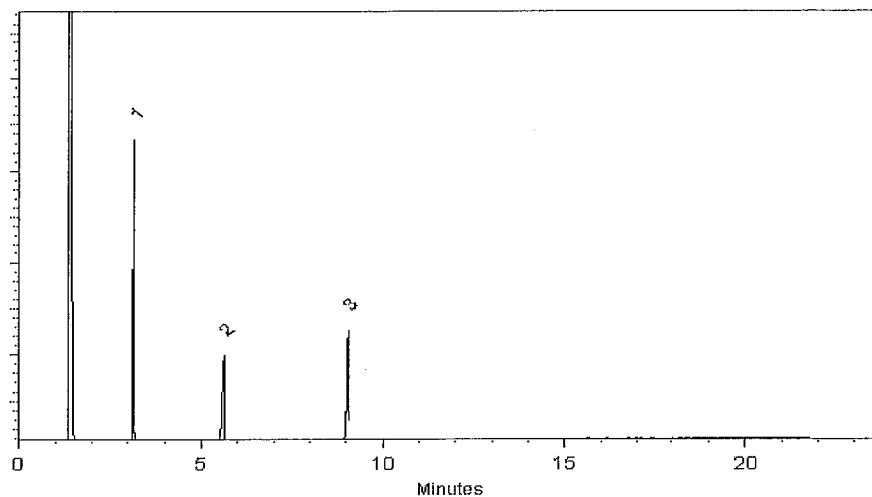
250°C

Det. Temp:

330°C

Det. Type:

FID

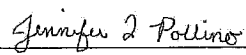


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


F. Joseph Tallon - Mix Technician

Date Mixed: 30-Dec-2014

Balance: 1128360905


Jennifer L. Pollino - QC Analyst

Date Passed: 02-Jan-2015

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Certification Summary

Client: Sundance Consulting, Inc
Project/Site: Fort Wingate, New Mexico

TestAmerica Job ID: 280-67484-2

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 8270D

Semivolatile Organic Compounds
(GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-67484-2
 SDG No.: _____
 Matrix: Water Level: Low
 GC Column (1): Vf-5MS (30.2 ID: 0.25 (mm))

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MW23042015	280-67484-5	87	85	83	83	87	52
DMW23042015	280-67484-6	75	75	76	78	82	43
	MB 280-272762/1-A	87	87	87	84	80	84
	LCS 280-272762/2-A	95	94	94	91	96	89
MW23042015 MS	280-67484-5 MS	73	75	74	77	89	72
MW23042015 MSD	280-67484-5 MSD	84	82	82	81	86	62

	<u>QC LIMITS</u>
2FP = 2-Fluorophenol (Surr)	41-135
PHL = Phenol-d5 (Surr)	46-135
NBZ = Nitrobenzene-d5 (Surr)	42-135
FBP = 2-Fluorobiphenyl	48-135
TBP = 2,4,6-Tribromophenol (Surr)	48-135
TPH = Terphenyl-d14 (Surr)	20-135

Column to be used to flag recovery values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Matrix: Water Level: Low Lab File ID: G6_17387.D
Lab ID: LCS 280-272762/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Caprolactam	80.0	72.4	90	64-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Matrix: Water Level: Low Lab File ID: G6_17401.D
Lab ID: 280-67484-5 MS Client ID: MW23042015 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Caprolactam	80.1	2.5 U	68.5	85	64-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Matrix: Water Level: Low Lab File ID: G6_17402.D
Lab ID: 280-67484-5 MSD Client ID: MW23042015 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Caprolactam	82.9	67.7	82	1	30	64-120	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Lab File ID: G6_17386.D Lab Sample ID: MB 280-272762/1-A
Matrix: Water Date Extracted: 04/09/2015 15:30
Instrument ID: SMS_G6 Date Analyzed: 04/17/2015 19:49
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-272762/2-A	G6_17387.D	04/17/2015 20:16
MW23042015	280-67484-5	G6_17400.D	04/18/2015 02:03
MW23042015 MS	280-67484-5 MS	G6_17401.D	04/18/2015 02:30
MW23042015 MSD	280-67484-5 MSD	G6_17402.D	04/18/2015 02:57
DMW23042015	280-67484-6	G6_17403.D	04/18/2015 03:24

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Lab File ID: G6_16636.D DFTPP Injection Date: 02/25/2015
Instrument ID: SMS_G6 DFTPP Injection Time: 11:44
Analysis Batch No.: 272059

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	49.7
68	Less than 2% of mass 69	0.7 (1.5)1
69	Mass 69 Relative abundance	47.6
70	Less than 2% of mass 69	0.1 (0.2)1
127	10-80% of Base Peak	56.0
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.6
275	10-60% of Base Peak	19.4
365	Greater than 1% of mass 198	2.1
441	present but less than 24% of mass 442	8.3 (14.8)2
442	Greater than 50% of mass 198	56.0
443	15-24% of mass 442	10.7 (19.0)2

1-Value is % mass 69

2-Value is % mass 442

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
	ICIS 280-272059/3	G6_16637.D	02/25/2015	11:53
	STD004 280-272059/4	G6_16638.D	02/25/2015	12:19
	STD010 280-272059/5	G6_16639.D	02/25/2015	12:46
	STD020 280-272059/6	G6_16640.D	02/25/2015	13:12
	STD050 280-272059/7	G6_16641.D	02/25/2015	13:39
	STD120 280-272059/8	G6_16642.D	02/25/2015	14:06
	STD160 280-272059/9	G6_16643.D	02/25/2015	14:32
	STD200 280-272059/10	G6_16644.D	02/25/2015	14:59
	ICV 280-272059/11	G6_16645.D	02/25/2015	15:26
	ICV 280-272059/12	G6_16646.D	02/25/2015	15:52
	ICV 280-272059/13	G6_16647.D	02/25/2015	16:19

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Lab File ID: G6_17381.D DFTPP Injection Date: 04/17/2015
Instrument ID: SMS_G6 DFTPP Injection Time: 18:00
Analysis Batch No.: 273264

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	43.4
68	Less than 2% of mass 69	0.6 (1.4) 1
69	Mass 69 Relative abundance	44.5
70	Less than 2% of mass 69	0.2 (0.5) 1
127	10-80% of Base Peak	55.4
197	Less than 2% of mass 198	0.4
198	Base peak	100.0
199	5-9% of mass 198	6.5
275	10-60% of Base Peak	19.7
365	Greater than 1% of mass 198	2.4
441	present but less than 24% of mass 442	9.0 (14.0) 2
442	Greater than 50% of mass 198	64.7
443	15-24% of mass 442	12.3 (18.9) 2

1-Value is % mass 69

2-Value is % mass 442

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 280-273264/3	G6_17382.D	04/17/2015	18:13
	CCV 280-273264/4	G6_17384.D	04/17/2015	19:02
	MB 280-272762/1-A	G6_17386.D	04/17/2015	19:49
	LCS 280-272762/2-A	G6_17387.D	04/17/2015	20:16
MW23042015	280-67484-5	G6_17400.D	04/18/2015	02:03
MW23042015 MS	280-67484-5 MS	G6_17401.D	04/18/2015	02:30
MW23042015 MSD	280-67484-5 MSD	G6_17402.D	04/18/2015	02:57
DMW23042015	280-67484-6	G6_17403.D	04/18/2015	03:24

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2
 SDG No.: _____
 Sample No.: ICIS 280-272059/3 Date Analyzed: 02/25/2015 11:53
 Instrument ID: SMS_G6 GC Column: Vf-5MS (30.25) ID: 0.25 (mm)
 Lab File ID (Standard): G6_16637.D Heated Purge: (Y/N) N
 Calibration ID: 21947

	DCB		NPT		ANT		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	187021	4.80	713420	6.02	385413	7.78	
UPPER LIMIT	374042	5.30	1426840	6.52	770826	8.28	
LOWER LIMIT	93511	4.30	356710	5.52	192707	7.28	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-272059/11		188037	4.80	718467	6.02	393887	7.78
ICV 280-272059/12		185167	4.80	715813	6.02	400054	7.78
ICV 280-272059/13		186013	4.80	710514	6.02	389552	7.78
CCV 280-273264/3		239754	4.70	925984	5.95	501846	7.70
CCV 280-273264/4		203935	4.70	761125	5.95	410168	7.70
MB 280-272762/1-A		161024	4.70	608970	5.94	332203	7.70
LCS 280-272762/2-A		152610	4.70	584545	5.95	326423	7.70
280-67484-5	MW23042015	160720	4.70	617765	5.94	340388	7.70
280-67484-5 MS	MW23042015 MS	156371	4.70	602498	5.94	336082	7.70
280-67484-5 MSD	MW23042015 MSD	165571	4.70	640419	5.94	354063	7.70
280-67484-6	DMW23042015	162542	4.70	613015	5.94	337611	7.70

DCB = 1,4-Dichlorobenzene-d4 (IS)

NPT = Naphthalene-d8 (IS)

ANT = Acenaphthene-d10 (IS)

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

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2
 SDG No.: _____
 Sample No.: ICIS 280-272059/3 Date Analyzed: 02/25/2015 11:53
 Instrument ID: SMS_G6 GC Column: Vf-5MS (30.25) ID: 0.25 (mm)
 Lab File ID (Standard): G6_16637.D Heated Purge: (Y/N) N
 Calibration ID: 21947

	PHN		CRY		PRY		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	653325	9.28	616068	13.71	532020	17.90	
UPPER LIMIT	1306650	9.78	1232136	14.21	1064040	18.40	
LOWER LIMIT	326663	8.78	308034	13.21	266010	17.40	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-272059/11		663955	9.29	625452	13.71	534138	17.91
ICV 280-272059/12		674469	9.28	649859	13.70	546537	17.90
ICV 280-272059/13		665613	9.28	633484	13.70	533431	17.90
CCV 280-273264/3		823535	9.20	728595	13.52	611014	17.64
CCV 280-273264/4		688508	9.20	627131	13.50	518371	17.63
MB 280-272762/1-A		556677	9.20	521559	13.50	435159	17.63
LCS 280-272762/2-A		549491	9.20	505539	13.50	423107	17.63
280-67484-5	MW23042015	566921	9.20	527429	13.50	446292	17.63
280-67484-5 MS	MW23042015 MS	568048	9.20	518151	13.50	435897	17.63
280-67484-5 MSD	MW23042015 MSD	599957	9.20	550615	13.50	460509	17.63
280-67484-6	DMW23042015	571709	9.20	529758	13.49	441717	17.63

PHN = Phenanthrene-d10 (IS)

CRY = Chrysene-d12 (IS)

PRY = Perylene-d12 (IS)

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

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Client Sample ID: MW23042015 Lab Sample ID: 280-67484-5
Matrix: Water Lab File ID: G6_17400.D
Analysis Method: 8270D Date Collected: 04/07/2015 09:40
Extract. Method: 3520C Date Extracted: 04/09/2015 15:30
Sample wt/vol: 1003.9(mL) Date Analyzed: 04/18/2015 02:03
Con. Extract Vol.: 1(mL) Dilution Factor: 1
Injection Volume: 0.5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 273264 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.5	U	5.0	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	87		48-135
321-60-8	2-Fluorobiphenyl	83		48-135
367-12-4	2-Fluorophenol (Surr)	87		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	83		42-135
4165-62-2	Phenol-d5 (Surr)	85		46-135
1718-51-0	Terphenyl-d14 (Surr)	52		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17400.D
 Lims ID: 280-67484-D-5-B Lab Sample ID: 280-67484-5
 Client ID: MW23042015
 Sample Type: Client
 Inject. Date: 18-Apr-2015 02:03:30 ALS Bottle#: 20 Worklist Smp#: 38
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: 280-67484-D-5-A
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 20-Apr-2015 12:00:33 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: hoeflera

Date: 18-Apr-2015 12:15:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	96	160720	40.0	
* 2 Naphthalene-d8	136	5.940	5.945	-0.005	100	617765	40.0	
* 3 Acenaphthene-d10	164	7.698	7.698	0.000	92	340388	40.0	
* 4 Phenanthrene-d10	188	9.198	9.198	0.000	97	566921	40.0	
* 5 Chrysene-d12	240	13.498	13.498	0.000	97	527429	40.0	
* 6 Perylene-d12	264	17.627	17.627	0.000	95	446292	40.0	
\$ 7 2-Fluorophenol	112	3.487	3.481	0.006	92	509542	87.2	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	625117	85.3	
\$ 9 Nitrobenzene-d5	82	5.234	5.239	-0.005	90	526000	83.0	
\$ 10 2-Fluorobiphenyl	172	6.993	6.998	-0.005	99	960200	83.4	
\$ 11 2,4,6-Tribromophenol	330	8.492	8.498	-0.006	89	110949	86.7	
\$ 12 Terphenyl-d14	244	11.222	11.233	-0.011	99	543919	51.9	
13 1,4-Dioxane	88		2.034				ND	
14 N-Nitrosodimethylamine	74		2.299				ND	
15 Pyridine	79		2.346				ND	
16 2-Picoline	93		2.987				ND	
17 N-Nitrosomethylethylamine	88		3.075				ND	
18 Methyl methanesulfonate	80		3.345				ND	
19 N-Nitrosodiethylamine	102		3.698				ND	
20 Pentachlorophenol_T	266		3.798				ND	
21 Ethyl methanesulfonate	79		3.963				ND	
22 Pentachloroethane	117		4.440				ND	
23 Phenol	94		4.340				ND	
24 Aniline	93		4.398				ND	
25 Bis(2-chloroethyl)ether	93		4.428				ND	
26 2-Chlorophenol	128		4.504				ND	
27 1,3-Dichlorobenzene	146		4.651				ND	
28 1,4-Dichlorobenzene	146		4.722				ND	
29 Benzyl alcohol	108		4.822				ND	
30 1,2-Dichlorobenzene	146		4.869				ND	
31 2-Methylphenol	108		4.910				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
32 2,2'-oxybis[1-chloropropan	45		4.928				ND	
33 N-Nitrosopyrrolidine	100		5.069				ND	
34 N-Nitrosomorpholine	116		5.098				ND	
35 Benzidine_T	184		4.975				ND	
36 2-Toluidine	106		5.116				ND	
37 Benzaldehyde	106		5.015				ND	
38 3 & 4 Methylphenol	108		5.057				ND	
39 3-Methylphenol	108		5.057				ND	
40 4-Methylphenol	108		5.057				ND	
41 N-Nitrosodi-n-propylamine	70		5.063				ND	
42 Acetophenone	105		5.081				ND	
43 Hexachloroethane	117		5.192				ND	
44 Nitrobenzene	77		5.257				ND	
45 N-Nitrosopiperidine	114		5.404				ND	
46 Isophorone	82		5.469				ND	
47 o,o',o''-Triethylphosphoro	198		5.616				ND	
48 2-Nitrophenol	139		5.563				ND	
49 2,4-Dimethylphenol	107		5.575				ND	
50 Bis(2-chloroethoxy)methane	93		5.663				ND	
51 alpha,alpha-Dimethyl phene	58		5.810				ND	
52 Benzoic acid	105		5.687				ND	
53 2,4-Dichlorophenol	162		5.792				ND	
54 1,2,4-Trichlorobenzene	180		5.881				ND	
55 2,6-Dichlorophenol	162		6.016				ND	
56 Hexachloropropene	213		6.039				ND	
57 Naphthalene	128		5.969				ND	
58 4-Chloroaniline	127		6.010				ND	
59 Hexachlorobutadiene	225		6.063				ND	
60 N-Nitrosodi-n-butylamine	84		6.304				ND	
61 p-Phenylene diamine	108		6.357				ND	
62 Caprolactam	55		6.363				ND	
63 Safrole, Total	162		6.534				ND	
64 4-Chloro-3-methylphenol	107		6.475				ND	
65 2-Methylnaphthalene	142		6.645				ND	
66 Isosafrole Peak 1	162		6.828				ND	
67 1-Methylnaphthalene	142		6.751				ND	
68 Hexachlorocyclopentadiene	237		6.792				ND	
69 1,2,4,5-Tetrachlorobenzene	216		6.816				ND	
70 2,4,6-Trichlorophenol	196		6.922				ND	
71 Isosafrole Peak 2	104		7.057				ND	
72 2,4,5-Trichlorophenol	196		6.963				ND	
73 1-Chloronaphthalene	162		7.163				ND	
74 1,1'-Biphenyl	154		7.104				ND	
75 2-Chloronaphthalene	162		7.145				ND	
76 1,4-Naphthoquinone	158		7.316				ND	
77 2-Nitroaniline	65		7.245				ND	
78 1,4-Dinitrobenzene	168		7.375				ND	
79 Dimethyl phthalate	163		7.392				ND	
80 1,3-Dinitrobenzene	168		7.451				ND	
81 2,6-Dinitrotoluene	165		7.475				ND	
82 Acenaphthylene	152		7.563				ND	
83 3-Nitroaniline	138		7.657				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
84 Acenaphthene	153		7.733				ND	
85 Pentachlorobenzene	250		7.857				ND	
86 2,4-Dinitrophenol	184		7.757				ND	
87 4-Nitrophenol	109		7.810				ND	
88 1-Naphthylamine	143		7.986				ND	
89 2,4-Dinitrotoluene	165		7.880				ND	
90 Dibenzofuran	168		7.904				ND	
91 2-Naphthylamine	143		8.063				ND	
92 2,3,4,6-Tetrachlorophenol	232		8.022				ND	
93 Thionazin	97		8.163				ND	
94 Diethyl phthalate	149		8.086				ND	
95 N-Nitro-o-toluidine	152		8.257				ND	
96 4-Chlorophenyl phenyl ethe	204		8.228				ND	
97 Diphenylamine	169		8.345				ND	
98 Fluorene	166		8.251				ND	
99 4-Nitroaniline	138		8.280				ND	
100 4,6-Dinitro-2-methylphenol	198		8.292				ND	
101 Sulfotepp	97		8.445				ND	
102 N-Nitrosodiphenylamine	169		8.351				ND	
103 Azobenzene	77		8.386				ND	
104 1,2-Diphenylhydrazine	77		8.386				ND	
105 Diallate Peak 1	86		8.604				ND	
106 1,3,5-Trinitrobenzene	213		8.610				ND	
107 Phorate	121		8.616				ND	
108 Phenacetin	108		8.639				ND	
109 Diallate Peak 2	86		8.698				ND	
110 Dimethoate	87		8.810				ND	
111 4-Bromophenyl phenyl ether	248		8.722				ND	
112 Hexachlorobenzene	284		8.804				ND	
113 4-Aminobiphenyl	169		8.992				ND	
114 Pentachloronitrobenzene	237		9.004				ND	
115 Pronamide	173		9.004				ND	
116 Pentachlorophenol	266		9.004				ND	
117 Disulfoton	88		9.139				ND	
118 Dinoseb	211		9.145				ND	
119 Phenanthrene	178		9.227				ND	
120 Anthracene	178		9.280				ND	
121 Methyl parathion	109		9.539				ND	
122 Carbazole	167		9.439				ND	
123 Di-n-butyl phthalate	149		9.733				ND	
124 Ethyl Parathion	109		9.969				ND	
125 4-Nitroquinoline-1-oxide	190		10.092				ND	
126 Methapyrilene	97		10.116				ND	
127 Isodrin	193		10.421				ND	
128 Fluoranthene	202		10.663				ND	
129 Benzidine	184		10.466				ND	
130 Aramite Peak 1	185		11.127				ND	
131 Pyrene	202		11.027				ND	
132 Aramite Peak 2	185		11.257				ND	
133 p-Dimethylamino azobenzene	120		11.474				ND	
134 Chlorobenzilate	251		11.527				ND	
135 3,3'-Dimethylbenzidine	212		12.163				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
136 Famphur	218		12.039				ND	
137 Butyl benzyl phthalate	149		12.139				ND	
138 2-Acetylaminofluorene	181		12.721				ND	
139 4,4'-Methylene bis(2-chlor	231		13.439				ND	
140 3,3'-Dichlorobenzidine	252		13.451				ND	
141 Benzo[a]anthracene	228		13.486				ND	
142 Bis(2-ethylhexyl) phthalat	149		13.480				ND	
143 Chrysene	228		13.586				ND	
144 Di-n-octyl phthalate	149		15.351				ND	
145 7,12-Dimethylbenz(a)anthra	256		16.462				ND	
146 Benzo[b]fluoranthene	252		16.486				ND	
147 Benzo[k]fluoranthene	252		16.568				ND	
148 Benzo[a]pyrene	252		17.315				ND	
149 3-Methylcholanthrene	268		18.521				ND	
150 Dibenz[a,j]acridine	279		20.321				ND	
151 Indeno[1,2,3-cd]pyrene	276		20.833				ND	
152 Dibenz(a,h)anthracene	278		20.915				ND	
153 Benzo[g,h,i]perylene	276		21.609				ND	
S 160 Aramite, Total	185		15.047				ND	
S 161 Isosafrole	162		15.047				ND	
S 162 Diallate	86		15.047				ND	
154 Total Cresols	1		0.000				ND	
155 Tetraethyl Pyrophosphate (	1		0.000				ND	
157 4,4'-DDE	246		4.981				ND	
158 4,4'-DDD	235		5.381				ND	
159 4,4'-DDT	235		5.510				ND	
S 163 Methyl Phenols, Total	1		0.000				ND	

Reagents:

MS-IS_00007

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17400.D

Injection Date: 18-Apr-2015 02:03:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: 280-67484-D-5-B

Lab Sample ID: 280-67484-5

Worklist Smp#: 38

Client ID: MW23042015

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

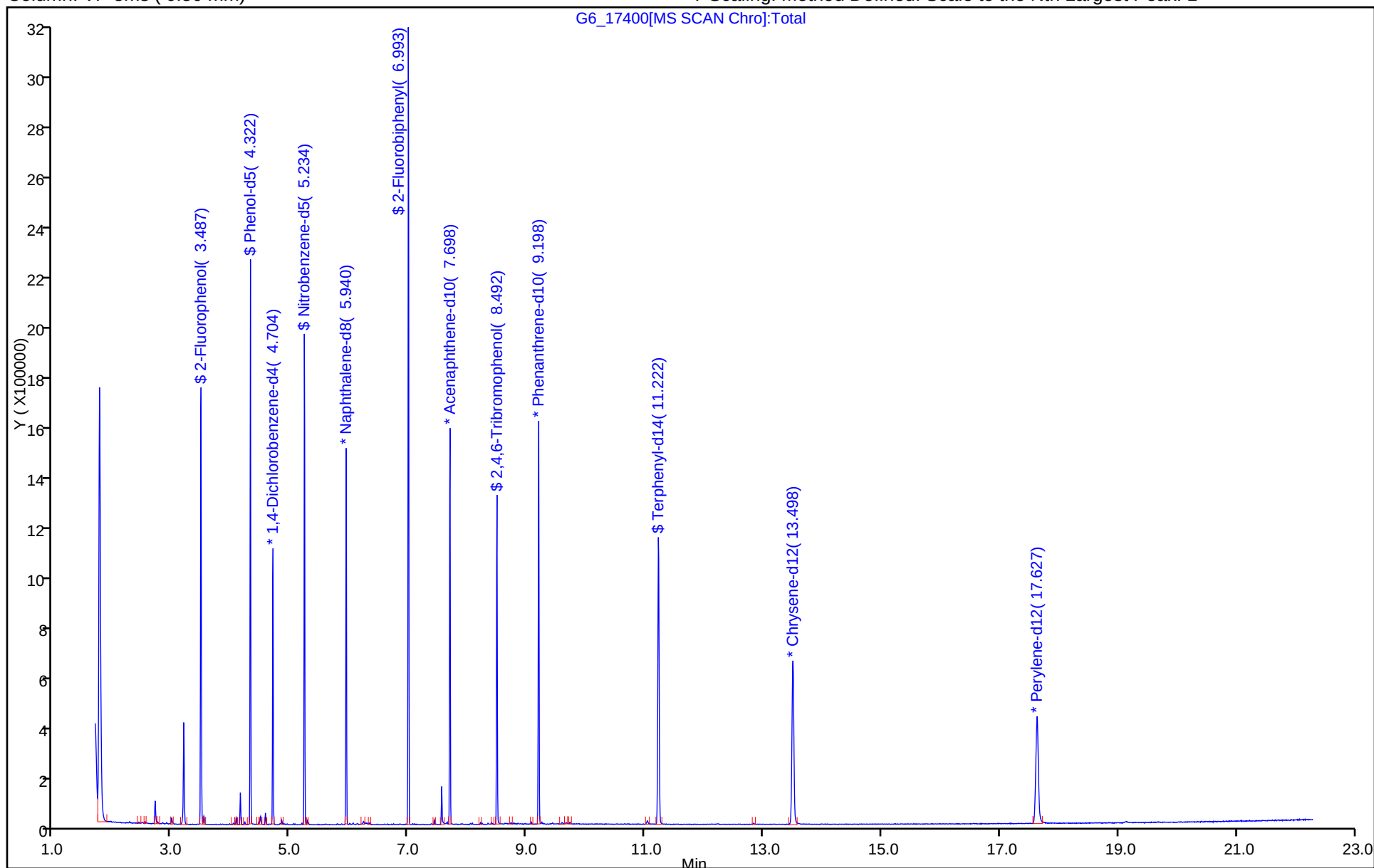
ALS Bottle#: 20

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Client Sample ID: DMW23042015 Lab Sample ID: 280-67484-6
Matrix: Water Lab File ID: G6_17403.D
Analysis Method: 8270D Date Collected: 04/07/2015 09:40
Extract. Method: 3520C Date Extracted: 04/09/2015 15:30
Sample wt/vol: 1033.3(mL) Date Analyzed: 04/18/2015 03:24
Con. Extract Vol.: 1(mL) Dilution Factor: 1
Injection Volume: 0.5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 273264 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.4	U	4.8	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	82		48-135
321-60-8	2-Fluorobiphenyl	78		48-135
367-12-4	2-Fluorophenol (Surr)	75		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	76		42-135
4165-62-2	Phenol-d5 (Surr)	75		46-135
1718-51-0	Terphenyl-d14 (Surr)	43		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17403.D
 Lims ID: 280-67484-C-6-B Lab Sample ID: 280-67484-6
 Client ID: DMW23042015
 Sample Type: Client
 Inject. Date: 18-Apr-2015 03:24:30 ALS Bottle#: 23 Worklist Smp#: 41
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: 280-67484-C-6-A
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 20-Apr-2015 12:00:33 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: hoeflera

Date: 18-Apr-2015 12:17:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	96	162542	40.0	
* 2 Naphthalene-d8	136	5.940	5.945	-0.005	100	613015	40.0	
* 3 Acenaphthene-d10	164	7.698	7.698	0.000	92	337611	40.0	
* 4 Phenanthrene-d10	188	9.198	9.198	0.000	97	571709	40.0	
* 5 Chrysene-d12	240	13.492	13.498	-0.006	96	529758	40.0	
* 6 Perylene-d12	264	17.627	17.627	0.000	95	441717	40.0	
\$ 7 2-Fluorophenol	112	3.487	3.481	0.006	92	444503	75.2	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	558015	75.3	
\$ 9 Nitrobenzene-d5	82	5.234	5.239	-0.005	91	480161	76.4	
\$ 10 2-Fluorobiphenyl	172	6.993	6.998	-0.005	99	891534	78.1	
\$ 11 2,4,6-Tribromophenol	330	8.492	8.498	-0.006	90	104478	82.3	
\$ 12 Terphenyl-d14	244	11.222	11.233	-0.011	98	452670	43.0	
26 2-Chlorophenol	128		4.504				ND	
28 1,4-Dichlorobenzene	146		4.722				ND	
31 2-Methylphenol	108		4.910				ND	
41 N-Nitrosodi-n-propylamine	70		5.063				ND	
54 1,2,4-Trichlorobenzene	180		5.881				ND	
62 Caprolactam	55		6.363				ND	
64 4-Chloro-3-methylphenol	107		6.475				ND	
65 2-Methylnaphthalene	142	6.640	6.645	-0.005	92	4001	0.3819	
70 2,4,6-Trichlorophenol	196		6.922				ND	
84 Acenaphthene	153	7.728	7.733	-0.005	94	3940	0.3923	
87 4-Nitrophenol	109		7.810				ND	
89 2,4-Dinitrotoluene	165		7.880				ND	
116 Pentachlorophenol	266		9.004				ND	
120 Anthracene	178		9.280				ND	
131 Pyrene	202		11.027				ND	

Reagents:

MS-IS_00007

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17403.D

Injection Date: 18-Apr-2015 03:24:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: 280-67484-C-6-B

Lab Sample ID: 280-67484-6

Worklist Smp#: 41

Client ID: DMW23042015

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

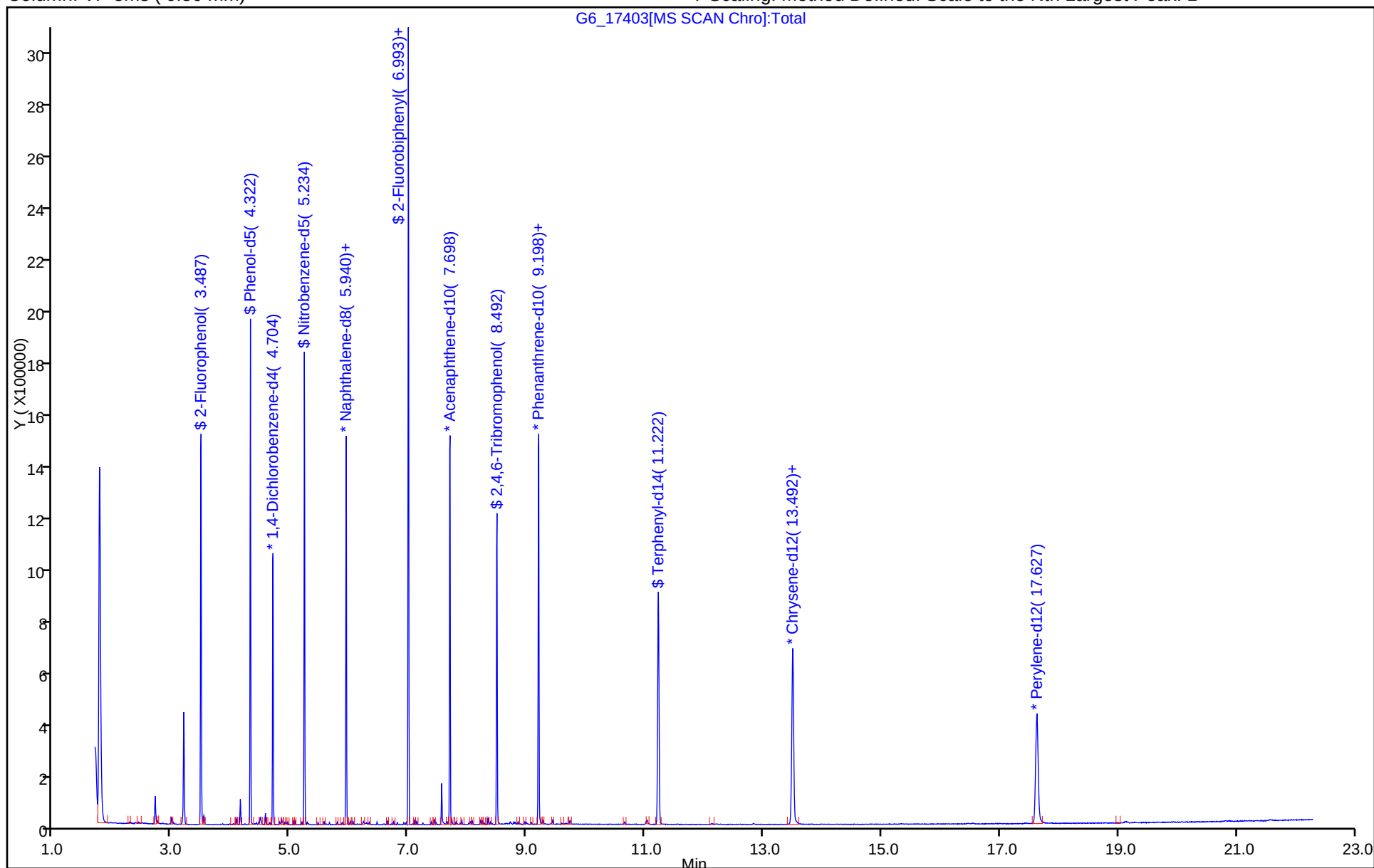
ALS Bottle#: 23

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD004 280-272059/4	G6_16638.D
Level 2	STD010 280-272059/5	G6_16639.D
Level 3	STD020 280-272059/6	G6_16640.D
Level 4	STD050 280-272059/7	G6_16641.D
Level 5	ICIS 280-272059/3	G6_16637.D
Level 6	STD120 280-272059/8	G6_16642.D
Level 7	STD160 280-272059/9	G6_16643.D
Level 8	STD200 280-272059/10	G6_16644.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
1,4-Dioxane	0.6238 0.6039	0.6479 0.5901	0.6303 0.5885	0.6040	0.6208	Ave		0.6137				3.4		20.0			
N-Nitrosodimethylamine	0.9428 0.9384	0.9324 0.9251	0.9075 0.9268	0.9449	0.9390	Ave		0.9321				1.3		20.0			
Pyridine	1.6094 1.6115	1.5930 1.5754	1.5655 1.5629	1.5930	1.6057	Ave		1.5895				1.2		20.0			
Phenol	1.8894 1.8069	1.8459 1.7739	1.8225 1.7674	1.8507	1.8678	Ave		1.8281			0.8000	2.4		20.0			
Aniline	2.3768 2.2326	2.1918 2.2254	2.1905 2.1802	2.2465	2.2323	Ave		2.2345				2.8		20.0			
Bis(2-chloroethyl)ether	1.5059 1.4502	1.4945 1.3267	1.4527 1.3207	1.4517	1.4789	Ave		1.4352			0.7000	5.0		20.0			
2-Chlorophenol	1.5378 1.4906	1.5218 1.4477	1.4794 1.4288	1.5127	1.5199	Ave		1.4924			0.8000	2.6		20.0			
1,3-Dichlorobenzene	1.5887 1.5052	1.5554 1.4508	1.5140 1.4356	1.5306	1.5345	Ave		1.5143				3.4		20.0			
1,4-Dichlorobenzene	1.5919 1.5145	1.5614 1.4693	1.5561 1.4271	1.5552	1.5637	Ave		1.5299				3.6		20.0			
Benzyl alcohol	0.9436 0.9634	0.9013 0.9386	0.9191 0.9314	0.9512	0.9727	Ave		0.9402				2.5		20.0			
1,2-Dichlorobenzene	1.5762 1.4506	1.5061 1.4020	1.4846 1.3840	1.4764	1.4904	Ave		1.4713				4.1		20.0			
2-Methylphenol	1.3905 1.3558	1.3706 1.3166	1.3493 1.3142	1.3800	1.3655	Ave		1.3553			0.7000	2.1		20.0			
bis (2-chloroisopropyl) ether	2.2287 2.1058	2.1607 2.0300	2.1132 2.0111	2.1516	2.0987	Ave		2.1125			0.0100	3.3		20.0			
3 & 4 Methylphenol	1.4380 1.4065	1.3807 1.3842	1.4127 1.3677	1.4193	1.4295	Ave		1.4048				1.8		20.0			

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

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
3-Methylphenol	1.4380 1.4065	1.3807 1.3842	1.4127 1.3677	1.4193	1.4295	Ave		1.4048				1.8		20.0			
4-Methylphenol	1.4380 1.4065	1.3807 1.3842	1.4127 1.3677	1.4193	1.4295	Ave		1.4048			0.6000	1.8		20.0			
N-Nitrosodi-n-propylamine	1.0616 1.0289	0.9941 0.9958	1.0192 0.9800	1.0472	1.0302	Ave		1.0196			0.5000	2.8		20.0			
Acetophenone	2.1078 1.9618	2.0248 1.8890	1.9599 1.8742	2.0034	1.9742	Ave		1.9744			0.0100	3.8		20.0			
Hexachloroethane	0.6768 0.6538	0.6642 0.6300	0.6557 0.6255	0.6686	0.6777	Ave		0.6565			0.3000	3.0		20.0			
Nitrobenzene	0.3952 0.4001	0.4067 0.3872	0.3929 0.3764	0.3996	0.4027	Ave		0.3951				2.4		20.0			
Isophorone	0.6745 0.6778	0.6572 0.6688	0.6649 0.6533	0.6861	0.6860	Ave		0.6711			0.4000	1.8		20.0			
2,4-Dimethylphenol	0.3673 0.3568	0.3792 0.3487	0.3639 0.3319	0.3677	0.3710	Ave		0.3608			0.2000	4.1		20.0			
2-Nitrophenol	0.2010 0.1974	0.2008 0.1901	0.1990 0.1838	0.2024	0.2008	Ave		0.1969			0.1000	3.3		20.0			
Benzoic acid	0.2283 0.3050	0.2539 0.3193	0.2690 0.3060	0.2845	0.2990	Ave		0.2831				10.9		20.0			
Bis(2-chloroethoxy)methane	0.4554 0.4368	0.4570 0.4303	0.4453 0.4126	0.4466	0.4448	Ave		0.4411			0.3000	3.3		20.0			
2,4-Dichlorophenol	0.3071 0.2979	0.2949 0.2915	0.2959 0.2808	0.2954	0.3007	Ave		0.2955			0.2000	2.6		20.0			
1,2,4-Trichlorobenzene	0.3128 0.3001	0.3066 0.2894	0.3030 0.2824	0.3061	0.3017	Ave		0.3003				3.3		20.0			
Naphthalene	1.1213 1.0599	1.0974 1.0207	1.0807 0.9865	1.0695	1.0760	Ave		1.0640			0.7000	4.0		20.0			
4-Chloroaniline	0.4969 0.4804	0.4885 0.4712	0.4771 0.4573	0.4854	0.4931	Ave		0.4813			0.0100	2.7		20.0			
Hexachlorobutadiene	0.1780 0.1621	0.1655 0.1604	0.1633 0.1522	0.1618	0.1658	Ave		0.1636			0.0100	4.4		20.0			
Caprolactam	0.1575 0.2059	0.1794 0.2017	0.1815 0.2002	0.1874	0.2000	Ave		0.1892				8.6		20.0			
4-Chloro-3-methylphenol	0.3232 0.3198	0.3181 0.3124	0.3112 0.3052	0.3170	0.3237	Ave		0.3163			0.2000	2.0		20.0			
2-Methylnaphthalene	0.7077 0.6803	0.7083 0.6577	0.6911 0.6323	0.6962	0.6952	Ave		0.6836			0.4000	3.9		20.0			
1-Methylnaphthalene	0.6652 0.6382	0.6677 0.6166	0.6544 0.5913	0.6561	0.6543	Ave		0.6430				4.1		20.0			

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

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Hexachlorocyclopentadiene	0.2947 0.3198	0.2965 0.3184	0.3107 0.3146	0.3234	0.3361	Ave		0.3143			0.0500	4.4		20.0			
1,2,4,5-Tetrachlorobenzene	0.2970 0.2796	0.2871 0.2748	0.2894 0.2692	0.2921	0.2876	Ave		0.2846			0.0100	3.3		20.0			
2,4,6-Trichlorophenol	0.3657 0.3545	0.3558 0.3520	0.3604 0.3446	0.3676	0.3727	Ave		0.3592			0.2000	2.6		20.0			
2,4,5-Trichlorophenol	0.3946 0.3800	0.3801 0.3716	0.3848 0.3684	0.3863	0.3949	Ave		0.3826			0.2000	2.5		20.0			
1,1'-Biphenyl	1.5894 1.4447	1.5563 1.4388	1.5496 1.3861	1.5342	1.5450	Ave		1.5055				4.8		20.0			
2-Chloronaphthalene	1.1700 1.1082	1.1772 1.0827	1.1682 1.0515	1.1586	1.1648	Ave		1.1352			0.8000	4.2		20.0			
2-Nitroaniline	0.3890 0.4212	0.4091 0.4207	0.4239 0.4111	0.4270	0.4327	Ave		0.4168			0.0100	3.3		20.0			
Dimethyl phthalate	1.5586 1.2704	1.3548 1.2539	1.3221 1.2346	1.3203	1.3386	Ave		1.3317			0.0100	7.6		20.0			
1,3-Dinitrobenzene	0.1942 0.2516	0.2110 0.2498	0.2336 0.2509	0.2438	0.2549	Ave		0.2362				9.4		20.0			
2,6-Dinitrotoluene	0.2960 0.3045	0.2992 0.3071	0.3210 0.3014	0.3137	0.3193	Ave		0.3078			0.2000	3.0		20.0			
Acenaphthylene	1.8624 1.8257	1.8627 1.7954	1.8590 1.7480	1.8945	1.8979	Ave		1.8432			0.9000	2.8		20.0			
3-Nitroaniline	0.3671 0.3971	0.3907 0.4035	0.3969 0.4015	0.4156	0.4117	Ave		0.3980			0.0100	3.7		20.0			
Acenaphthene	1.2405 1.1570	1.2286 1.1392	1.2217 1.0937	1.2241	1.2147	Ave		1.1899			0.9000	4.5		20.0			
2,4-Dinitrophenol	0.1476 0.2290	0.1713 0.2290	0.2002 0.2287	0.2216	0.2288	Lin2	-0.709	0.2271			0.0100				0.9980		0.9900
4-Nitrophenol	0.2212 0.2119	0.2128 0.2099	0.2124 0.2061	0.2174	0.2247	Ave		0.2146			0.0100	2.8		20.0			
2,4-Dinitrotoluene	0.3711 0.4093	0.3874 0.4073	0.4097 0.4040	0.4194	0.4204	Ave		0.4036			0.2000	4.1		20.0			
Dibenzofuran	1.7496 1.6359	1.7143 1.6052	1.7150 1.5494	1.7178	1.7204	Ave		1.6760			0.8000	4.2		20.0			
2,3,4,6-Tetrachlorophenol	0.2847 0.3155	0.3085 0.3095	0.3060 0.3115	0.3205	0.3251	Ave		0.3102			0.0100	3.9		20.0			
Diethyl phthalate	1.4120 1.3118	1.3980 1.2889	1.4006 1.2647	1.3831	1.3855	Ave		1.3556			0.0100	4.3		20.0			
4-Chlorophenyl phenyl ether	0.6326 0.5864	0.6274 0.5832	0.6207 0.5690	0.6193	0.6132	Ave		0.6065			0.4000	3.9		20.0			

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

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Fluorene	1.4028 1.3292	1.4196 1.2961	1.4070 1.2662	1.4084	1.3789	Ave		1.3635			0.9000	4.3		20.0			
4-Nitroaniline	0.3747 0.3850	0.3884 0.3879	0.3917 0.3738	0.4022	0.4094	Ave		0.3891			0.0100	3.2		20.0			
4,6-Dinitro-2-methylphenol	0.1138 0.1466	0.1344 0.1468	0.1430 0.1444	0.1507	0.1524	Ave		0.1415			0.0100	8.8		20.0			
N-Nitrosodiphenylamine	0.6054 0.5842	0.6159 0.5651	0.6141 0.5562	0.6024	0.5971	Ave		0.5925			0.0100	3.7		20.0			
1,2-Diphenylhydrazine (as Azobenzene)	1.5351 1.4624	1.4890 1.4353	1.4994 1.4075	1.5191	1.5093	Ave		1.4821				3.0		20.0			
Azobenzene	1.5519 1.4785	1.5054 1.4510	1.5159 1.4229	1.5357	1.5259	Ave		1.4984				3.0		20.0			
4-Bromophenyl phenyl ether	0.1791 0.1876	0.1939 0.1840	0.1898 0.1803	0.1924	0.1923	Ave		0.1874			0.1000	3.0		20.0			
Hexachlorobenzene	0.1990 0.1896	0.1977 0.1875	0.2002 0.1880	0.1991	0.1965	Ave		0.1947			0.1000	2.8		20.0			
Pentachlorophenol	0.1133 0.1315	0.1202 0.1292	0.1285 0.1296	0.1356	0.1360	Ave		0.1280			0.0500	6.0		20.0			
Phenanthrene	1.1647 1.0730	1.1605 1.0522	1.1306 1.0273	1.1385	1.1283	Ave		1.1094			0.7000	4.7		20.0			
Anthracene	1.1822 1.1094	1.1766 1.0889	1.1645 1.0583	1.1597	1.1547	Ave		1.1368			0.7000	4.0		20.0			
Carbazole	1.1800 1.1376	1.1904 1.1151	1.1973 1.0890	1.1840	1.1774	Ave		1.1589			0.0100	3.4		20.0			
Di-n-butyl phthalate	1.3294 1.3535	1.3595 1.3335	1.3832 1.3196	1.4207	1.4049	Ave		1.3630			0.0100	2.7		20.0			
Fluoranthene	1.2052 1.1977	1.2468 1.1836	1.2384 1.1659	1.2350	1.2483	Ave		1.2151			0.6000	2.6		20.0			
Pyrene	1.3471 1.3422	1.3443 1.3128	1.3236 1.2915	1.3549	1.3687	Ave		1.3356			0.6000	1.9		20.0			
Famphur	0.4275 0.4189	0.4372 0.3872	0.4432 0.3507	0.4559	0.4518	Ave		0.4215				8.5		20.0			
Butyl benzyl phthalate	0.5480 0.6654	0.5938 0.6573	0.6115 0.6497	0.6472	0.6721	Ave		0.6306			0.0100	6.8		20.0			
3,3'-Dichlorobenzidine	0.3550 0.4127	0.3739 0.4060	0.3796 0.3966	0.4110	0.4275	Ave		0.3953			0.0100	6.1		20.0			
Bis(2-ethylhexyl) phthalate	0.7171 0.8671	0.7740 0.8474	0.7980 0.8287	0.8610	0.8965	Ave		0.8237			0.0100	7.1		20.0			
Benzo[a]anthracene	1.1704 1.1473	1.1594 1.1299	1.1437 1.1089	1.1663	1.1712	Ave		1.1496			0.8000	1.9		20.0			

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

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Chrysene	1.0715 1.0812	1.0706 1.0677	1.0653 1.0532	1.0881	1.0910	Ave		1.0736			0.7000	1.2		20.0			
Di-n-octyl phthalate	0.9715 1.5292	1.1522 1.5274	1.2430 1.5267	1.4190	1.5392	Lin2	-2.366	1.4972			0.0100				0.9960		0.9900
Benzo[b]fluoranthene	1.0676 1.1983	1.1421 1.2214	1.1629 1.1805	1.1650	1.2102	Ave		1.1685			0.7000	4.2		20.0			
Benzo[k]fluoranthene	1.1189 1.2408	1.0998 1.2306	1.1683 1.2469	1.2353	1.2599	Ave		1.2001			0.7000	5.2		20.0			
Benzo[a]pyrene	0.9584 1.1859	1.0416 1.1888	1.0918 1.1801	1.1657	1.1745	Ave		1.1233			0.7000	7.6		20.0			
Indeno[1,2,3-cd]pyrene	0.7186 0.8643	0.7610 0.8576	0.7749 0.8581	0.8305	0.8680	Ave		0.8166			0.5000	7.0		20.0			
Dibenz(a,h)anthracene	0.7853 0.9916	0.8077 0.9941	0.9011 0.9801	0.9711	0.9998	Ave		0.9288			0.4000	9.4		20.0			
Benzo[g,h,i]perylene	0.9134 1.0580	0.9613 1.0482	0.9725 1.0450	1.0270	1.0597	Ave		1.0106			0.5000	5.4		20.0			
2-Fluorophenol (Surr)	1.4984 1.4619	1.4670 1.4249	1.4461 1.4139	1.4548	1.4680	Ave		1.4544				1.8		20.0			
Phenol-d5 (Surr)	1.8890 1.8249	1.7818 1.7845	1.8331 1.7781	1.8364	1.8548	Ave		1.8228				2.2		20.0			
Nitrobenzene-d5 (Surr)	0.4132 0.4157	0.4145 0.4054	0.4052 0.3934	0.4128	0.4209	Ave		0.4101				2.1		20.0			
2-Fluorobiphenyl	1.4249 1.3139	1.3935 1.2755	1.3897 1.2507	1.3777	1.3915	Ave		1.3522				4.7		20.0			
2,4,6-Tribromophenol (Surr)	0.1405 0.1566	0.1391 0.1540	0.1478 0.1563	0.1539	0.1551	Ave		0.1504				4.7		20.0			
Terphenyl-d14 (Surr)	0.7894 0.7962	0.8165 0.7812	0.7915 0.7699	0.8063	0.8080	Ave		0.7949				1.9		20.0			

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

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD004 280-272059/4	G6_16638.D
Level 2	STD010 280-272059/5	G6_16639.D
Level 3	STD020 280-272059/6	G6_16640.D
Level 4	STD050 280-272059/7	G6_16641.D
Level 5	ICIS 280-272059/3	G6_16637.D
Level 6	STD120 280-272059/8	G6_16642.D
Level 7	STD160 280-272059/9	G6_16643.D
Level 8	STD200 280-272059/10	G6_16644.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	11382 333966	29946 439534	59534 558095	142371	232210	4.00 120	10.0 160	20.0 200	50.0	80.0
N-Nitrosodimethylamine	DCB	Ave	17202 518985	43094 689099	85710 878936	222746	351228	4.00 120	10.0 160	20.0 200	50.0	80.0
Pyridine	DCB	Ave	29364 891222	73629 1173437	147856 1482135	375517	600581	4.00 120	10.0 160	20.0 200	50.0	80.0
Phenol	DCB	Ave	34473 999282	85314 1321311	172136 1676043	436251	698622	4.00 120	10.0 160	20.0 200	50.0	80.0
Aniline	DCB	Ave	43366 1234749	101304 1657573	206891 2067510	529556	834965	4.00 120	10.0 160	20.0 200	50.0	80.0
Bis(2-chloroethyl)ether	DCB	Ave	27476 802000	69073 988186	137208 1252467	342205	553186	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Chlorophenol	DCB	Ave	28058 824383	70338 1078332	139729 1354936	356590	568507	4.00 120	10.0 160	20.0 200	50.0	80.0
1,3-Dichlorobenzene	DCB	Ave	28987 832464	71887 1080606	142995 1361408	360797	573965	4.00 120	10.0 160	20.0 200	50.0	80.0
1,4-Dichlorobenzene	DCB	Ave	29045 837561	72168 1094435	146967 1353318	366601	584889	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzyl alcohol	DCB	Ave	17216 532820	41657 699135	86805 883290	224224	363847	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2-Dichlorobenzene	DCB	Ave	28758 802221	69610 1044311	140215 1312433	348029	557476	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Methylphenol	DCB	Ave	25371 749809	63348 980672	127434 1246269	325292	510773	4.00 120	10.0 160	20.0 200	50.0	80.0
bis (2-chloroisopropyl) ether	DCB	Ave	40664 1164573	99866 1512052	199591 1907157	507190	785020	4.00 120	10.0 160	20.0 200	50.0	80.0
3 & 4 Methylphenol	DCB	Ave	26237 777835	63816 1031059	133429 1296981	334564	534702	4.00 120	10.0 160	20.0 200	50.0	80.0
3-Methylphenol	DCB	Ave	26237 777835	63816 1031059	133429 1296981	334564	534702	4.00 120	10.0 160	20.0 200	50.0	80.0

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
4-Methylphenol	DCB	Ave	26237 777835	63816 1031059	133429 1296981	334564	534702	4.00 120	10.0 160	20.0 200	50.0	80.0
N-Nitrosodi-n-propylamine	DCB	Ave	19369 569051	45947 741748	96259 929339	246852	385350	4.00 120	10.0 160	20.0 200	50.0	80.0
Acetophenone	DCB	Ave	38458 1084969	93583 1407057	185111 1777329	472247	738421	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachloroethane	DCB	Ave	12349 361563	30699 469286	61931 593205	157602	253482	4.00 120	10.0 160	20.0 200	50.0	80.0
Nitrobenzene	NPT	Ave	27855 842823	71302 1089690	141833 1376078	365089	574579	4.00 120	10.0 160	20.0 200	50.0	80.0
Isophorone	NPT	Ave	47544 1427939	115206 1881926	240037 2388530	626824	978816	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4-Dimethylphenol	NPT	Ave	25893 751706	66475 981303	131383 1213524	335864	529293	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Nitrophenol	NPT	Ave	14166 415910	35195 534875	71833 672106	184945	286572	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzoic acid	NPT	Ave	32187 1285043	89023 1796945	194250 2237473	519854	853321	8.00 240	20.0 320	40.0 400	100	160
Bis (2-chloroethoxy)methane	NPT	Ave	32100 920059	80123 1210771	160771 1508491	407948	634640	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4-Dichlorophenol	NPT	Ave	21647 627452	51694 820144	106817 1026716	269879	429047	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2,4-Trichlorobenzene	NPT	Ave	22051 632193	53749 814451	109397 1032581	279647	430534	4.00 120	10.0 160	20.0 200	50.0	80.0
Naphthalene	NPT	Ave	79041 2232749	192392 2872188	390163 3606766	977042	1535294	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Chloroaniline	NPT	Ave	35029 1011967	85639 1326050	172259 1671870	443432	703626	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachlorobutadiene	NPT	Ave	12544 341381	29013 451504	58938 556376	147770	236535	4.00 120	10.0 160	20.0 200	50.0	80.0
Caprolactam	NPT	Ave	11099 433839	31448 567672	65538 732007	171197	285328	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Chloro-3-methylphenol	NPT	Ave	22782 673785	55761 879210	112366 1115868	289585	461868	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Methylnaphthalene	NPT	Ave	49887 1433043	124165 1850886	249498 2311519	636017	991995	4.00 120	10.0 160	20.0 200	50.0	80.0
1-Methylnaphthalene	NPT	Ave	46889 1344403	117053 1735161	236260 2161606	599383	933568	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachlorocyclopentadiene	ANT	Ave	11449 376192	28473 489123	60610 621756	159056	259090	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2,4,5-Tetrachlorobenzene	NPT	Ave	20934 588950	50324 773416	104495 984311	266816	410334	4.00 120	10.0 160	20.0 200	50.0	80.0

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,4,6-Trichlorophenol	ANT	Ave	14208 416933	34170 540716	70312 681085	180797	287284	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4,5-Trichlorophenol	ANT	Ave	15333 446976	36506 570902	75074 728184	189993	304384	4.00 120	10.0 160	20.0 200	50.0	80.0
1,1'-Biphenyl	ANT	Ave	61753 1699215	149463 2210281	302324 2739578	754596	1190895	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Chloronaphthalene	ANT	Ave	45458 1303430	113058 1663115	227907 2078262	569839	897878	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Nitroaniline	ANT	Ave	15113 495382	39287 646189	82700 812592	210036	333520	4.00 120	10.0 160	20.0 200	50.0	80.0
Dimethyl phthalate	ANT	Ave	60554 1494143	130115 1926232	257927 2440056	649391	1031864	4.00 120	10.0 160	20.0 200	50.0	80.0
1,3-Dinitrobenzene	ANT	Ave	7547 295917	20263 383728	45571 495821	119893	196521	4.00 120	10.0 160	20.0 200	50.0	80.0
2,6-Dinitrotoluene	ANT	Ave	11500 358122	28732 471768	62625 595647	154313	246140	4.00 120	10.0 160	20.0 200	50.0	80.0
Acenaphthylene	ANT	Ave	72357 2147354	178896 2757941	362680 3454854	931810	1462928	4.00 120	10.0 160	20.0 200	50.0	80.0
3-Nitroaniline	ANT	Ave	14261 467084	37522 619865	77435 793558	204409	317373	4.00 120	10.0 160	20.0 200	50.0	80.0
Acenaphthene	ANT	Ave	48195 1360779	117997 1750014	238340 2161568	602051	936356	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4-Dinitrophenol	ANT	Lin2	11473 538794	32905 703654	78117 903939	217993	352771	8.00 240	20.0 320	40.0 400	100	160
4-Nitrophenol	ANT	Ave	17189 498510	40880 644961	82891 814776	213891	346346	8.00 240	20.0 320	40.0 400	100	160
2,4-Dinitrotoluene	ANT	Ave	14418 481458	37208 625683	79927 798404	206301	324018	4.00 120	10.0 160	20.0 200	50.0	80.0
Dibenzofuran	ANT	Ave	67976 1924090	164638 2465817	334583 3062264	844896	1326145	4.00 120	10.0 160	20.0 200	50.0	80.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	11063 371083	29631 475470	59694 615581	157611	250593	4.00 120	10.0 160	20.0 200	50.0	80.0
Diethyl phthalate	ANT	Ave	54858 1542842	134263 1980010	273258 2499587	680249	1067965	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Chlorophenyl phenyl ether	ANT	Ave	24578 689660	60258 895954	121088 1124576	304597	472676	4.00 120	10.0 160	20.0 200	50.0	80.0
Fluorene	ANT	Ave	54503 1563412	136339 1991029	274499 2502594	692688	1062927	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Nitroaniline	ANT	Ave	14556 452856	37301 595856	76419 738699	197830	315582	4.00 120	10.0 160	20.0 200	50.0	80.0
4,6-Dinitro-2-methylphenol	PHN	Ave	14971 578792	43031 761080	93754 958230	249423	398341	8.00 240	20.0 320	40.0 400	100	160

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
N-Nitrosodiphenylamine	PHN	Ave	39816 1152861	98599 1464837	201342 1845140	498390	780136	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2-Diphenylhydrazine (as Azobenzene)	ANT	Ave	60296 1738928	144575 2228985	295740 2812289	755331	1176176	4.04 121	10.1 162	20.2 202	50.5	80.9
Azobenzene	ANT	Ave	60296 1738928	144575 2228985	295740 2812289	755331	1176176	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Bromophenyl phenyl ether	PHN	Ave	11781 370159	31038 477097	62227 598149	159165	251254	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachlorobenzene	PHN	Ave	13090 374109	31646 486080	65622 623678	164764	256694	4.00 120	10.0 160	20.0 200	50.0	80.0
Pentachlorophenol	PHN	Ave	14903 519082	38486 669774	84234 859647	224380	355328	8.00 240	20.0 320	40.0 400	100	160
Phenanthrene	PHN	Ave	76605 2117512	185797 2727512	370680 3407975	941975	1474345	4.00 120	10.0 160	20.0 200	50.0	80.0
Anthracene	PHN	Ave	77754 2189501	188375 2822765	381794 3510820	959498	1508829	4.00 120	10.0 160	20.0 200	50.0	80.0
Carbazole	PHN	Ave	77606 2245142	190570 2890531	392545 3612710	979659	1538487	4.00 120	10.0 160	20.0 200	50.0	80.0
Di-n-butyl phthalate	PHN	Ave	87433 2671086	217656 3456767	453491 4377647	1175500	1835676	4.00 120	10.0 160	20.0 200	50.0	80.0
Fluoranthene	PHN	Ave	79265 2363681	199608 3068105	405997 3867766	1021800	1631054	4.00 120	10.0 160	20.0 200	50.0	80.0
Pyrene	CRY	Ave	85070 2459885	206008 3191260	418438 4045386	1068582	1686444	4.00 120	10.0 160	20.0 200	50.0	80.0
Famphur	CRY	Ave	26998 767713	66995 941175	140106 1098625	359540	556669	4.00 120	10.0 160	20.0 200	50.0	80.0
Butyl benzyl phthalate	CRY	Ave	34606 1219463	91001 1597755	193326 2035238	510447	828145	4.00 120	10.0 160	20.0 200	50.0	80.0
3,3'-Dichlorobenzidine	CRY	Ave	22416 756387	57301 987057	120010 1242385	324147	526780	4.00 120	10.0 160	20.0 200	50.0	80.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	45285 1589107	118615 2060022	252271 2595812	679050	1104576	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[a]anthracene	CRY	Ave	73908 2102748	177675 2746652	361571 3473559	919851	1443039	4.00 120	10.0 160	20.0 200	50.0	80.0
Chrysene	CRY	Ave	67664 1981581	164066 2595420	336779 3298874	858164	1344205	4.00 120	10.0 160	20.0 200	50.0	80.0
Di-n-octyl phthalate	CRY	Lin2	61347 2802646	176570 3712823	392967 4782051	1119188	1896507	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[b]fluoranthene	PRY	Ave	57364 1901054	151541 2549534	312315 3151061	791973	1287729	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[k]fluoranthene	PRY	Ave	60118 1968536	145931 2568840	313777 3328296	839735	1340597	4.00 120	10.0 160	20.0 200	50.0	80.0

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

Lab Name: TestAmerica Denver Job No.: 280-67484-2 Analy Batch No.: 272059

SDG No.: _____

Instrument ID: SMS_G6 GC Column: Vf-5MS (30.2 ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 02/25/2015 11:53 Calibration End Date: 02/25/2015 14:59 Calibration ID: 21947

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzo[a]pyrene	PRY	Ave	51493 1881464	138204 2481467	293226 3149998	792402	1249715	4.00 120	10.0 160	20.0 200	50.0	80.0
Indeno[1,2,3-cd]pyrene	CRY	Ave	45380 1584058	116621 2084773	244980 2687797	654992	1069526	4.00 120	10.0 160	20.0 200	50.0	80.0
Dibenz(a,h)anthracene	PRY	Ave	42195 1573114	107166 2075077	242009 2616064	660134	1063872	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[g,h,i]perylene	PRY	Ave	49079 1678491	127555 2188108	261176 2789274	698128	1127580	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Fluorophenol (Surr)	DCB	Ave	27340 808477	67803 1061373	136584 1340808	342921	549103	4.00 120	10.0 160	20.0 200	50.0	80.0
Phenol-d5 (Surr)	DCB	Ave	34467 1009270	82351 1329218	173137 1686187	432891	693790	4.00 120	10.0 160	20.0 200	50.0	80.0
Nitrobenzene-d5 (Surr)	NPT	Ave	29128 875604	72669 1140831	146288 1438315	377126	600607	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Fluorobiphenyl	ANT	Ave	55360 1545378	133834 1959377	271127 2471944	677613	1072615	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	5458 184203	13361 236631	28834 308954	75692	119592	4.00 120	10.0 160	20.0 200	50.0	80.0
Terphenyl-d14 (Surr)	CRY	Ave	49847 1459232	125136 1898972	250222 2411505	635940	995559	4.00 120	10.0 160	20.0 200	50.0	80.0

Curve Type Legend:

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

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16637.D
 Lims ID: ICIS HSL
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 25-Feb-2015 11:53:30 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: ICIS HSL
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:37 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: kiekeld

Date: 10-Apr-2015 08:10:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	96	187021	40.0	40.0	
* 2 Naphthalene-d8	136	6.022	6.022	0.000	100	713420	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	92	385413	40.0	40.0	
* 4 Phenanthrene-d10	188	9.280	9.280	0.000	97	653325	40.0	40.0	
* 5 Chrysene-d12	240	13.710	13.710	0.000	96	616068	40.0	40.0	
* 6 Perylene-d12	264	17.903	17.903	0.000	95	532020	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.622	3.622	0.000	94	549103	80.0	80.8	
\$ 8 Phenol-d5	99	4.410	4.410	0.000	98	693790	80.0	81.4	
\$ 9 Nitrobenzene-d5	82	5.322	5.322	0.000	91	600607	80.0	82.1	
\$ 10 2-Fluorobiphenyl	172	7.069	7.069	0.000	100	1072615	80.0	82.3	
\$ 11 2,4,6-Tribromophenol	330	8.575	8.575	0.000	88	119592	80.0	82.5	
\$ 12 Terphenyl-d14	244	11.369	11.369	0.000	98	995559	80.0	81.3	
13 1,4-Dioxane	88	2.352	2.352	0.000	98	232210	80.0	80.9	
14 N-Nitrosodimethylamine	74	2.581	2.581	0.000	90	351228	80.0	80.6	
15 Pyridine	79	2.622	2.622	0.000	91	600581	80.0	80.8	
23 Phenol	94	4.422	4.422	0.000	99	698622	80.0	81.7	
24 Aniline	93	4.498	4.498	0.000	98	834965	80.0	79.9	
25 Bis(2-chloroethyl)ether	93	4.528	4.528	0.000	90	553186	80.0	82.4	
26 2-Chlorophenol	128	4.604	4.604	0.000	97	568507	80.0	81.5	
27 1,3-Dichlorobenzene	146	4.751	4.751	0.000	97	573965	80.0	81.1	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	93	584889	80.0	81.8	
29 Benzyl alcohol	108	4.904	4.904	0.000	93	363847	80.0	82.8	
30 1,2-Dichlorobenzene	146	4.963	4.963	0.000	96	557476	80.0	81.0	
31 2-Methylphenol	108	4.981	4.981	0.000	96	510773	80.0	80.6	
32 2,2'-oxybis[1-chloropropan	45	5.010	5.010	0.000	93	785020	80.0	79.5	
38 3 & 4 Methylphenol	108	5.128	5.128	0.000	98	534702	80.0	81.4	
39 3-Methylphenol	108	5.128	5.128	0.000	98	534702	80.0	81.4	
40 4-Methylphenol	108	5.128	5.128	0.000	93	534702	80.0	81.4	
41 N-Nitrosodi-n-propylamine	70	5.145	5.145	0.000	90	385350	80.0	80.8	
42 Acetophenone	105	5.163	5.163	0.000	96	738421	80.0	80.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	96	253482	80.0	82.6	
44 Nitrobenzene	77	5.340	5.340	0.000	91	574579	80.0	81.5	
46 Isophorone	82	5.545	5.545	0.000	99	978816	80.0	81.8	
48 2-Nitrophenol	139	5.645	5.645	0.000	93	286572	80.0	81.6	
49 2,4-Dimethylphenol	107	5.640	5.640	0.000	92	529293	80.0	82.2	
50 Bis(2-chloroethoxy)methane	93	5.734	5.734	0.000	98	634640	80.0	80.7	
52 Benzoic acid	105	5.728	5.728	0.000	90	853321	160.0	169.0	
53 2,4-Dichlorophenol	162	5.863	5.863	0.000	96	429047	80.0	81.4	
54 1,2,4-Trichlorobenzene	180	5.951	5.951	0.000	94	430534	80.0	80.4	
57 Naphthalene	128	6.040	6.040	0.000	98	1535294	80.0	80.9	
58 4-Chloroaniline	127	6.081	6.081	0.000	96	703626	80.0	82.0	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	97	236535	80.0	81.1	
62 Caprolactam	55	6.428	6.428	0.000	78	285328	80.0	84.6	M
64 4-Chloro-3-methylphenol	107	6.528	6.528	0.000	97	461868	80.0	81.9	
65 2-Methylnaphthalene	142	6.716	6.716	0.000	93	991995	80.0	81.4	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	94	933568	80.0	81.4	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	97	259090	80.0	85.6	
69 1,2,4,5-Tetrachlorobenzene	216	6.887	6.887	0.000	98	410334	80.0	80.8	
70 2,4,6-Trichlorophenol	196	6.992	6.992	0.000	95	287284	80.0	83.0	
72 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	93	304384	80.0	82.6	
74 1,1'-Biphenyl	154	7.181	7.181	0.000	95	1190895	80.0	82.1	
75 2-Chloronaphthalene	162	7.216	7.216	0.000	97	897878	80.0	82.1	
77 2-Nitroaniline	65	7.316	7.316	0.000	84	333520	80.0	83.0	
79 Dimethyl phthalate	163	7.463	7.463	0.000	98	1031864	80.0	80.4	
80 1,3-Dinitrobenzene	168	7.528	7.528	0.000	84	196521	80.0	86.3	
81 2,6-Dinitrotoluene	165	7.545	7.545	0.000	93	246140	80.0	83.0	
82 Acenaphthylene	152	7.639	7.639	0.000	99	1462928	80.0	82.4	
83 3-Nitroaniline	138	7.728	7.728	0.000	94	317373	80.0	82.8	
84 Acenaphthene	153	7.810	7.810	0.000	96	936356	80.0	81.7	
86 2,4-Dinitrophenol	184	7.828	7.828	0.000	84	352771	160.0	164.4	
87 4-Nitrophenol	109	7.869	7.869	0.000	95	346346	160.0	167.5	
89 2,4-Dinitrotoluene	165	7.951	7.951	0.000	91	324018	80.0	83.3	
90 Dibenzofuran	168	7.981	7.981	0.000	97	1326145	80.0	82.1	
92 2,3,4,6-Tetrachlorophenol	232	8.092	8.092	0.000	77	250593	80.0	83.9	
94 Diethyl phthalate	149	8.157	8.157	0.000	98	1067965	80.0	81.8	
96 4-Chlorophenyl phenyl ethe	204	8.298	8.298	0.000	97	472676	80.0	80.9	
98 Fluorene	166	8.328	8.328	0.000	95	1062927	80.0	80.9	
99 4-Nitroaniline	138	8.357	8.357	0.000	85	315582	80.0	84.2	
100 4,6-Dinitro-2-methylphenol	198	8.363	8.363	0.000	85	398341	160.0	172.3	
102 N-Nitrosodiphenylamine	169	8.422	8.422	0.000	63	780136	80.0	80.6	
103 Azobenzene	77	8.463	8.463	0.000	99	1176176	80.0	81.5	
104 1,2-Diphenylhydrazine	77	8.463	8.463	0.000	100	1176176	80.9	82.4	
111 4-Bromophenyl phenyl ether	248	8.798	8.798	0.000	72	251254	80.0	82.1	
112 Hexachlorobenzene	284	8.881	8.881	0.000	92	256694	80.0	80.7	
116 Pentachlorophenol	266	9.080	9.080	0.000	91	355328	160.0	170.0	
119 Phenanthrene	178	9.310	9.310	0.000	98	1474345	80.0	81.4	
120 Anthracene	178	9.357	9.357	0.000	98	1508829	80.0	81.3	
122 Carbazole	167	9.522	9.522	0.000	96	1538487	80.0	81.3	
123 Di-n-butyl phthalate	149	9.822	9.822	0.000	100	1835676	80.0	82.5	
128 Fluoranthene	202	10.786	10.786	0.000	98	1631054	80.0	82.2	
131 Pyrene	202	11.157	11.157	0.000	97	1686444	80.0	82.0	
136 Famphur	218	12.198	12.198	0.000	96	556669	80.0	85.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.298	12.298	0.000	98	828145	80.0	85.3	
140 3,3'-Dichlorobenzidine	252	13.639	13.639	0.000	76	526780	80.0	86.5	
141 Benzo[a]anthracene	228	13.680	13.680	0.000	99	1443039	80.0	81.5	
142 Bis(2-ethylhexyl) phthalat	149	13.668	13.668	0.000	97	1104576	80.0	87.1	
143 Chrysene	228	13.774	13.774	0.000	98	1344205	80.0	81.3	
144 Di-n-octyl phthalate	149	15.574	15.574	0.000	99	1896507	80.0	83.8	
146 Benzo[b]fluoranthene	252	16.727	16.727	0.000	98	1287729	80.0	82.9	
147 Benzo[k]fluoranthene	252	16.815	16.815	0.000	98	1340597	80.0	84.0	
148 Benzo[a]pyrene	252	17.727	17.727	0.000	80	1249715	80.0	83.6	
151 Indeno[1,2,3-cd]pyrene	276	21.127	21.127	0.000	96	1069526	80.0	85.0	M
152 Dibenz(a,h)anthracene	278	21.203	21.203	0.000	96	1063872	80.0	86.1	
153 Benzo[g,h,i]perylene	276	21.897	21.897	0.000	95	1127580	80.0	83.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA080_00015

Amount Added: 200.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16637.D

Injection Date: 25-Feb-2015 11:53:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: ICIS HSL

Worklist Smp#: 3

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

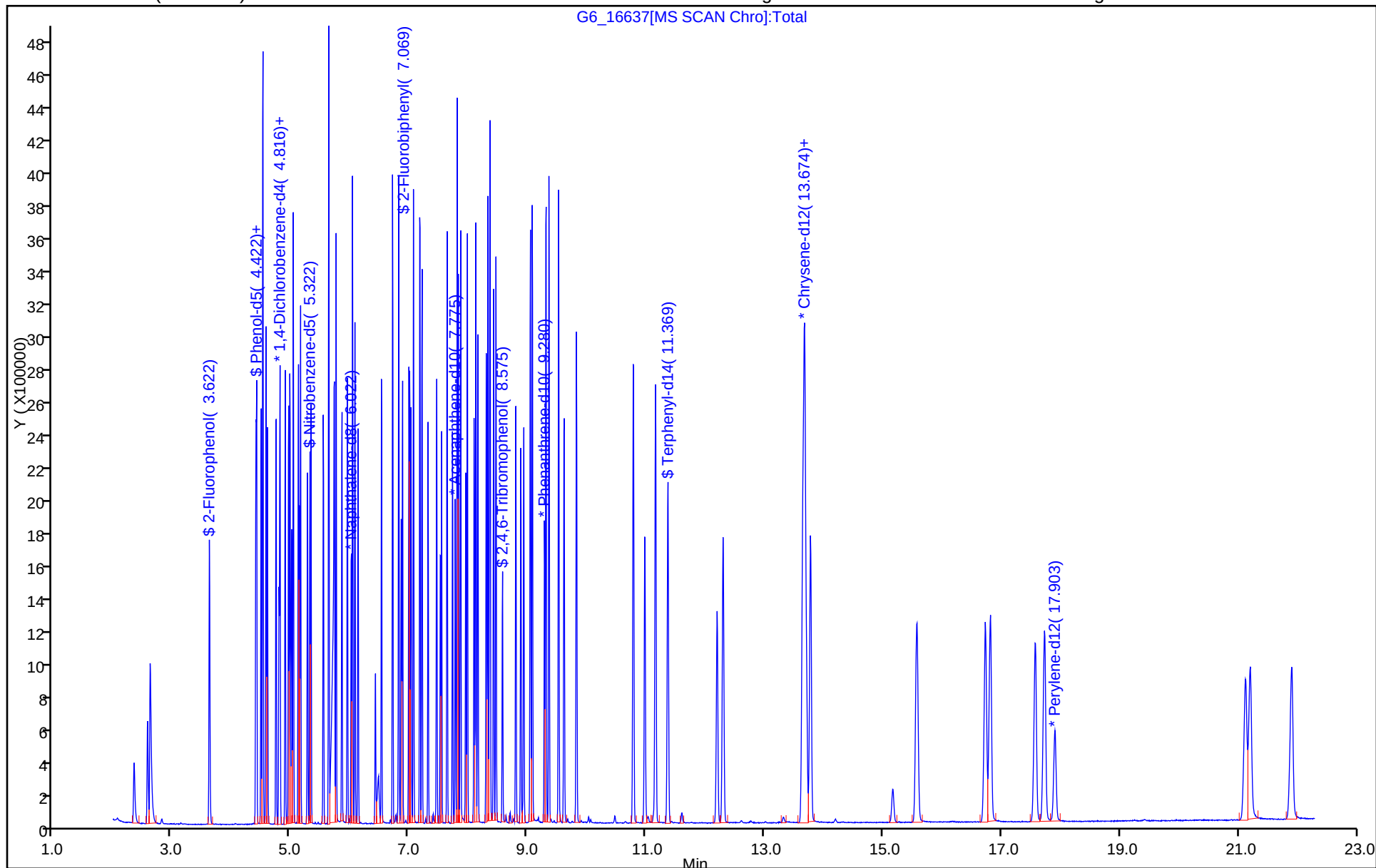
ALS Bottle#: 2

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



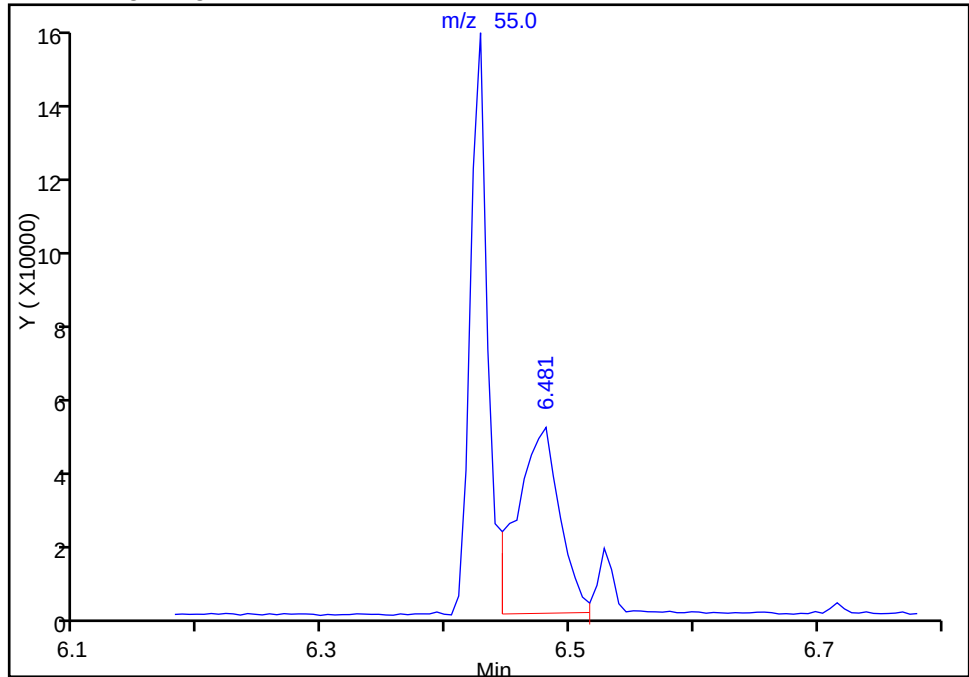
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16637.D
Injection Date: 25-Feb-2015 11:53:30 Instrument ID: SMS_G6
Lims ID: ICIS HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

62 Caprolactam, CAS: 105-60-2

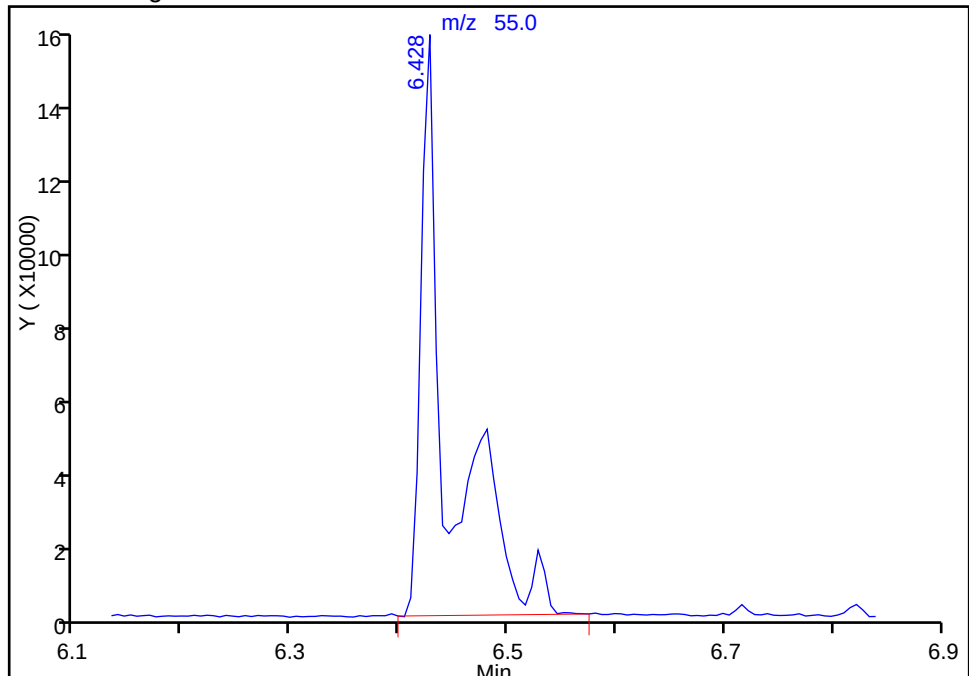
RT: 6.48
Area: 122405
Amount: 80.000000
Amount Units: ug/ml

Processing Integration Results



RT: 6.43
Area: 285328
Amount: 84.551985
Amount Units: ug/ml

Manual Integration Results



Reviewer: kiekeld, 10-Apr-2015 08:28:05
Audit Action: Manually Integrated
Audit Reason: Split Peak

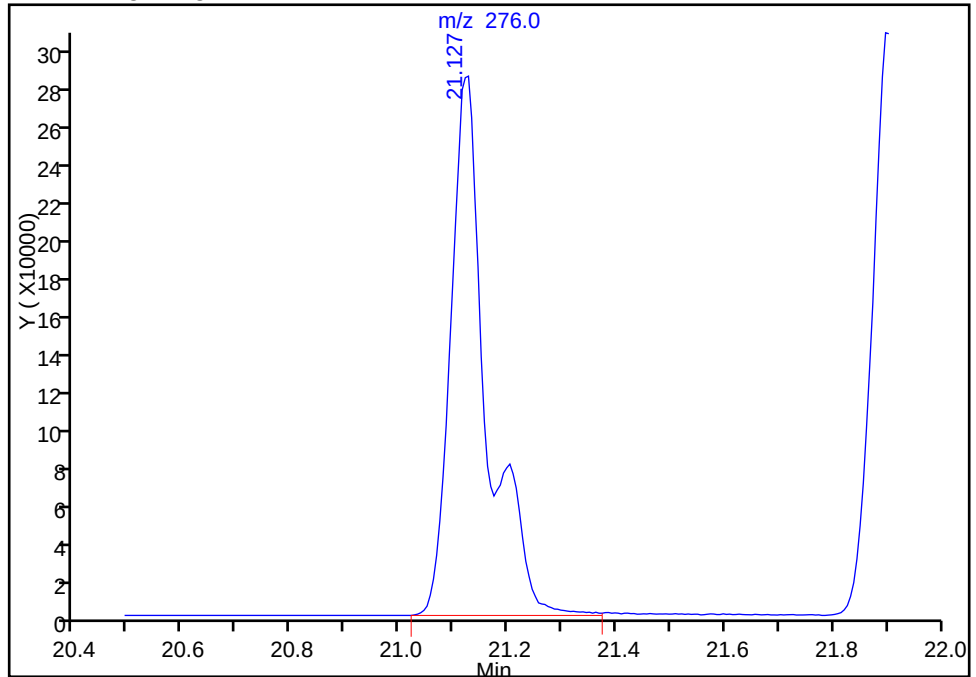
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16637.D
Injection Date: 25-Feb-2015 11:53:30 Instrument ID: SMS_G6
Lims ID: ICIS HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

151 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

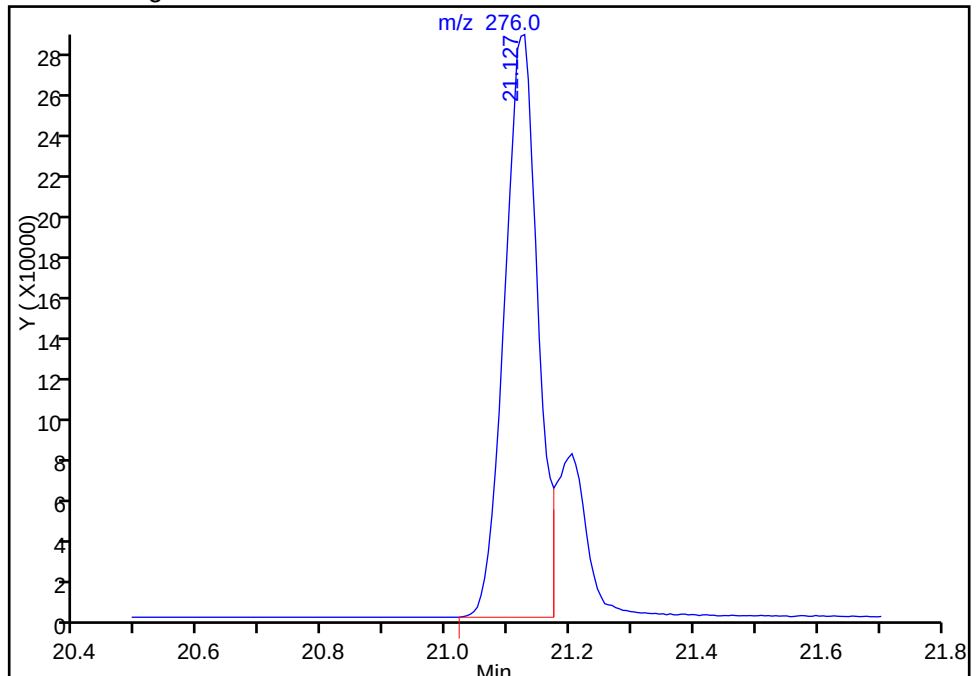
RT: 21.13
Area: 1331166
Amount: 80.000000
Amount Units: ug/ml

Processing Integration Results



RT: 21.13
Area: 1069526
Amount: 85.035106
Amount Units: ug/ml

Manual Integration Results



Reviewer: kiekeld, 10-Apr-2015 08:28:05
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16638.D
 Lims ID: STD004 HSL
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 25-Feb-2015 12:19:30 ALS Bottle#: 3 Worklist Smp#: 4
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: STD004 HSL
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:38 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 08:51:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	97	182457	40.0	40.0	
* 2 Naphthalene-d8	136	6.016	6.022	-0.006	100	704885	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	92	388522	40.0	40.0	
* 4 Phenanthrene-d10	188	9.280	9.280	0.000	97	657696	40.0	40.0	
* 5 Chrysene-d12	240	13.698	13.710	-0.012	97	631485	40.0	40.0	
* 6 Perylene-d12	264	17.898	17.903	-0.005	95	537308	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.622	3.622	0.000	93	27340	4.00	4.12	
\$ 8 Phenol-d5	99	4.404	4.410	-0.006	98	34467	4.00	4.15	
\$ 9 Nitrobenzene-d5	82	5.322	5.322	0.000	91	29128	4.00	4.03	
\$ 10 2-Fluorobiphenyl	172	7.069	7.069	0.000	99	55360	4.00	4.22	
\$ 11 2,4,6-Tribromophenol	330	8.575	8.575	0.000	82	5458	4.00	3.74	
\$ 12 Terphenyl-d14	244	11.363	11.369	-0.006	98	49847	4.00	3.97	
13 1,4-Dioxane	88	2.351	2.352	-0.001	99	11382	4.00	4.07	
14 N-Nitrosodimethylamine	74	2.581	2.581	0.000	93	17202	4.00	4.05	
15 Pyridine	79	2.628	2.622	0.006	87	29364	4.00	4.05	
23 Phenol	94	4.416	4.422	-0.006	98	34473	4.00	4.13	
24 Aniline	93	4.493	4.498	-0.006	98	43366	4.00	4.25	
25 Bis(2-chloroethyl)ether	93	4.528	4.528	0.000	91	27476	4.00	4.20	
26 2-Chlorophenol	128	4.604	4.604	0.000	96	28058	4.00	4.12	
27 1,3-Dichlorobenzene	146	4.751	4.751	0.000	97	28987	4.00	4.20	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	92	29045	4.00	4.16	
29 Benzyl alcohol	108	4.904	4.904	0.000	93	17216	4.00	4.01	
30 1,2-Dichlorobenzene	146	4.957	4.963	-0.006	95	28758	4.00	4.29	
31 2-Methylphenol	108	4.981	4.981	0.000	95	25371	4.00	4.10	
32 2,2'-oxybis[1-chloropropan	45	5.010	5.010	0.000	94	40664	4.00	4.22	
38 3 & 4 Methylphenol	108	5.122	5.128	-0.006	97	26237	4.00	4.09	
39 3-Methylphenol	108	5.122	5.128	-0.006	97	26237	4.00	4.09	
40 4-Methylphenol	108	5.122	5.128	-0.006	95	26237	4.00	4.09	
41 N-Nitrosodi-n-propylamine	70	5.140	5.145	-0.005	89	19369	4.00	4.16	
42 Acetophenone	105	5.163	5.163	0.000	96	38458	4.00	4.27	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	95	12349	4.00	4.12	
44 Nitrobenzene	77	5.340	5.340	0.000	92	27855	4.00	4.00	
46 Isophorone	82	5.545	5.545	0.000	99	47544	4.00	4.02	
48 2-Nitrophenol	139	5.639	5.645	-0.006	95	14166	4.00	4.08	
49 2,4-Dimethylphenol	107	5.634	5.640	-0.006	93	25893	4.00	4.07	
50 Bis(2-chloroethoxy)methane	93	5.734	5.734	0.000	98	32100	4.00	4.13	
52 Benzoic acid	105	5.657	5.728	-0.071	92	32187	8.00	6.45	
53 2,4-Dichlorophenol	162	5.857	5.863	-0.006	95	21647	4.00	4.16	
54 1,2,4-Trichlorobenzene	180	5.951	5.951	0.000	94	22051	4.00	4.17	
57 Naphthalene	128	6.039	6.040	-0.001	98	79041	4.00	4.22	
58 4-Chloroaniline	127	6.081	6.081	0.000	96	35029	4.00	4.13	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	96	12544	4.00	4.35	
62 Caprolactam	55	6.416	6.428	-0.012	76	11099	4.00	3.33	
64 4-Chloro-3-methylphenol	107	6.528	6.528	0.000	97	22782	4.00	4.09	
65 2-Methylnaphthalene	142	6.716	6.716	0.000	93	49887	4.00	4.14	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	93	46889	4.00	4.14	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	97	11449	4.00	3.75	
69 1,2,4,5-Tetrachlorobenzene	216	6.881	6.887	-0.005	97	20934	4.00	4.17	
70 2,4,6-Trichlorophenol	196	6.992	6.992	0.000	93	14208	4.00	4.07	
72 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	92	15333	4.00	4.13	
74 1,1'-Biphenyl	154	7.175	7.181	-0.006	95	61753	4.00	4.22	
75 2-Chloronaphthalene	162	7.210	7.216	-0.006	97	45458	4.00	4.12	
77 2-Nitroaniline	65	7.316	7.316	0.000	84	15113	4.00	3.73	
79 Dimethyl phthalate	163	7.457	7.463	-0.006	98	60554	4.00	4.68	
80 1,3-Dinitrobenzene	168	7.522	7.528	-0.006	81	7547	4.00	3.29	
81 2,6-Dinitrotoluene	165	7.539	7.545	-0.006	91	11500	4.00	3.85	
82 Acenaphthylene	152	7.639	7.639	0.000	98	72357	4.00	4.04	
83 3-Nitroaniline	138	7.728	7.728	0.000	91	14261	4.00	3.69	
84 Acenaphthene	153	7.810	7.810	0.000	95	48195	4.00	4.17	
86 2,4-Dinitrophenol	184	7.828	7.828	0.000	77	11473	8.00	8.32	
87 4-Nitrophenol	109	7.857	7.869	-0.012	95	17189	8.00	8.25	
89 2,4-Dinitrotoluene	165	7.951	7.951	0.000	91	14418	4.00	3.68	
90 Dibenzofuran	168	7.975	7.981	-0.006	96	67976	4.00	4.18	
92 2,3,4,6-Tetrachlorophenol	232	8.092	8.092	0.000	78	11063	4.00	3.67	
94 Diethyl phthalate	149	8.151	8.157	-0.006	97	54858	4.00	4.17	
96 4-Chlorophenyl phenyl ethe	204	8.298	8.298	0.000	96	24578	4.00	4.17	
98 Fluorene	166	8.322	8.328	-0.006	96	54503	4.00	4.12	
99 4-Nitroaniline	138	8.345	8.357	-0.012	83	14556	4.00	3.85	
100 4,6-Dinitro-2-methylphenol	198	8.357	8.363	-0.006	77	14971	8.00	6.43	
102 N-Nitrosodiphenylamine	169	8.422	8.422	0.000	63	39816	4.00	4.09	
103 Azobenzene	77	8.463	8.463	0.000	99	60296	4.00	4.14	
104 1,2-Diphenylhydrazine	77	8.463	8.463	0.000	99	60296	4.04	4.19	
111 4-Bromophenyl phenyl ether	248	8.798	8.798	0.000	75	11781	4.00	3.82	
112 Hexachlorobenzene	284	8.880	8.881	0.000	90	13090	4.00	4.09	
116 Pentachlorophenol	266	9.075	9.080	-0.005	87	14903	8.00	7.08	
119 Phenanthrene	178	9.304	9.310	-0.006	98	76605	4.00	4.20	
120 Anthracene	178	9.357	9.357	0.000	98	77754	4.00	4.16	
122 Carbazole	167	9.522	9.522	0.000	96	77606	4.00	4.07	
123 Di-n-butyl phthalate	149	9.822	9.822	0.000	99	87433	4.00	3.90	
128 Fluoranthene	202	10.780	10.786	-0.006	97	79265	4.00	3.97	
131 Pyrene	202	11.151	11.157	-0.006	97	85070	4.00	4.03	
136 Famphur	218	12.192	12.198	-0.006	94	26998	4.00	4.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.292	12.298	-0.006	98	34606	4.00	3.48	
140 3,3'-Dichlorobenzidine	252	13.627	13.639	-0.012	75	22416	4.00	3.59	
141 Benzo[a]anthracene	228	13.674	13.680	-0.006	97	73908	4.00	4.07	
142 Bis(2-ethylhexyl) phthalat	149	13.668	13.668	0.000	77	45285	4.00	3.48	
143 Chrysene	228	13.762	13.774	-0.012	97	67664	4.00	3.99	
144 Di-n-octyl phthalate	149	15.562	15.574	-0.012	99	61347	4.00	4.18	
146 Benzo[b]fluoranthene	252	16.715	16.727	-0.012	98	57364	4.00	3.65	
147 Benzo[k]fluoranthene	252	16.798	16.815	-0.017	98	60118	4.00	3.73	
148 Benzo[a]pyrene	252	17.715	17.727	-0.012	80	51493	4.00	3.41	
151 Indeno[1,2,3-cd]pyrene	276	21.097	21.127	-0.030	95	45380	4.00	3.52	
152 Dibenz(a,h)anthracene	278	21.180	21.203	-0.023	94	42195	4.00	3.38	
153 Benzo[g,h,i]perylene	276	21.874	21.897	-0.023	94	49079	4.00	3.62	

Reagents:

MS-HSLA004_00015

Amount Added: 200.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16638.D

Injection Date: 25-Feb-2015 12:19:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: STD004 HSL

Worklist Smp#: 4

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

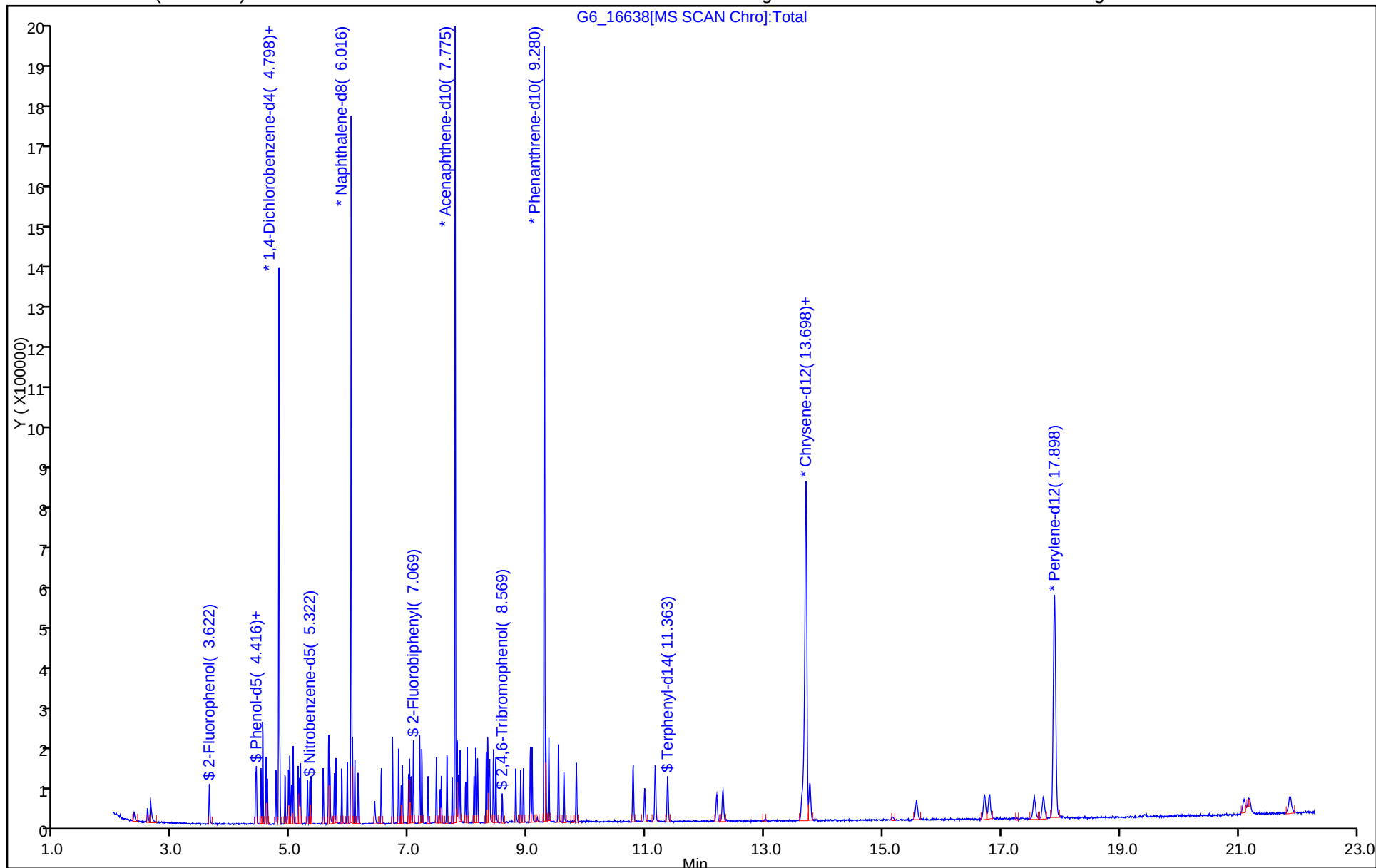
ALS Bottle#: 3

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16639.D
 Lims ID: STD010 HSL
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 25-Feb-2015 12:46:30 ALS Bottle#: 4 Worklist Smp#: 5
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: STD010 HSL
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:40 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:02:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	96	184876	40.0	40.0	
* 2 Naphthalene-d8	136	6.016	6.022	-0.006	100	701243	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	92	384159	40.0	40.0	
* 4 Phenanthrene-d10	188	9.280	9.280	0.000	97	640383	40.0	40.0	
* 5 Chrysene-d12	240	13.698	13.710	-0.012	96	613004	40.0	40.0	
* 6 Perylene-d12	264	17.892	17.903	-0.011	95	530739	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.622	3.622	0.000	92	67803	10.0	10.1	
\$ 8 Phenol-d5	99	4.404	4.410	-0.006	98	82351	10.0	9.77	
\$ 9 Nitrobenzene-d5	82	5.316	5.322	-0.006	92	72669	10.0	10.1	
\$ 10 2-Fluorobiphenyl	172	7.069	7.069	0.000	99	133834	10.0	10.3	
\$ 11 2,4,6-Tribromophenol	330	8.569	8.575	-0.006	84	13361	10.0	9.25	
\$ 12 Terphenyl-d14	244	11.363	11.369	-0.006	98	125136	10.0	10.3	
13 1,4-Dioxane	88	2.352	2.352	0.000	98	29946	10.0	10.6	
14 N-Nitrosodimethylamine	74	2.575	2.581	-0.006	91	43094	10.0	10.0	
15 Pyridine	79	2.622	2.622	0.000	92	73629	10.0	10.0	
23 Phenol	94	4.416	4.422	-0.006	98	85314	10.0	10.1	
24 Aniline	93	4.493	4.498	-0.005	98	101304	10.0	9.81	
25 Bis(2-chloroethyl)ether	93	4.522	4.528	-0.006	90	69073	10.0	10.4	
26 2-Chlorophenol	128	4.604	4.604	0.000	97	70338	10.0	10.2	
27 1,3-Dichlorobenzene	146	4.745	4.751	-0.006	97	71887	10.0	10.3	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	96	72168	10.0	10.2	
29 Benzyl alcohol	108	4.898	4.904	-0.006	92	41657	10.0	9.59	
30 1,2-Dichlorobenzene	146	4.963	4.963	0.000	96	69610	10.0	10.2	
31 2-Methylphenol	108	4.981	4.981	0.000	94	63348	10.0	10.1	
32 2,2'-oxybis[1-chloropropan	45	5.010	5.010	0.000	93	99866	10.0	10.2	
38 3 & 4 Methylphenol	108	5.122	5.128	-0.006	98	63816	10.0	9.83	
39 3-Methylphenol	108	5.122	5.128	-0.006	98	63816	10.0	9.83	
40 4-Methylphenol	108	5.122	5.128	-0.006	94	63816	10.0	9.83	
41 N-Nitrosodi-n-propylamine	70	5.140	5.145	-0.005	91	45947	10.0	9.75	
42 Acetophenone	105	5.163	5.163	0.000	96	93583	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	96	30699	10.0	10.1	
44 Nitrobenzene	77	5.340	5.340	0.000	91	71302	10.0	10.3	
46 Isophorone	82	5.545	5.545	0.000	99	115206	10.0	9.79	
48 2-Nitrophenol	139	5.640	5.645	-0.005	90	35195	10.0	10.2	
49 2,4-Dimethylphenol	107	5.634	5.640	-0.006	93	66475	10.0	10.5	
50 Bis(2-chloroethoxy)methane	93	5.734	5.734	0.000	98	80123	10.0	10.4	
52 Benzoic acid	105	5.669	5.728	-0.059	88	89023	20.0	17.9	
53 2,4-Dichlorophenol	162	5.857	5.863	-0.006	97	51694	10.0	9.98	
54 1,2,4-Trichlorobenzene	180	5.951	5.951	0.000	94	53749	10.0	10.2	
57 Naphthalene	128	6.040	6.040	0.000	97	192392	10.0	10.3	
58 4-Chloroaniline	127	6.081	6.081	0.000	96	85639	10.0	10.2	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	98	29013	10.0	10.1	
62 Caprolactam	55	6.410	6.428	-0.018	76	31448	10.0	9.48	
64 4-Chloro-3-methylphenol	107	6.528	6.528	0.000	98	55761	10.0	10.1	
65 2-Methylnaphthalene	142	6.716	6.716	0.000	93	124165	10.0	10.4	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	94	117053	10.0	10.4	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	97	28473	10.0	9.43	
69 1,2,4,5-Tetrachlorobenzene	216	6.881	6.887	-0.005	97	50324	10.0	10.1	
70 2,4,6-Trichlorophenol	196	6.992	6.992	0.000	94	34170	10.0	9.91	
72 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	94	36506	10.0	9.93	
74 1,1'-Biphenyl	154	7.175	7.181	-0.006	95	149463	10.0	10.3	
75 2-Chloronaphthalene	162	7.210	7.216	-0.006	98	113058	10.0	10.4	
77 2-Nitroaniline	65	7.316	7.316	0.000	85	39287	10.0	9.81	
79 Dimethyl phthalate	163	7.457	7.463	-0.006	98	130115	10.0	10.2	
80 1,3-Dinitrobenzene	168	7.522	7.528	-0.006	81	20263	10.0	8.93	
81 2,6-Dinitrotoluene	165	7.539	7.545	-0.006	92	28732	10.0	9.72	
82 Acenaphthylene	152	7.634	7.639	-0.005	98	178896	10.0	10.1	
83 3-Nitroaniline	138	7.728	7.728	0.000	94	37522	10.0	9.82	
84 Acenaphthene	153	7.810	7.810	0.000	95	117997	10.0	10.3	
86 2,4-Dinitrophenol	184	7.822	7.828	-0.006	81	32905	20.0	18.2	
87 4-Nitrophenol	109	7.857	7.869	-0.012	96	40880	20.0	19.8	
89 2,4-Dinitrotoluene	165	7.951	7.951	0.000	91	37208	10.0	9.60	
90 Dibenzofuran	168	7.975	7.981	-0.006	97	164638	10.0	10.2	
92 2,3,4,6-Tetrachlorophenol	232	8.092	8.092	0.000	75	29631	10.0	9.95	
94 Diethyl phthalate	149	8.151	8.157	-0.006	97	134263	10.0	10.3	
96 4-Chlorophenyl phenyl ethe	204	8.298	8.298	0.000	95	60258	10.0	10.3	
98 Fluorene	166	8.322	8.328	-0.006	96	136339	10.0	10.4	
99 4-Nitroaniline	138	8.345	8.357	-0.012	84	37301	10.0	9.98	
100 4,6-Dinitro-2-methylphenol	198	8.357	8.363	-0.006	78	43031	20.0	19.0	
102 N-Nitrosodiphenylamine	169	8.422	8.422	0.000	62	98599	10.0	10.4	
103 Azobenzene	77	8.457	8.463	-0.006	99	144575	10.0	10.0	
104 1,2-Diphenylhydrazine	77	8.457	8.463	-0.006	99	144575	10.1	10.2	
111 4-Bromophenyl phenyl ether	248	8.798	8.798	0.000	73	31038	10.0	10.3	
112 Hexachlorobenzene	284	8.881	8.881	0.000	91	31646	10.0	10.2	
116 Pentachlorophenol	266	9.075	9.080	-0.005	87	38486	20.0	18.8	
119 Phenanthrene	178	9.304	9.310	-0.006	98	185797	10.0	10.5	
120 Anthracene	178	9.357	9.357	0.000	98	188375	10.0	10.4	
122 Carbazole	167	9.516	9.522	-0.006	96	190570	10.0	10.3	
123 Di-n-butyl phthalate	149	9.822	9.822	0.000	100	217656	10.0	9.97	
128 Fluoranthene	202	10.775	10.786	-0.012	99	199608	10.0	10.3	
131 Pyrene	202	11.151	11.157	-0.006	97	206008	10.0	10.1	
136 Famphur	218	12.192	12.198	-0.006	97	66995	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.292	12.298	-0.006	97	91001	10.0	9.42	
140 3,3'-Dichlorobenzidine	252	13.627	13.639	-0.012	75	57301	10.0	9.46	
141 Benzo[a]anthracene	228	13.663	13.680	-0.017	100	177675	10.0	10.1	
142 Bis(2-ethylhexyl) phthalat	149	13.663	13.668	-0.005	96	118615	10.0	9.40	
143 Chrysene	228	13.763	13.774	-0.011	97	164066	10.0	9.97	
144 Di-n-octyl phthalate	149	15.562	15.574	-0.012	99	176570	10.0	9.28	
146 Benzo[b]fluoranthene	252	16.709	16.727	-0.018	99	151541	10.0	9.77	
147 Benzo[k]fluoranthene	252	16.798	16.815	-0.017	99	145931	10.0	9.16	
148 Benzo[a]pyrene	252	17.709	17.727	-0.018	80	138204	10.0	9.27	
151 Indeno[1,2,3-cd]pyrene	276	21.097	21.127	-0.030	97	116621	10.0	9.32	
152 Dibenz(a,h)anthracene	278	21.186	21.203	-0.017	93	107166	10.0	8.70	
153 Benzo[g,h,i]perylene	276	21.874	21.897	-0.023	94	127555	10.0	9.51	

Reagents:

MS-HSLA010_00015

Amount Added: 200.00

Units: uL

Report Date: 10-Apr-2015 12:09:40

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16639.D

Injection Date: 25-Feb-2015 12:46:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: STD010 HSL

Worklist Smp#: 5

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

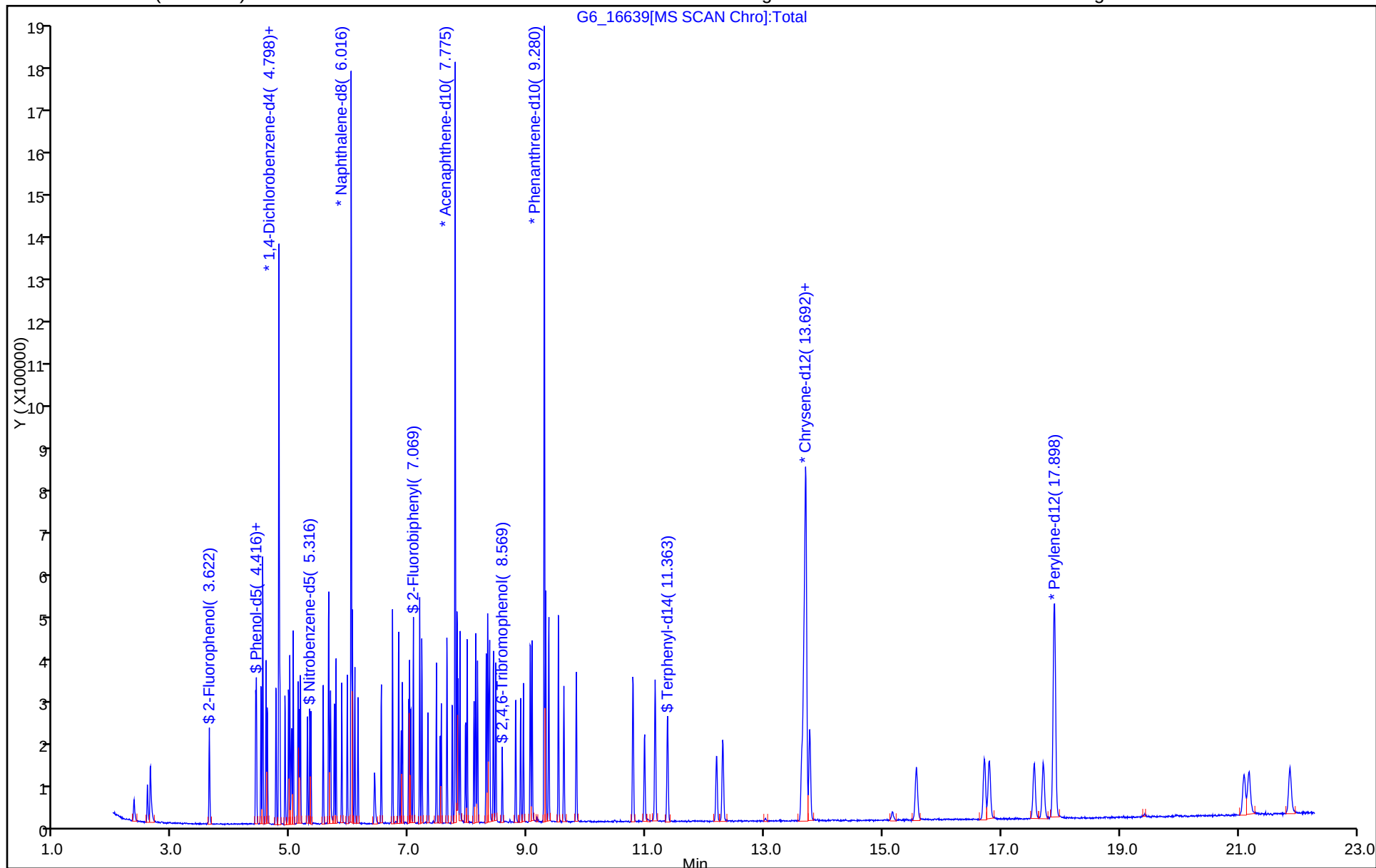
ALS Bottle#: 4

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16640.D
 Lims ID: STD020 HSL
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 25-Feb-2015 13:12:30 ALS Bottle#: 5 Worklist Smp#: 6
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: STD020 HSL
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:41 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:04:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	96	188896	40.0	40.0	
* 2 Naphthalene-d8	136	6.016	6.022	-0.006	100	722037	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	92	390190	40.0	40.0	
* 4 Phenanthrene-d10	188	9.280	9.280	0.000	97	655697	40.0	40.0	
* 5 Chrysene-d12	240	13.698	13.710	-0.012	96	632287	40.0	40.0	
* 6 Perylene-d12	264	17.892	17.903	-0.011	96	537132	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.622	3.622	0.000	93	136584	20.0	19.9	
\$ 8 Phenol-d5	99	4.404	4.410	-0.006	99	173137	20.0	20.1	
\$ 9 Nitrobenzene-d5	82	5.316	5.322	-0.006	92	146288	20.0	19.8	
\$ 10 2-Fluorobiphenyl	172	7.069	7.069	0.000	100	271127	20.0	20.6	
\$ 11 2,4,6-Tribromophenol	330	8.569	8.575	-0.006	84	28834	20.0	19.7	
\$ 12 Terphenyl-d14	244	11.363	11.369	-0.006	98	250222	20.0	19.9	
13 1,4-Dioxane	88	2.351	2.352	-0.001	95	59534	20.0	20.5	
14 N-Nitrosodimethylamine	74	2.575	2.581	-0.006	89	85710	20.0	19.5	
15 Pyridine	79	2.622	2.622	0.000	90	147856	20.0	19.7	
23 Phenol	94	4.416	4.422	-0.006	98	172136	20.0	19.9	
24 Aniline	93	4.493	4.498	-0.005	97	206891	20.0	19.6	
25 Bis(2-chloroethyl)ether	93	4.522	4.528	-0.006	88	137208	20.0	20.2	
26 2-Chlorophenol	128	4.604	4.604	0.000	97	139729	20.0	19.8	
27 1,3-Dichlorobenzene	146	4.745	4.751	-0.006	97	142995	20.0	20.0	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	94	146967	20.0	20.3	
29 Benzyl alcohol	108	4.904	4.904	0.000	92	86805	20.0	19.6	
30 1,2-Dichlorobenzene	146	4.957	4.963	-0.006	95	140215	20.0	20.2	
31 2-Methylphenol	108	4.981	4.981	0.000	96	127434	20.0	19.9	
32 2,2'-oxybis[1-chloropropan	45	5.010	5.010	0.000	92	199591	20.0	20.0	
38 3 & 4 Methylphenol	108	5.122	5.128	-0.006	97	133429	20.0	20.1	
39 3-Methylphenol	108	5.122	5.128	-0.006	97	133429	20.0	20.1	
40 4-Methylphenol	108	5.122	5.128	-0.006	92	133429	20.0	20.1	
41 N-Nitrosodi-n-propylamine	70	5.140	5.145	-0.005	90	96259	20.0	20.0	
42 Acetophenone	105	5.163	5.163	0.000	96	185111	20.0	19.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	97	61931	20.0	20.0	
44 Nitrobenzene	77	5.340	5.340	0.000	91	141833	20.0	19.9	
46 Isophorone	82	5.545	5.545	0.000	99	240037	20.0	19.8	
48 2-Nitrophenol	139	5.640	5.645	-0.005	92	71833	20.0	20.2	
49 2,4-Dimethylphenol	107	5.634	5.640	-0.006	92	131383	20.0	20.2	
50 Bis(2-chloroethoxy)methane	93	5.734	5.734	0.000	98	160771	20.0	20.2	
52 Benzoic acid	105	5.681	5.728	-0.047	90	194250	40.0	38.0	
53 2,4-Dichlorophenol	162	5.857	5.863	-0.006	97	106817	20.0	20.0	
54 1,2,4-Trichlorobenzene	180	5.951	5.951	0.000	94	109397	20.0	20.2	
57 Naphthalene	128	6.039	6.040	-0.001	97	390163	20.0	20.3	
58 4-Chloroaniline	127	6.081	6.081	0.000	95	172259	20.0	19.8	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	97	58938	20.0	20.0	
62 Caprolactam	55	6.410	6.428	-0.018	77	65538	20.0	19.2	M
64 4-Chloro-3-methylphenol	107	6.528	6.528	0.000	98	112366	20.0	19.7	
65 2-Methylnaphthalene	142	6.716	6.716	0.000	94	249498	20.0	20.2	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	94	236260	20.0	20.4	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	97	60610	20.0	19.8	
69 1,2,4,5-Tetrachlorobenzene	216	6.881	6.887	-0.005	98	104495	20.0	20.3	
70 2,4,6-Trichlorophenol	196	6.992	6.992	0.000	94	70312	20.0	20.1	
72 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	94	75074	20.0	20.1	
74 1,1'-Biphenyl	154	7.175	7.181	-0.006	95	302324	20.0	20.6	
75 2-Chloronaphthalene	162	7.210	7.216	-0.006	98	227907	20.0	20.6	
77 2-Nitroaniline	65	7.316	7.316	0.000	85	82700	20.0	20.3	
79 Dimethyl phthalate	163	7.457	7.463	-0.006	97	257927	20.0	19.9	
80 1,3-Dinitrobenzene	168	7.522	7.528	-0.006	83	45571	20.0	19.8	
81 2,6-Dinitrotoluene	165	7.539	7.545	-0.006	94	62625	20.0	20.9	
82 Acenaphthylene	152	7.634	7.639	-0.005	99	362680	20.0	20.2	
83 3-Nitroaniline	138	7.728	7.728	0.000	95	77435	20.0	19.9	
84 Acenaphthene	153	7.810	7.810	0.000	95	238340	20.0	20.5	
86 2,4-Dinitrophenol	184	7.822	7.828	-0.006	82	78117	40.0	38.4	
87 4-Nitrophenol	109	7.857	7.869	-0.012	96	82891	40.0	39.6	
89 2,4-Dinitrotoluene	165	7.951	7.951	0.000	91	79927	20.0	20.3	
90 Dibenzofuran	168	7.975	7.981	-0.006	97	334583	20.0	20.5	
92 2,3,4,6-Tetrachlorophenol	232	8.092	8.092	0.000	76	59694	20.0	19.7	
94 Diethyl phthalate	149	8.151	8.157	-0.006	97	273258	20.0	20.7	
96 4-Chlorophenyl phenyl ethe	204	8.298	8.298	0.000	97	121088	20.0	20.5	
98 Fluorene	166	8.322	8.328	-0.006	97	274499	20.0	20.6	
99 4-Nitroaniline	138	8.345	8.357	-0.012	84	76419	20.0	20.1	
100 4,6-Dinitro-2-methylphenol	198	8.357	8.363	-0.006	80	93754	40.0	40.4	
102 N-Nitrosodiphenylamine	169	8.422	8.422	0.000	63	201342	20.0	20.7	
103 Azobenzene	77	8.463	8.463	0.000	99	295740	20.0	20.2	
104 1,2-Diphenylhydrazine	77	8.463	8.463	0.000	100	295740	20.2	20.5	
111 4-Bromophenyl phenyl ether	248	8.798	8.798	0.000	72	62227	20.0	20.3	
112 Hexachlorobenzene	284	8.880	8.881	0.000	91	65622	20.0	20.6	
116 Pentachlorophenol	266	9.075	9.080	-0.005	88	84234	40.0	40.2	
119 Phenanthrene	178	9.304	9.310	-0.006	98	370680	20.0	20.4	
120 Anthracene	178	9.357	9.357	0.000	98	381794	20.0	20.5	
122 Carbazole	167	9.516	9.522	-0.006	96	392545	20.0	20.7	
123 Di-n-butyl phthalate	149	9.822	9.822	0.000	100	453491	20.0	20.3	
128 Fluoranthene	202	10.780	10.786	-0.006	98	405997	20.0	20.4	
131 Pyrene	202	11.151	11.157	-0.006	97	418438	20.0	19.8	
136 Famphur	218	12.192	12.198	-0.006	96	140106	20.0	21.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.292	12.298	-0.006	98	193326	20.0	19.4	
140 3,3'-Dichlorobenzidine	252	13.627	13.639	-0.012	75	120010	20.0	19.2	
141 Benzo[a]anthracene	228	13.668	13.680	-0.012	99	361571	20.0	19.9	
142 Bis(2-ethylhexyl) phthalat	149	13.663	13.668	-0.005	96	252271	20.0	19.4	
143 Chrysene	228	13.763	13.774	-0.011	98	336779	20.0	19.8	
144 Di-n-octyl phthalate	149	15.562	15.574	-0.012	99	392967	20.0	18.2	
146 Benzo[b]fluoranthene	252	16.715	16.727	-0.012	98	312315	20.0	19.9	
147 Benzo[k]fluoranthene	252	16.798	16.815	-0.017	98	313777	20.0	19.5	
148 Benzo[a]pyrene	252	17.703	17.727	-0.024	80	293226	20.0	19.4	
151 Indeno[1,2,3-cd]pyrene	276	21.103	21.127	-0.024	97	244980	20.0	19.0	
152 Dibenz(a,h)anthracene	278	21.180	21.203	-0.023	94	242009	20.0	19.4	
153 Benzo[g,h,i]perylene	276	21.880	21.897	-0.017	94	261176	20.0	19.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA020_00015

Amount Added: 200.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16640.D

Injection Date: 25-Feb-2015 13:12:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: STD020 HSL

Worklist Smp#: 6

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

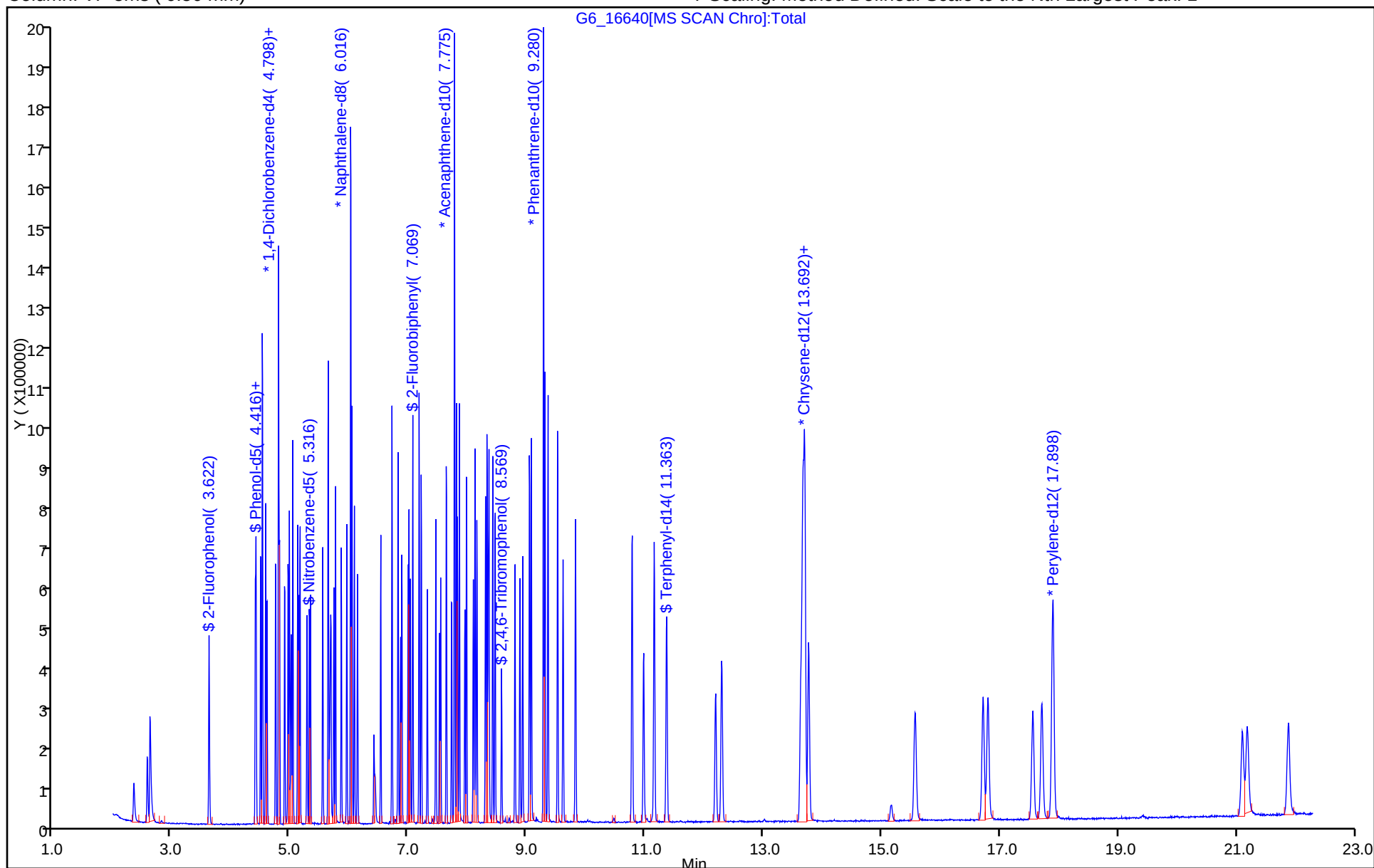
ALS Bottle#: 5

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



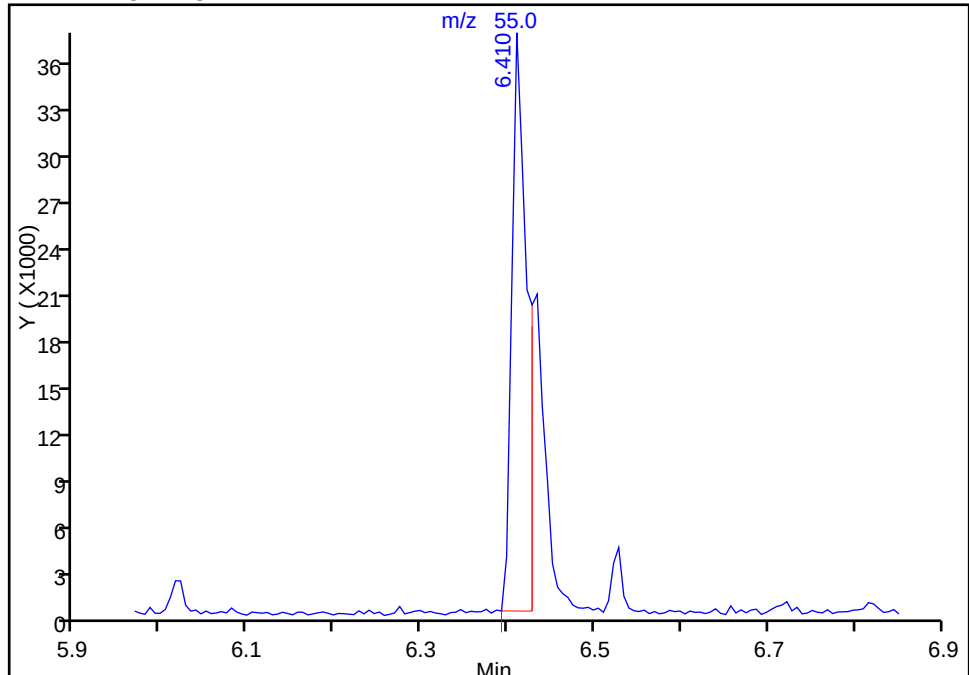
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16640.D
Injection Date: 25-Feb-2015 13:12:30 Instrument ID: SMS_G6
Lims ID: STD020 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

62 Caprolactam, CAS: 105-60-2

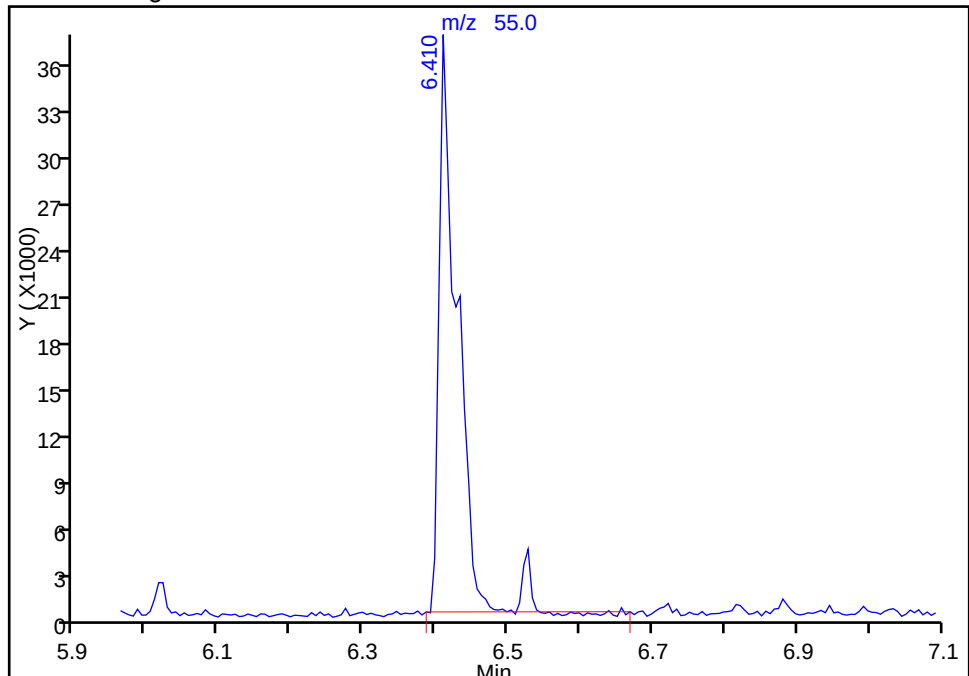
RT: 6.41
Area: 46259
Amount: 18.733378
Amount Units: ug/ml

Processing Integration Results



RT: 6.41
Area: 65538
Amount: 19.189269
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:04:20
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16641.D
 Lims ID: STD050 HSL
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 25-Feb-2015 13:39:30 ALS Bottle#: 6 Worklist Smp#: 7
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: STD050 HSL
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:42 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:09:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	96	188580	40.0	40.0	
* 2 Naphthalene-d8	136	6.016	6.022	-0.006	100	730834	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	93	393471	40.0	40.0	
* 4 Phenanthrene-d10	188	9.280	9.280	0.000	97	661919	40.0	40.0	
* 5 Chrysene-d12	240	13.704	13.710	-0.006	96	630959	40.0	40.0	
* 6 Perylene-d12	264	17.898	17.903	-0.005	95	543830	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.622	3.622	0.000	94	342921	50.0	50.0	
\$ 8 Phenol-d5	99	4.404	4.410	-0.006	99	432891	50.0	50.4	
\$ 9 Nitrobenzene-d5	82	5.322	5.322	0.000	91	377126	50.0	50.3	
\$ 10 2-Fluorobiphenyl	172	7.069	7.069	0.000	99	677613	50.0	50.9	
\$ 11 2,4,6-Tribromophenol	330	8.575	8.575	0.000	91	75692	50.0	51.2	
\$ 12 Terphenyl-d14	244	11.369	11.369	0.000	98	635940	50.0	50.7	
13 1,4-Dioxane	88	2.351	2.352	-0.001	98	142371	50.0	49.2	
14 N-Nitrosodimethylamine	74	2.575	2.581	-0.006	90	222746	50.0	50.7	
15 Pyridine	79	2.622	2.622	0.000	90	375517	50.0	50.1	
23 Phenol	94	4.422	4.422	0.000	99	436251	50.0	50.6	
24 Aniline	93	4.498	4.498	0.000	98	529556	50.0	50.3	
25 Bis(2-chloroethyl)ether	93	4.528	4.528	0.000	89	342205	50.0	50.6	
26 2-Chlorophenol	128	4.604	4.604	0.000	97	356590	50.0	50.7	
27 1,3-Dichlorobenzene	146	4.751	4.751	0.000	97	360797	50.0	50.5	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	93	366601	50.0	50.8	
29 Benzyl alcohol	108	4.904	4.904	0.000	92	224224	50.0	50.6	
30 1,2-Dichlorobenzene	146	4.963	4.963	0.000	96	348029	50.0	50.2	
31 2-Methylphenol	108	4.981	4.981	0.000	96	325292	50.0	50.9	
32 2,2'-oxybis[1-chloropropan	45	5.010	5.010	0.000	93	507190	50.0	50.9	
38 3 & 4 Methylphenol	108	5.122	5.128	-0.006	99	334564	50.0	50.5	
39 3-Methylphenol	108	5.122	5.128	-0.006	99	334564	50.0	50.5	
40 4-Methylphenol	108	5.122	5.128	-0.006	93	334564	50.0	50.5	
41 N-Nitrosodi-n-propylamine	70	5.140	5.145	-0.005	90	246852	50.0	51.4	
42 Acetophenone	105	5.163	5.163	0.000	97	472247	50.0	50.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	96	157602	50.0	50.9	
44 Nitrobenzene	77	5.340	5.340	0.000	90	365089	50.0	50.6	
46 Isophorone	82	5.545	5.545	0.000	99	626824	50.0	51.1	
48 2-Nitrophenol	139	5.639	5.645	-0.006	95	184945	50.0	51.4	
49 2,4-Dimethylphenol	107	5.639	5.640	-0.001	93	335864	50.0	50.9	
50 Bis(2-chloroethoxy)methane	93	5.734	5.734	0.000	98	407948	50.0	50.6	
52 Benzoic acid	105	5.710	5.728	-0.018	91	519854	100.0	100.5	
53 2,4-Dichlorophenol	162	5.863	5.863	0.000	96	269879	50.0	50.0	
54 1,2,4-Trichlorobenzene	180	5.951	5.951	0.000	93	279647	50.0	51.0	
57 Naphthalene	128	6.039	6.040	-0.001	98	977042	50.0	50.3	
58 4-Chloroaniline	127	6.081	6.081	0.000	96	443432	50.0	50.4	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	98	147770	50.0	49.4	
62 Caprolactam	55	6.416	6.428	-0.012	77	171197	50.0	49.5	M
64 4-Chloro-3-methylphenol	107	6.528	6.528	0.000	97	289585	50.0	50.1	
65 2-Methylnaphthalene	142	6.716	6.716	0.000	93	636017	50.0	50.9	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	94	599383	50.0	51.0	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	97	159056	50.0	51.5	
69 1,2,4,5-Tetrachlorobenzene	216	6.886	6.887	0.000	98	266816	50.0	51.3	
70 2,4,6-Trichlorophenol	196	6.992	6.992	0.000	94	180797	50.0	51.2	
72 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	92	189993	50.0	50.5	
74 1,1'-Biphenyl	154	7.175	7.181	-0.006	96	754596	50.0	51.0	
75 2-Chloronaphthalene	162	7.210	7.216	-0.006	98	569839	50.0	51.0	
77 2-Nitroaniline	65	7.316	7.316	0.000	84	210036	50.0	51.2	
79 Dimethyl phthalate	163	7.457	7.463	-0.006	98	649391	50.0	49.6	
80 1,3-Dinitrobenzene	168	7.522	7.528	-0.006	83	119893	50.0	51.6	
81 2,6-Dinitrotoluene	165	7.545	7.545	0.000	95	154313	50.0	51.0	
82 Acenaphthylene	152	7.639	7.639	0.000	99	931810	50.0	51.4	
83 3-Nitroaniline	138	7.728	7.728	0.000	94	204409	50.0	52.2	
84 Acenaphthene	153	7.810	7.810	0.000	95	602051	50.0	51.4	
86 2,4-Dinitrophenol	184	7.828	7.828	0.000	81	217993	100.0	100.7	
87 4-Nitrophenol	109	7.863	7.869	-0.006	95	213891	100.0	101.3	
89 2,4-Dinitrotoluene	165	7.951	7.951	0.000	91	206301	50.0	52.0	
90 Dibenzofuran	168	7.981	7.981	-0.001	97	844896	50.0	51.2	
92 2,3,4,6-Tetrachlorophenol	232	8.092	8.092	0.000	76	157611	50.0	51.7	
94 Diethyl phthalate	149	8.157	8.157	0.000	98	680249	50.0	51.0	
96 4-Chlorophenyl phenyl ethe	204	8.298	8.298	0.000	96	304597	50.0	51.1	
98 Fluorene	166	8.328	8.328	0.000	96	692688	50.0	51.6	
99 4-Nitroaniline	138	8.351	8.357	-0.006	85	197830	50.0	51.7	
100 4,6-Dinitro-2-methylphenol	198	8.363	8.363	0.000	86	249423	100.0	106.5	
102 N-Nitrosodiphenylamine	169	8.422	8.422	0.000	62	498390	50.0	50.8	
103 Azobenzene	77	8.463	8.463	0.000	99	755331	50.0	51.2	
104 1,2-Diphenylhydrazine	77	8.463	8.463	0.000	99	755331	50.5	51.8	
111 4-Bromophenyl phenyl ether	248	8.798	8.798	0.000	72	159165	50.0	51.3	
112 Hexachlorobenzene	284	8.880	8.881	0.000	92	164764	50.0	51.1	
116 Pentachlorophenol	266	9.075	9.080	-0.005	89	224380	100.0	106.0	
119 Phenanthrene	178	9.310	9.310	0.000	98	941975	50.0	51.3	
120 Anthracene	178	9.357	9.357	0.000	98	959498	50.0	51.0	
122 Carbazole	167	9.522	9.522	0.000	96	979659	50.0	51.1	
123 Di-n-butyl phthalate	149	9.822	9.822	0.000	100	1175500	50.0	52.1	
128 Fluoranthene	202	10.780	10.786	-0.006	98	1021800	50.0	50.8	
131 Pyrene	202	11.157	11.157	0.000	97	1068582	50.0	50.7	
136 Famphur	218	12.198	12.198	0.000	97	359540	50.0	54.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.298	12.298	0.000	98	510447	50.0	51.3	
140 3,3'-Dichlorobenzidine	252	13.633	13.639	-0.006	75	324147	50.0	52.0	
141 Benzo[a]anthracene	228	13.674	13.680	-0.006	99	919851	50.0	50.7	
142 Bis(2-ethylhexyl) phthalat	149	13.662	13.668	-0.006	97	679050	50.0	52.3	
143 Chrysene	228	13.768	13.774	-0.006	98	858164	50.0	50.7	
144 Di-n-octyl phthalate	149	15.568	15.574	-0.006	99	1119188	50.0	49.0	
146 Benzo[b]fluoranthene	252	16.721	16.727	-0.006	99	791973	50.0	49.9	
147 Benzo[k]fluoranthene	252	16.803	16.815	-0.012	98	839735	50.0	51.5	
148 Benzo[a]pyrene	252	17.721	17.727	-0.006	80	792402	50.0	51.9	
151 Indeno[1,2,3-cd]pyrene	276	21.115	21.127	-0.012	97	654992	50.0	50.8	M
152 Dibenz(a,h)anthracene	278	21.197	21.203	-0.006	94	660134	50.0	52.3	
153 Benzo[g,h,i]perylene	276	21.891	21.897	-0.006	96	698128	50.0	50.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA050_00015

Amount Added: 200.00

Units: uL

Report Date: 10-Apr-2015 12:09:42

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16641.D

Injection Date: 25-Feb-2015 13:39:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: STD050 HSL

Worklist Smp#: 7

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

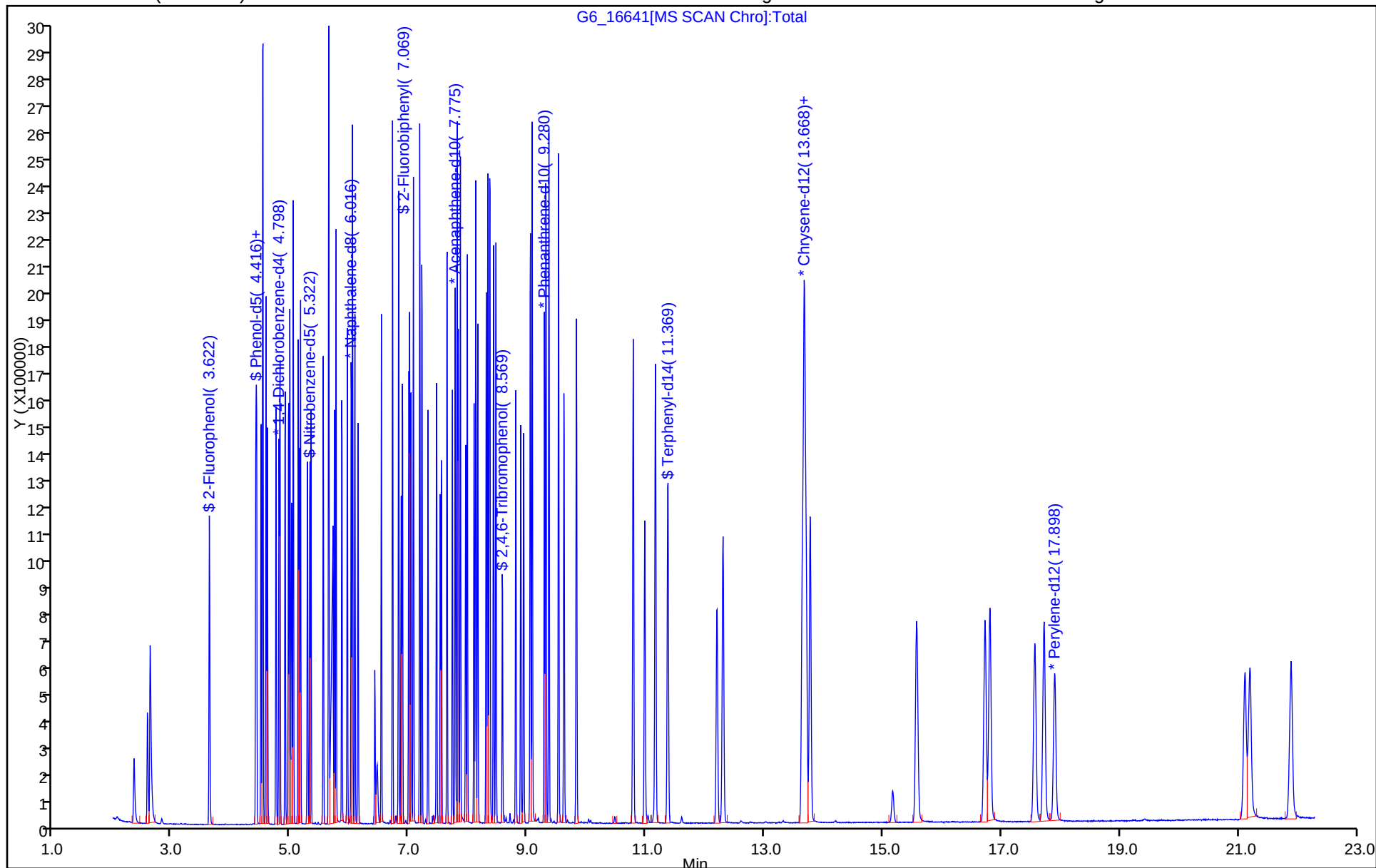
ALS Bottle#: 6

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



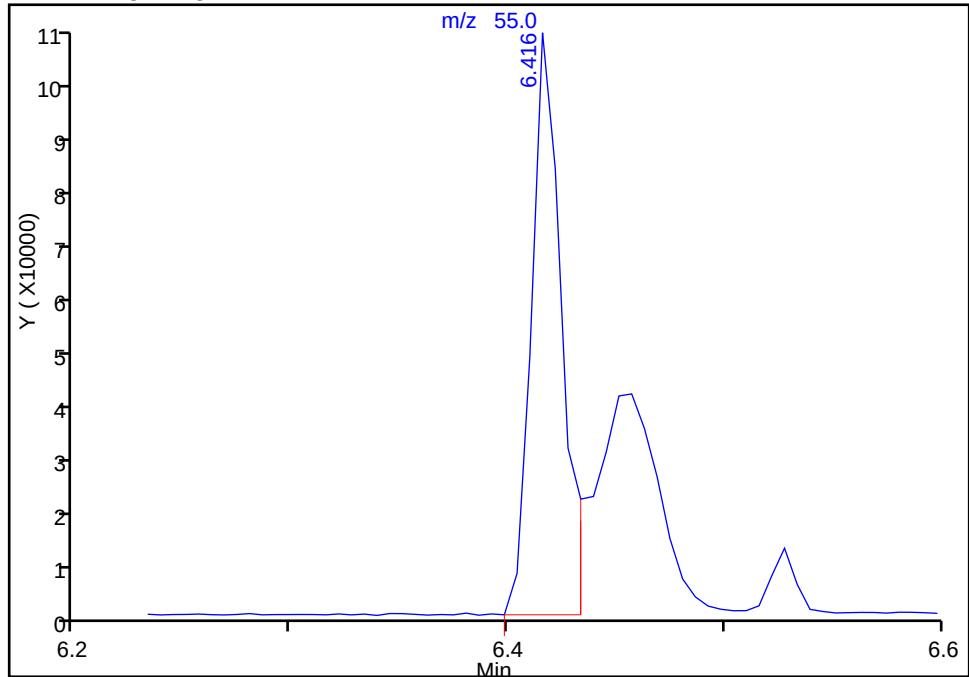
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16641.D
Injection Date: 25-Feb-2015 13:39:30 Instrument ID: SMS_G6
Lims ID: STD050 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

62 Caprolactam, CAS: 105-60-2

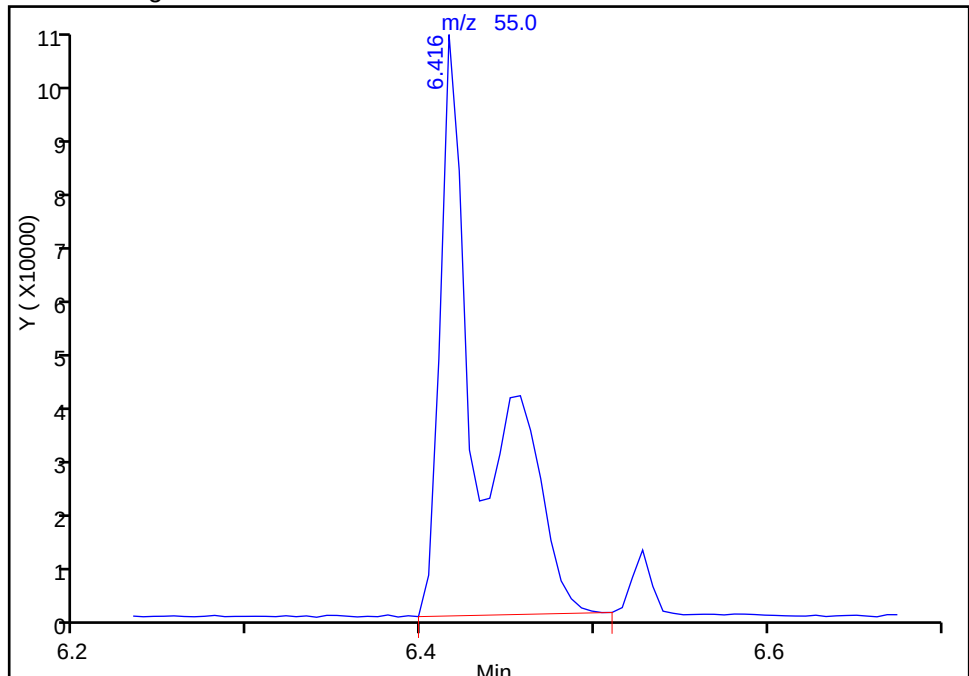
RT: 6.42
Area: 99614
Amount: 38.000554
Amount Units: ug/ml

Processing Integration Results



RT: 6.42
Area: 171197
Amount: 49.522448
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:09:09
Audit Action: Manually Integrated
Audit Reason: Split Peak

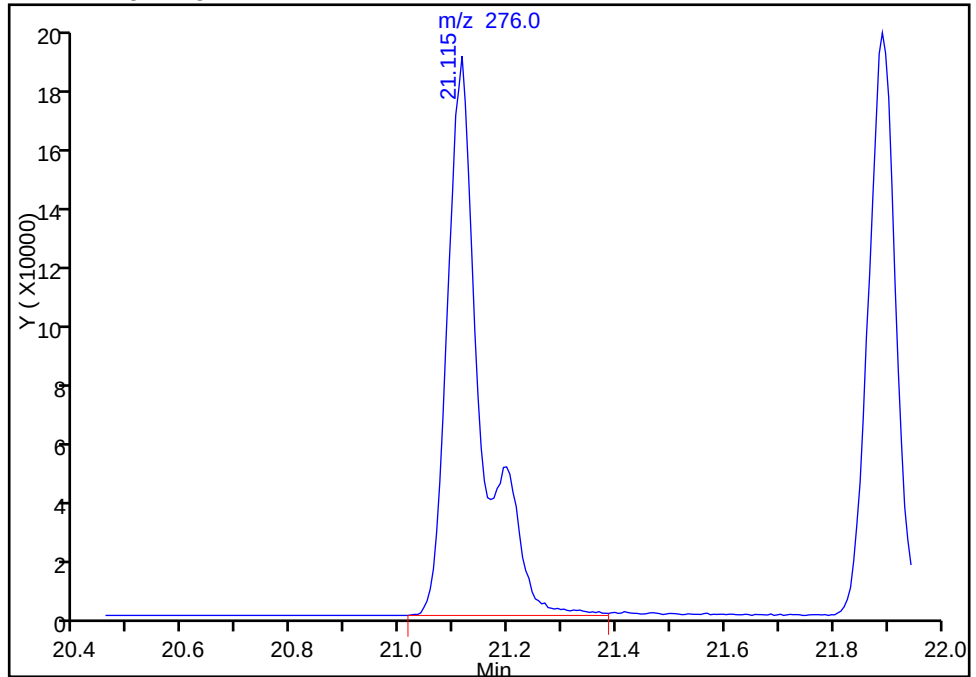
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16641.D
Injection Date: 25-Feb-2015 13:39:30 Instrument ID: SMS_G6
Lims ID: STD050 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

151 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

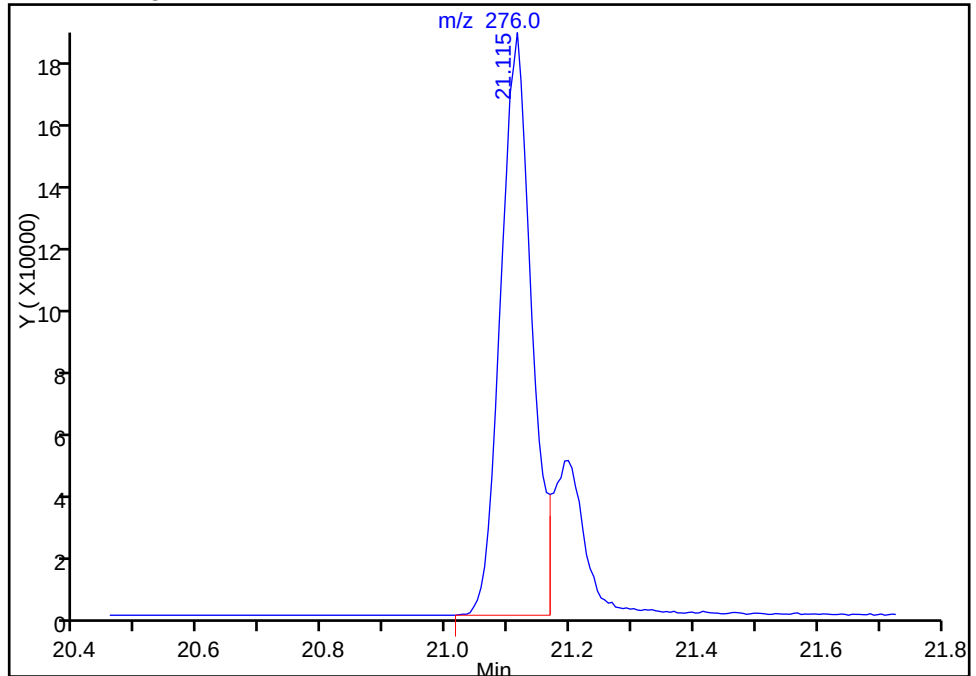
RT: 21.11
Area: 825882
Amount: 56.977890
Amount Units: ug/ml

Processing Integration Results



RT: 21.11
Area: 654992
Amount: 50.847595
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:09:09
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16642.D
 Lims ID: STD120 HSL
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 25-Feb-2015 14:06:30 ALS Bottle#: 7 Worklist Smp#: 8
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: STD120 HSL
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:43 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:12:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	96	184348	40.0	40.0	
* 2 Naphthalene-d8	136	6.022	6.022	0.000	100	702195	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	91	392054	40.0	40.0	
* 4 Phenanthrene-d10	188	9.281	9.280	0.000	97	657834	40.0	40.0	
* 5 Chrysene-d12	240	13.710	13.710	0.000	96	610902	40.0	40.0	
* 6 Perylene-d12	264	17.903	17.903	0.000	95	528824	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.622	3.622	0.000	94	808477	120.0	120.6	
\$ 8 Phenol-d5	99	4.410	4.410	0.000	99	1009270	120.0	120.1	
\$ 9 Nitrobenzene-d5	82	5.322	5.322	0.000	92	875604	120.0	121.6	
\$ 10 2-Fluorobiphenyl	172	7.069	7.069	0.000	100	1545378	120.0	116.6	
\$ 11 2,4,6-Tribromophenol	330	8.575	8.575	0.000	87	184203	120.0	124.9	
\$ 12 Terphenyl-d14	244	11.369	11.369	0.000	98	1459232	120.0	120.2	
13 1,4-Dioxane	88	2.352	2.352	0.000	99	333966	120.0	118.1	
14 N-Nitrosodimethylamine	74	2.581	2.581	0.000	90	518985	120.0	120.8	
15 Pyridine	79	2.622	2.622	0.000	90	891222	120.0	121.7	
23 Phenol	94	4.422	4.422	0.000	99	999282	120.0	118.6	
24 Aniline	93	4.498	4.498	0.000	98	1234749	120.0	119.9	
25 Bis(2-chloroethyl)ether	93	4.528	4.528	0.000	90	802000	120.0	121.3	
26 2-Chlorophenol	128	4.604	4.604	0.000	97	824383	120.0	119.9	
27 1,3-Dichlorobenzene	146	4.751	4.751	0.000	97	832464	120.0	119.3	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	93	837561	120.0	118.8	
29 Benzyl alcohol	108	4.904	4.904	0.000	93	532820	120.0	123.0	
30 1,2-Dichlorobenzene	146	4.963	4.963	0.000	96	802221	120.0	118.3	
31 2-Methylphenol	108	4.987	4.981	0.006	94	749809	120.0	120.0	
32 2,2'-oxybis[1-chloropropan	45	5.010	5.010	0.000	93	1164573	120.0	119.6	
38 3 & 4 Methylphenol	108	5.128	5.128	0.000	98	777835	120.0	120.1	
39 3-Methylphenol	108	5.128	5.128	0.000	98	777835	120.0	120.1	
40 4-Methylphenol	108	5.128	5.128	0.000	94	777835	120.0	120.1	
41 N-Nitrosodi-n-propylamine	70	5.145	5.145	0.000	92	569051	120.0	121.1	
42 Acetophenone	105	5.163	5.163	0.000	96	1084969	120.0	119.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	97	361563	120.0	119.5	
44 Nitrobenzene	77	5.340	5.340	0.000	92	842823	120.0	121.5	
46 Isophorone	82	5.551	5.545	0.006	99	1427939	120.0	121.2	
48 2-Nitrophenol	139	5.645	5.645	0.000	96	415910	120.0	120.3	
49 2,4-Dimethylphenol	107	5.640	5.640	0.000	94	751706	120.0	118.7	
50 Bis(2-chloroethoxy)methane	93	5.734	5.734	0.000	98	920059	120.0	118.8	
52 Benzoic acid	105	5.745	5.728	0.017	90	1285043	240.0	258.5	
53 2,4-Dichlorophenol	162	5.863	5.863	0.000	96	627452	120.0	121.0	
54 1,2,4-Trichlorobenzene	180	5.951	5.951	0.000	94	632193	120.0	119.9	
57 Naphthalene	128	6.040	6.040	0.000	98	2232749	120.0	119.5	
58 4-Chloroaniline	127	6.081	6.081	0.000	96	1011967	120.0	119.8	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	97	341381	120.0	118.9	
62 Caprolactam	55	6.434	6.428	0.006	78	433839	120.0	130.6	M
64 4-Chloro-3-methylphenol	107	6.534	6.528	0.006	98	673785	120.0	121.3	
65 2-Methylnaphthalene	142	6.716	6.716	0.000	93	1433043	120.0	119.4	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	94	1344403	120.0	119.1	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	97	376192	120.0	122.1	
69 1,2,4,5-Tetrachlorobenzene	216	6.887	6.887	0.001	98	588950	120.0	117.9	
70 2,4,6-Trichlorophenol	196	6.992	6.992	0.000	95	416933	120.0	118.4	
72 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	93	446976	120.0	119.2	
74 1,1'-Biphenyl	154	7.181	7.181	0.000	95	1699215	120.0	115.2	
75 2-Chloronaphthalene	162	7.216	7.216	0.000	98	1303430	120.0	117.2	
77 2-Nitroaniline	65	7.316	7.316	0.000	84	495382	120.0	121.3	
79 Dimethyl phthalate	163	7.463	7.463	0.000	98	1494143	120.0	114.5	
80 1,3-Dinitrobenzene	168	7.528	7.528	0.000	83	295917	120.0	127.8	
81 2,6-Dinitrotoluene	165	7.545	7.545	0.000	92	358122	120.0	118.7	
82 Acenaphthylene	152	7.639	7.639	0.000	99	2147354	120.0	118.9	
83 3-Nitroaniline	138	7.734	7.728	0.006	93	467084	120.0	119.7	
84 Acenaphthene	153	7.810	7.810	0.000	95	1360779	120.0	116.7	
86 2,4-Dinitrophenol	184	7.834	7.828	0.006	83	538794	240.0	245.2	
87 4-Nitrophenol	109	7.875	7.869	0.006	95	498510	240.0	237.0	
89 2,4-Dinitrotoluene	165	7.957	7.951	0.006	92	481458	120.0	121.7	
90 Dibenzofuran	168	7.981	7.981	0.000	97	1924090	120.0	117.1	
92 2,3,4,6-Tetrachlorophenol	232	8.098	8.092	0.006	75	371083	120.0	122.1	
94 Diethyl phthalate	149	8.157	8.157	0.000	98	1542842	120.0	116.1	
96 4-Chlorophenyl phenyl ethe	204	8.304	8.298	0.006	95	689660	120.0	116.0	
98 Fluorene	166	8.328	8.328	0.000	96	1563412	120.0	117.0	
99 4-Nitroaniline	138	8.363	8.357	0.006	85	452856	120.0	118.7	
100 4,6-Dinitro-2-methylphenol	198	8.369	8.363	0.006	75	578792	240.0	248.7	
102 N-Nitrosodiphenylamine	169	8.428	8.422	0.006	62	1152861	120.0	118.3	
103 Azobenzene	77	8.463	8.463	0.000	99	1738928	120.0	118.4	
104 1,2-Diphenylhydrazine	77	8.463	8.463	0.000	100	1738928	121.3	119.7	
111 4-Bromophenyl phenyl ether	248	8.798	8.798	0.000	71	370159	120.0	120.1	
112 Hexachlorobenzene	284	8.886	8.881	0.006	92	374109	120.0	116.8	
116 Pentachlorophenol	266	9.081	9.080	0.001	90	519082	240.0	246.6	
119 Phenanthrene	178	9.310	9.310	0.000	98	2117512	120.0	116.1	
120 Anthracene	178	9.363	9.357	0.006	98	2189501	120.0	117.1	
122 Carbazole	167	9.522	9.522	0.000	96	2245142	120.0	117.8	
123 Di-n-butyl phthalate	149	9.822	9.822	0.000	100	2671086	120.0	119.2	
128 Fluoranthene	202	10.786	10.786	0.000	98	2363681	120.0	118.3	
131 Pyrene	202	11.157	11.157	0.000	97	2459885	120.0	120.6	
136 Famphur	218	12.198	12.198	0.000	96	767713	120.0	119.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.298	12.298	0.000	98	1219463	120.0	126.6	
140 3,3'-Dichlorobenzidine	252	13.639	13.639	0.000	76	756387	120.0	125.3	
141 Benzo[a]anthracene	228	13.680	13.680	0.000	99	2102748	120.0	119.8	
142 Bis(2-ethylhexyl) phthalat	149	13.663	13.668	-0.005	97	1589107	120.0	126.3	
143 Chrysene	228	13.780	13.774	0.006	98	1981581	120.0	120.9	
144 Di-n-octyl phthalate	149	15.568	15.574	-0.006	99	2802646	120.0	124.1	
146 Benzo[b]fluoranthene	252	16.733	16.727	0.006	99	1901054	120.0	123.1	
147 Benzo[k]fluoranthene	252	16.815	16.815	0.000	98	1968536	120.0	124.1	
148 Benzo[a]pyrene	252	17.733	17.727	0.006	80	1881464	120.0	126.7	
151 Indeno[1,2,3-cd]pyrene	276	21.127	21.127	0.000	96	1584058	120.0	127.0	M
152 Dibenz(a,h)anthracene	278	21.209	21.203	0.006	95	1573114	120.0	128.1	
153 Benzo[g,h,i]perylene	276	21.909	21.897	0.012	94	1678491	120.0	125.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA120_00015

Amount Added: 200.00

Units: uL

Report Date: 10-Apr-2015 12:09:43

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16642.D

Injection Date: 25-Feb-2015 14:06:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: STD120 HSL

Worklist Smp#: 8

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

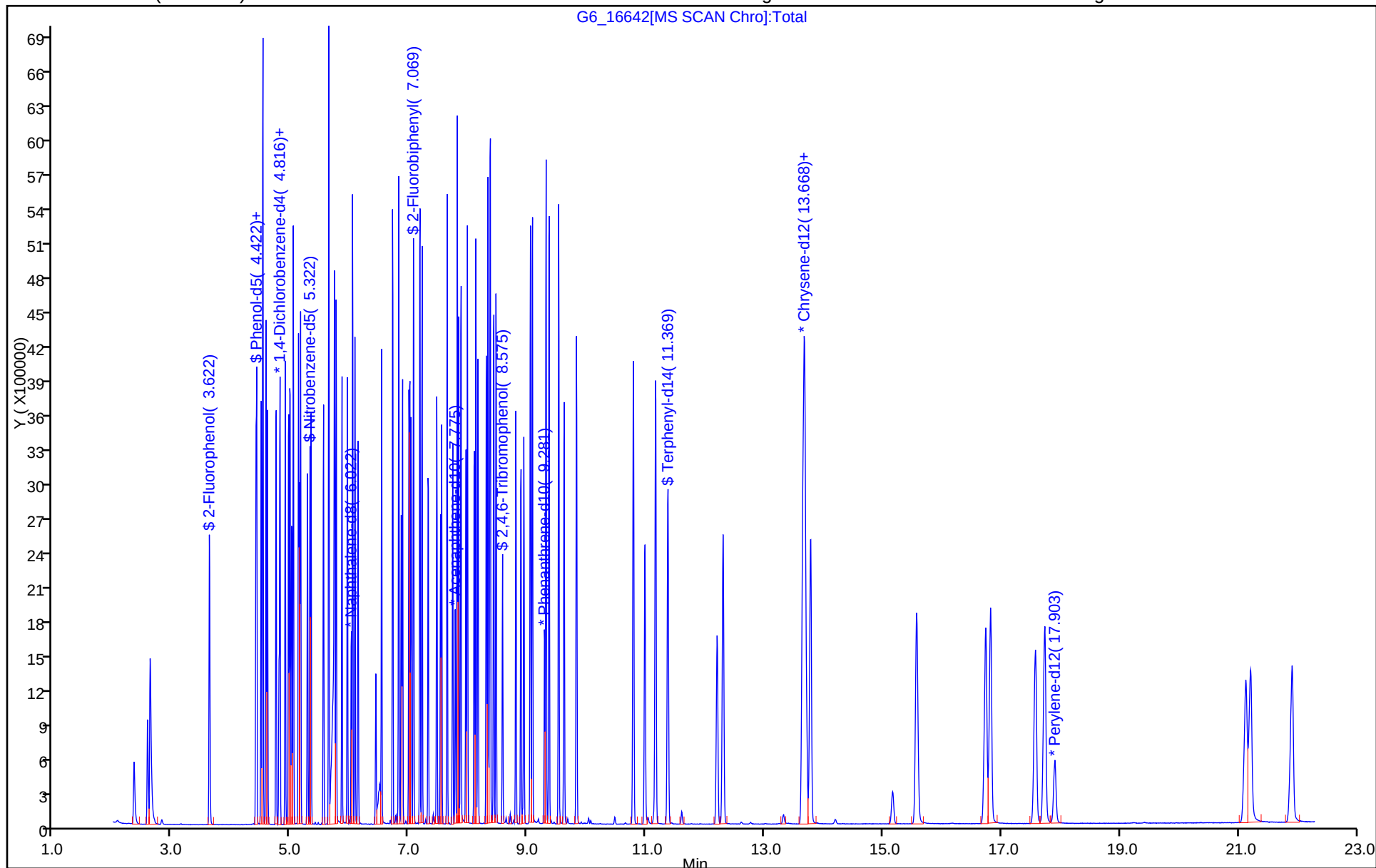
ALS Bottle#: 7

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



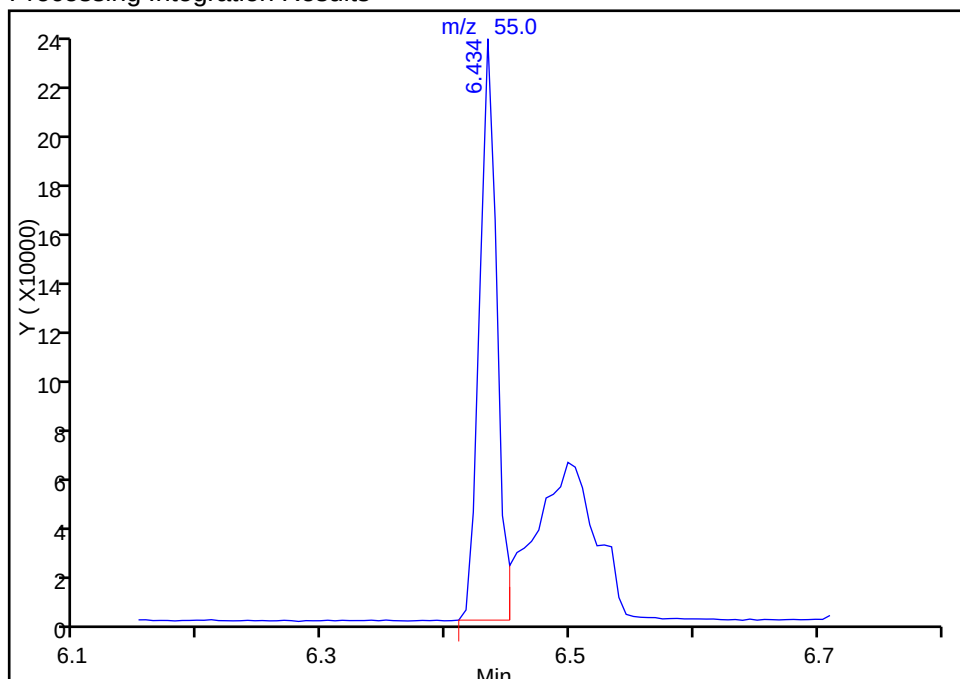
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16642.D
Injection Date: 25-Feb-2015 14:06:30 Instrument ID: SMS_G6
Lims ID: STD120 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

62 Caprolactam, CAS: 105-60-2

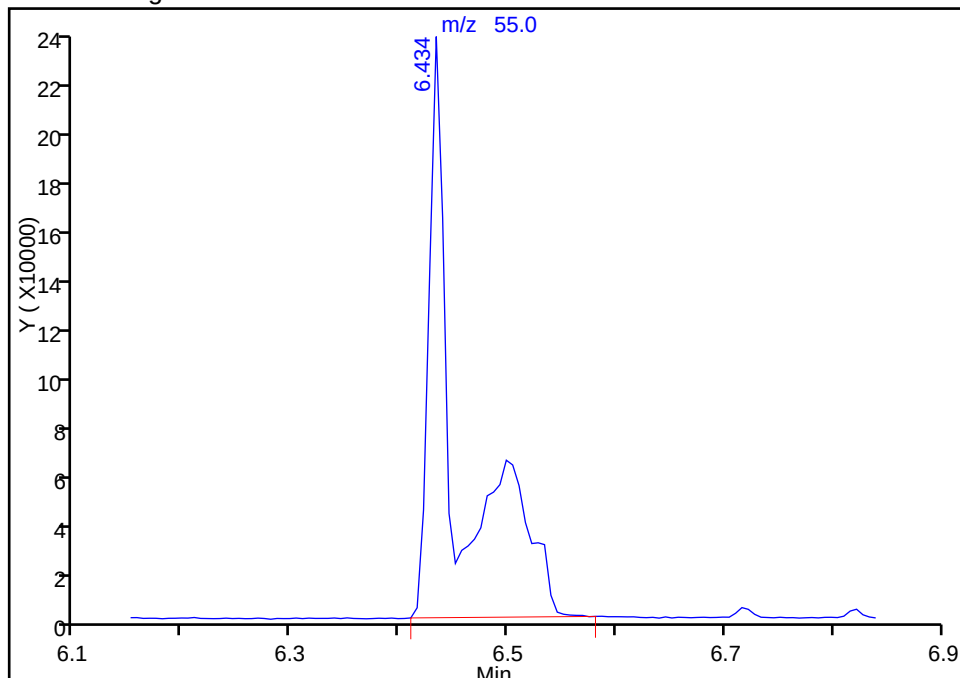
RT: 6.43
Area: 226919
Amount: 84.337564
Amount Units: ug/ml

Processing Integration Results



RT: 6.43
Area: 433839
Amount: 130.6158
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:12:35
Audit Action: Manually Integrated
Audit Reason: Split Peak

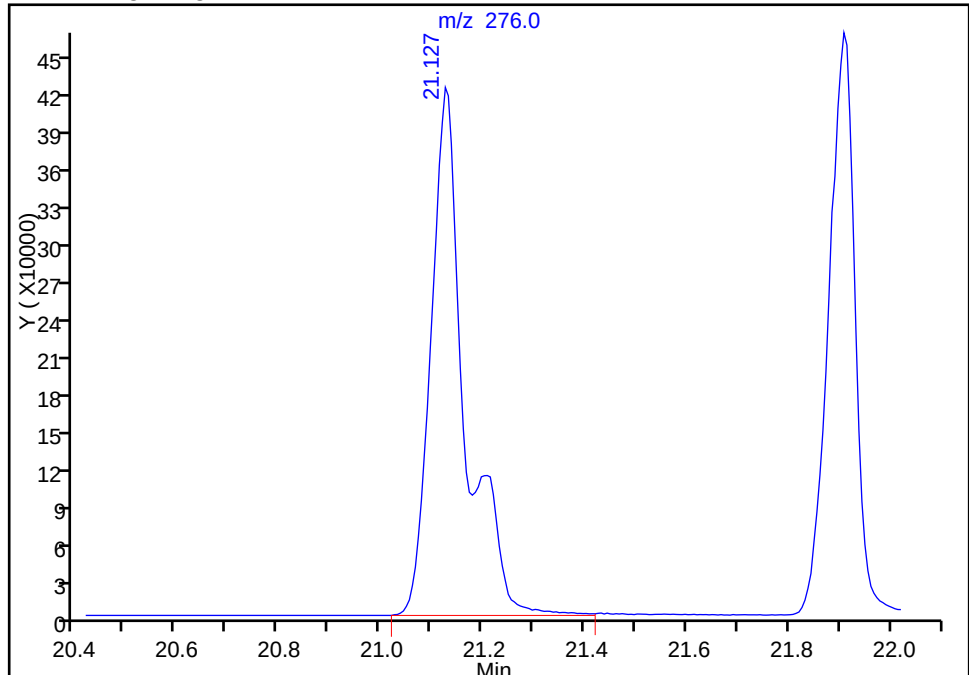
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16642.D
Injection Date: 25-Feb-2015 14:06:30 Instrument ID: SMS_G6
Lims ID: STD120 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

151 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

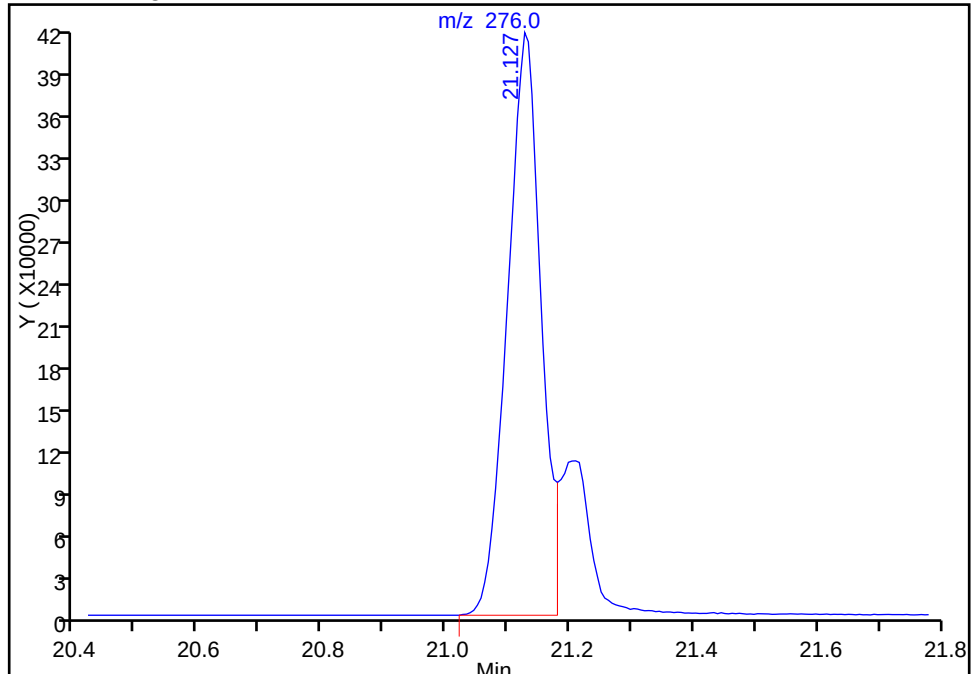
RT: 21.13
Area: 1960031
Amount: 143.9043
Amount Units: ug/ml

Processing Integration Results



RT: 21.13
Area: 1584058
Amount: 127.0092
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:12:35
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16643.D
 Lims ID: STD160 HSL
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 25-Feb-2015 14:32:30 ALS Bottle#: 8 Worklist Smp#: 9
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: STD160 HSL
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:43 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:14:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.799	4.798	0.001	96	186214	40.0	40.0	
* 2 Naphthalene-d8	136	6.022	6.022	0.000	100	703500	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	93	384037	40.0	40.0	
* 4 Phenanthrene-d10	188	9.286	9.280	0.006	97	648058	40.0	40.0	
* 5 Chrysene-d12	240	13.716	13.710	0.006	96	607719	40.0	40.0	
* 6 Perylene-d12	264	17.909	17.903	0.006	95	521860	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.622	3.622	0.000	94	1061373	160.0	156.8	
\$ 8 Phenol-d5	99	4.410	4.410	0.000	99	1329218	160.0	156.6	
\$ 9 Nitrobenzene-d5	82	5.322	5.322	0.000	92	1140831	160.0	158.2	
\$ 10 2-Fluorobiphenyl	172	7.075	7.069	0.006	100	1959377	160.0	150.9	
\$ 11 2,4,6-Tribromophenol	330	8.581	8.575	0.006	92	236631	160.0	163.8	
\$ 12 Terphenyl-d14	244	11.375	11.369	0.006	98	1898972	160.0	157.2	
13 1,4-Dioxane	88	2.352	2.352	0.000	98	439534	160.0	153.9	
14 N-Nitrosodimethylamine	74	2.581	2.581	0.000	91	689099	160.0	158.8	
15 Pyridine	79	2.622	2.622	0.000	91	1173437	160.0	158.6	
23 Phenol	94	4.428	4.422	0.006	99	1321311	160.0	155.3	
24 Aniline	93	4.499	4.498	0.001	98	1657573	160.0	159.3	
25 Bis(2-chloroethyl)ether	93	4.528	4.528	0.000	90	988186	160.0	147.9	
26 2-Chlorophenol	128	4.604	4.604	0.000	98	1078332	160.0	155.2	
27 1,3-Dichlorobenzene	146	4.751	4.751	0.000	97	1080606	160.0	153.3	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	94	1094435	160.0	153.7	
29 Benzyl alcohol	108	4.904	4.904	0.000	93	699135	160.0	159.7	
30 1,2-Dichlorobenzene	146	4.963	4.963	0.000	96	1044311	160.0	152.5	
31 2-Methylphenol	108	4.987	4.981	0.006	95	980672	160.0	155.4	
32 2,2'-oxybis[1-chloropropan	45	5.016	5.010	0.006	93	1512052	160.0	153.8	
38 3 & 4 Methylphenol	108	5.134	5.128	0.006	98	1031059	160.0	157.7	
39 3-Methylphenol	108	5.134	5.128	0.006	98	1031059	160.0	157.7	
40 4-Methylphenol	108	5.134	5.128	0.006	93	1031059	160.0	157.7	
41 N-Nitrosodi-n-propylamine	70	5.151	5.145	0.006	90	741748	160.0	156.3	
42 Acetophenone	105	5.169	5.163	0.006	98	1407057	160.0	153.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	97	469286	160.0	153.5	
44 Nitrobenzene	77	5.346	5.340	0.006	90	1089690	160.0	156.8	
46 Isophorone	82	5.551	5.545	0.006	99	1881926	160.0	159.5	
48 2-Nitrophenol	139	5.646	5.645	0.001	93	534875	160.0	154.4	
49 2,4-Dimethylphenol	107	5.640	5.640	0.000	93	981303	160.0	154.6	
50 Bis(2-chloroethoxy)methane	93	5.740	5.734	0.006	98	1210771	160.0	156.1	
52 Benzoic acid	105	5.757	5.728	0.029	96	1796945	320.0	360.9	
53 2,4-Dichlorophenol	162	5.863	5.863	0.000	97	820144	160.0	157.8	
54 1,2,4-Trichlorobenzene	180	5.957	5.951	0.006	94	814451	160.0	154.2	
57 Naphthalene	128	6.046	6.040	0.006	97	2872188	160.0	153.5	
58 4-Chloroaniline	127	6.087	6.081	0.006	96	1326050	160.0	156.7	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	97	451504	160.0	156.9	
62 Caprolactam	55	6.445	6.428	0.017	78	567672	160.0	170.6	M
64 4-Chloro-3-methylphenol	107	6.534	6.528	0.006	98	879210	160.0	158.0	
65 2-Methylnaphthalene	142	6.722	6.716	0.006	93	1850886	160.0	153.9	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	94	1735161	160.0	153.4	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	97	489123	160.0	162.1	
69 1,2,4,5-Tetrachlorobenzene	216	6.887	6.887	0.001	98	773416	160.0	154.5	
70 2,4,6-Trichlorophenol	196	6.998	6.992	0.006	94	540716	160.0	156.8	
72 2,4,5-Trichlorophenol	196	7.034	7.028	0.006	93	570902	160.0	155.4	
74 1,1'-Biphenyl	154	7.181	7.181	0.000	95	2210281	160.0	152.9	
75 2-Chloronaphthalene	162	7.216	7.216	0.000	98	1663115	160.0	152.6	
77 2-Nitroaniline	65	7.322	7.316	0.006	84	646189	160.0	161.5	
79 Dimethyl phthalate	163	7.469	7.463	0.006	98	1926232	160.0	150.7	
80 1,3-Dinitrobenzene	168	7.534	7.528	0.006	85	383728	160.0	169.2	
81 2,6-Dinitrotoluene	165	7.551	7.545	0.006	95	471768	160.0	159.7	
82 Acenaphthylene	152	7.640	7.639	0.001	99	2757941	160.0	155.8	
83 3-Nitroaniline	138	7.740	7.728	0.012	94	619865	160.0	162.2	
84 Acenaphthene	153	7.810	7.810	0.000	95	1750014	160.0	153.2	
86 2,4-Dinitrophenol	184	7.834	7.828	0.006	83	703654	320.0	325.9	
87 4-Nitrophenol	109	7.881	7.869	0.012	94	644961	320.0	313.1	
89 2,4-Dinitrotoluene	165	7.963	7.951	0.012	93	625683	160.0	161.5	
90 Dibenzofuran	168	7.987	7.981	0.006	97	2465817	160.0	153.2	
92 2,3,4,6-Tetrachlorophenol	232	8.098	8.092	0.006	76	475470	160.0	159.7	
94 Diethyl phthalate	149	8.163	8.157	0.006	98	1980010	160.0	152.1	
96 4-Chlorophenyl phenyl ethe	204	8.304	8.298	0.006	95	895954	160.0	153.9	
98 Fluorene	166	8.334	8.328	0.006	96	1991029	160.0	152.1	
99 4-Nitroaniline	138	8.369	8.357	0.012	85	595856	160.0	159.5	
100 4,6-Dinitro-2-methylphenol	198	8.375	8.363	0.012	84	761080	320.0	331.9	
102 N-Nitrosodiphenylamine	169	8.428	8.422	0.006	63	1464837	160.0	152.6	
103 Azobenzene	77	8.469	8.463	0.006	99	2228985	160.0	154.9	
104 1,2-Diphenylhydrazine	77	8.469	8.463	0.006	100	2228985	161.8	156.6	
111 4-Bromophenyl phenyl ether	248	8.804	8.798	0.006	72	477097	160.0	157.1	
112 Hexachlorobenzene	284	8.886	8.881	0.006	92	486080	160.0	154.1	
116 Pentachlorophenol	266	9.081	9.080	0.001	90	669774	320.0	323.0	
119 Phenanthrene	178	9.310	9.310	0.000	98	2727512	160.0	151.7	
120 Anthracene	178	9.363	9.357	0.006	98	2822765	160.0	153.3	
122 Carbazole	167	9.528	9.522	0.006	96	2890531	160.0	154.0	
123 Di-n-butyl phthalate	149	9.828	9.822	0.006	100	3456767	160.0	156.5	
128 Fluoranthene	202	10.786	10.786	0.000	98	3068105	160.0	155.8	
131 Pyrene	202	11.163	11.157	0.006	97	3191260	160.0	157.3	
136 Famphur	218	12.204	12.198	0.006	96	941175	160.0	147.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.304	12.298	0.006	98	1597755	160.0	166.8	
140 3,3'-Dichlorobenzidine	252	13.651	13.639	0.012	75	987057	160.0	164.4	
141 Benzo[a]anthracene	228	13.686	13.680	0.006	99	2746652	160.0	157.3	
142 Bis(2-ethylhexyl) phthalat	149	13.674	13.668	0.006	97	2060022	160.0	164.6	
143 Chrysene	228	13.786	13.774	0.012	98	2595420	160.0	159.1	
144 Di-n-octyl phthalate	149	15.580	15.574	0.006	99	3712823	160.0	164.8	
146 Benzo[b]fluoranthene	252	16.745	16.727	0.018	99	2549534	160.0	167.2	
147 Benzo[k]fluoranthene	252	16.833	16.815	0.018	98	2568840	160.0	164.1	
148 Benzo[a]pyrene	252	17.745	17.727	0.018	80	2481467	160.0	169.3	
151 Indeno[1,2,3-cd]pyrene	276	21.145	21.127	0.018	96	2084773	160.0	168.0	M
152 Dibenz(a,h)anthracene	278	21.221	21.203	0.018	96	2075077	160.0	171.2	
153 Benzo[g,h,i]perylene	276	21.927	21.897	0.030	93	2188108	160.0	165.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA160_00015

Amount Added: 200.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16643.D

Injection Date: 25-Feb-2015 14:32:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: STD160 HSL

Worklist Smp#: 9

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

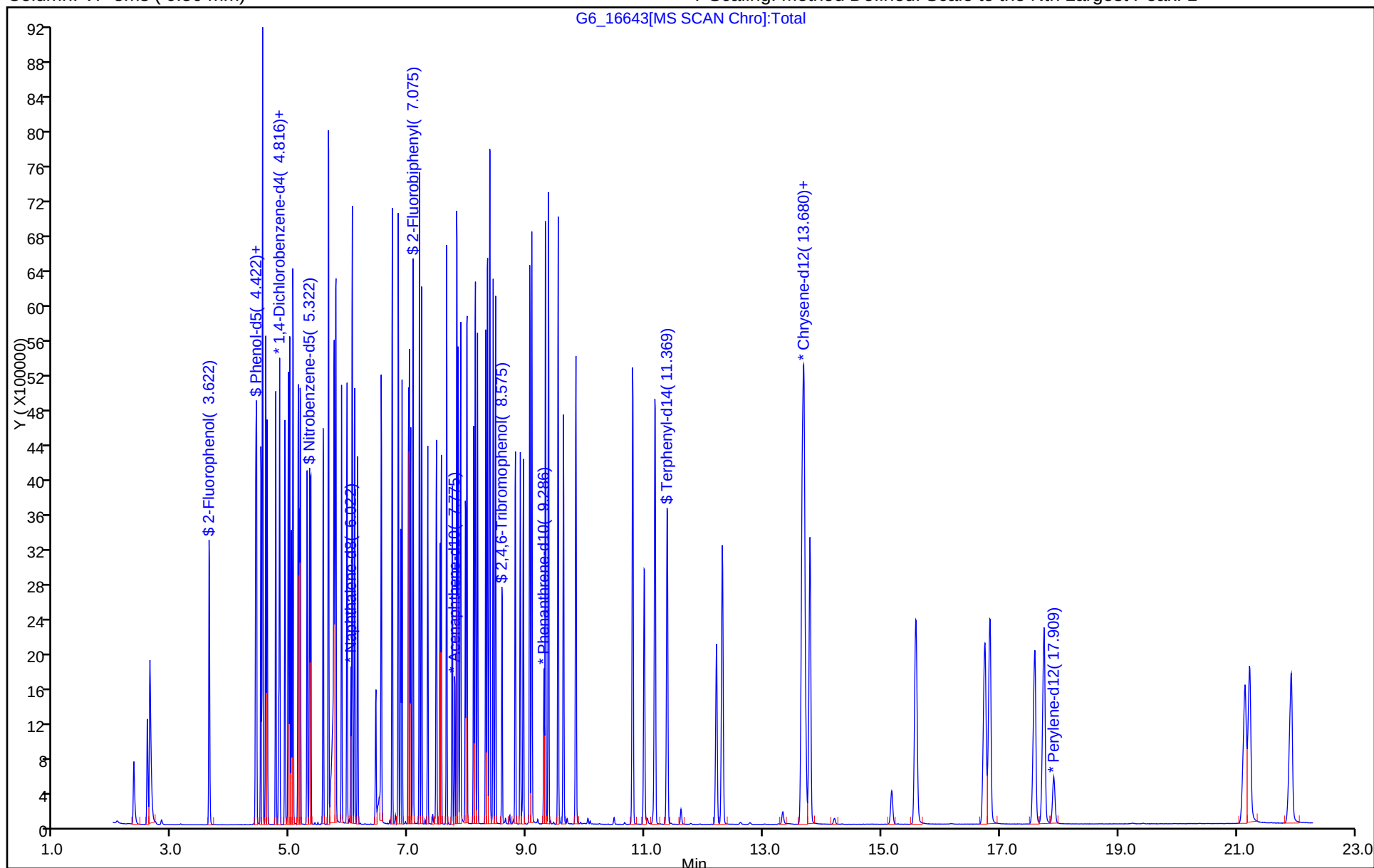
ALS Bottle#: 8

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



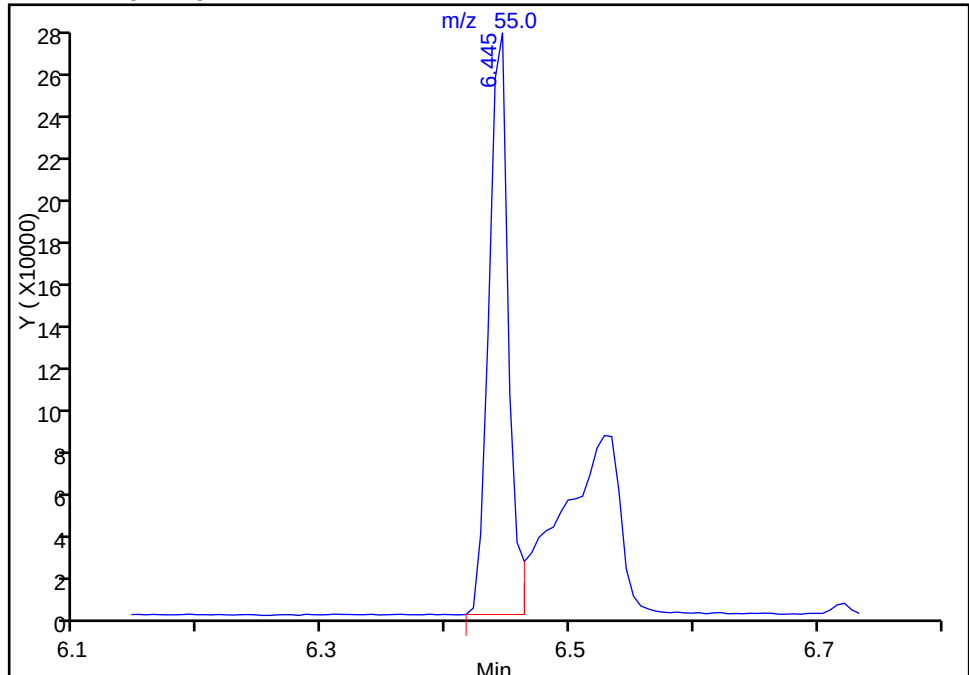
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16643.D
Injection Date: 25-Feb-2015 14:32:30 Instrument ID: SMS_G6
Lims ID: STD160 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

62 Caprolactam, CAS: 105-60-2

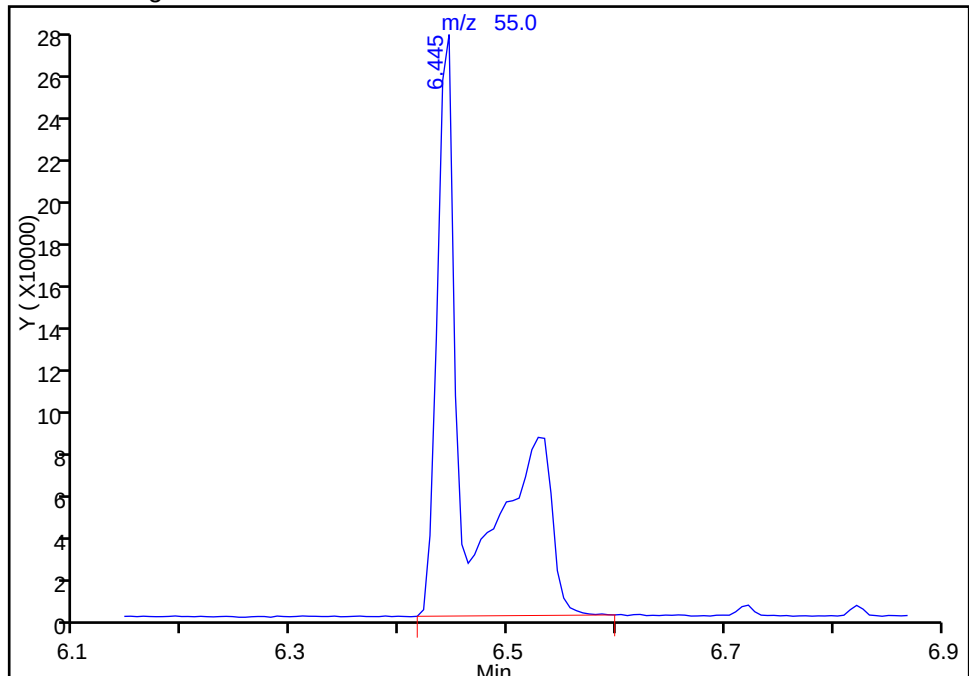
RT: 6.45
Area: 301406
Amount: 103.5209
Amount Units: ug/ml

Processing Integration Results



RT: 6.45
Area: 567672
Amount: 170.5918
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:14:19
Audit Action: Manually Integrated
Audit Reason: Split Peak

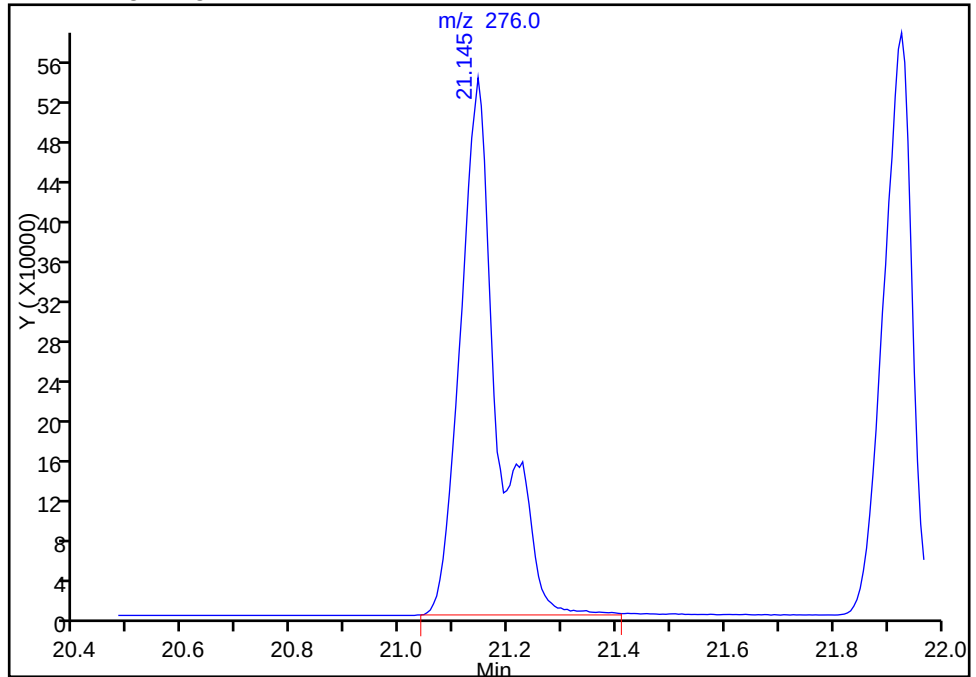
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16643.D
Injection Date: 25-Feb-2015 14:32:30 Instrument ID: SMS_G6
Lims ID: STD160 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

151 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

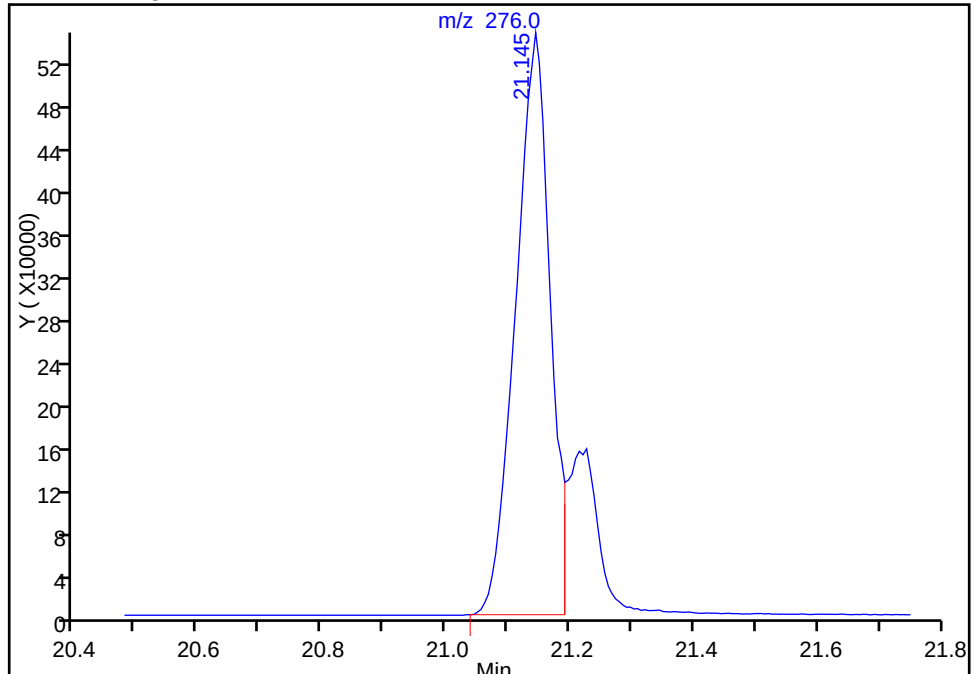
RT: 21.14
Area: 2591657
Amount: 196.9373
Amount Units: ug/ml

Processing Integration Results



RT: 21.14
Area: 2084773
Amount: 168.0318
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:14:19
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D

Lims ID: STD200 HSL

Client ID:

Sample Type: IC

Calib Level: 8

Inject. Date: 25-Feb-2015 14:59:30

ALS Bottle#: 9

Worklist Smp#: 10

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

Sample Info: STD200 HSL

Operator ID: KIEKELD

Instrument ID: SMS_G6

Sublist: chrom-SMS_G6_8270D*sub6

Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m

Limit Group: MSSV - 8270D

Method Label: 8270D

Last Update: 10-Apr-2015 12:09:44

Calib Date: 25-Feb-2015 14:59:30

Integrator: RTE

ID Type: Deconvolution ID

Quant Method: Internal Standard

Quant By: Initial Calibration

Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D

Column 1 : VF-5ms (0.50 mm)

Det: MS SCAN

Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:22:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	96	189664	40.0	40.0	
* 2 Naphthalene-d8	136	6.022	6.022	0.000	100	731189	40.0	40.0	
* 3 Acenaphthene-d10	164	7.781	7.775	0.006	93	395282	40.0	40.0	
* 4 Phenanthrene-d10	188	9.286	9.280	0.006	97	663475	40.0	40.0	
* 5 Chrysene-d12	240	13.721	13.710	0.011	96	626472	40.0	40.0	
* 6 Perylene-d12	264	17.909	17.903	0.006	95	533835	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.628	3.622	0.006	94	1340808	200.0	194.4	
\$ 8 Phenol-d5	99	4.416	4.410	0.006	99	1686187	200.0	195.1	
\$ 9 Nitrobenzene-d5	82	5.328	5.322	0.006	91	1438315	200.0	191.8	
\$ 10 2-Fluorobiphenyl	172	7.075	7.069	0.006	99	2471944	200.0	185.0	
\$ 11 2,4,6-Tribromophenol	330	8.580	8.575	0.005	91	308954	200.0	207.8	
\$ 12 Terphenyl-d14	244	11.374	11.369	0.005	98	2411505	200.0	193.7	
13 1,4-Dioxane	88	2.351	2.352	-0.001	98	558095	200.0	191.8	
14 N-Nitrosodimethylamine	74	2.581	2.581	0.000	91	878936	200.0	198.9	
15 Pyridine	79	2.622	2.622	0.000	91	1482135	200.0	196.6	
23 Phenol	94	4.428	4.422	0.006	99	1676043	200.0	193.4	
24 Aniline	93	4.504	4.498	0.006	98	2067510	200.0	195.1	
25 Bis(2-chloroethyl)ether	93	4.528	4.528	0.000	92	1252467	200.0	184.1	
26 2-Chlorophenol	128	4.604	4.604	0.000	97	1354936	200.0	191.5	
27 1,3-Dichlorobenzene	146	4.751	4.751	0.000	97	1361408	200.0	189.6	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	92	1353318	200.0	186.6	
29 Benzyl alcohol	108	4.910	4.904	0.006	93	883290	200.0	198.1	
30 1,2-Dichlorobenzene	146	4.963	4.963	0.000	95	1312433	200.0	188.1	
31 2-Methylphenol	108	4.987	4.981	0.006	95	1246269	200.0	193.9	
32 2,2'-oxybis[1-chloropropan	45	5.016	5.010	0.006	93	1907157	200.0	190.4	
38 3 & 4 Methylphenol	108	5.134	5.128	0.006	98	1296981	200.0	194.7	
39 3-Methylphenol	108	5.134	5.128	0.006	98	1296981	200.0	194.7	
40 4-Methylphenol	108	5.134	5.128	0.006	93	1296981	200.0	194.7	
41 N-Nitrosodi-n-propylamine	70	5.151	5.145	0.006	91	929339	200.0	192.2	
42 Acetophenone	105	5.169	5.163	0.006	97	1777329	200.0	189.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.281	5.281	0.000	97	593205	200.0	190.6	
44 Nitrobenzene	77	5.345	5.340	0.005	95	1376078	200.0	190.5	
46 Isophorone	82	5.557	5.545	0.012	99	2388530	200.0	194.7	
48 2-Nitrophenol	139	5.645	5.645	0.000	90	672106	200.0	186.7	
49 2,4-Dimethylphenol	107	5.645	5.640	0.005	93	1213524	200.0	184.0	
50 Bis(2-chloroethoxy)methane	93	5.739	5.734	0.005	98	1508491	200.0	187.1	
52 Benzoic acid	105	5.775	5.728	0.047	89	2237473	400.0	432.3	
53 2,4-Dichlorophenol	162	5.869	5.863	0.006	96	1026716	200.0	190.1	
54 1,2,4-Trichlorobenzene	180	5.957	5.951	0.006	94	1032581	200.0	188.1	
57 Naphthalene	128	6.045	6.040	0.005	97	3606766	200.0	185.4	
58 4-Chloroaniline	127	6.087	6.081	0.005	96	1671870	200.0	190.0	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	98	556376	200.0	186.0	
62 Caprolactam	55	6.451	6.428	0.023	77	732007	200.0	211.6	M
64 4-Chloro-3-methylphenol	107	6.539	6.528	0.011	98	1115868	200.0	193.0	
65 2-Methylnaphthalene	142	6.722	6.716	0.006	93	2311519	200.0	185.0	
67 1-Methylnaphthalene	142	6.828	6.822	0.006	95	2161606	200.0	183.9	
68 Hexachlorocyclopentadiene	237	6.869	6.863	0.006	96	621756	200.0	200.2	
69 1,2,4,5-Tetrachlorobenzene	216	6.886	6.887	0.000	98	984311	200.0	189.2	
70 2,4,6-Trichlorophenol	196	6.998	6.992	0.006	94	681085	200.0	191.9	
72 2,4,5-Trichlorophenol	196	7.034	7.028	0.006	93	728184	200.0	192.6	
74 1,1'-Biphenyl	154	7.181	7.181	0.000	96	2739578	200.0	184.1	
75 2-Chloronaphthalene	162	7.222	7.216	0.006	98	2078262	200.0	185.3	
77 2-Nitroaniline	65	7.322	7.316	0.006	85	812592	200.0	197.3	
79 Dimethyl phthalate	163	7.469	7.463	0.006	98	2440056	200.0	185.4	
80 1,3-Dinitrobenzene	168	7.533	7.528	0.005	85	495821	200.0	212.4	
81 2,6-Dinitrotoluene	165	7.551	7.545	0.006	94	595647	200.0	195.8	
82 Acenaphthylene	152	7.645	7.639	0.006	99	3454854	200.0	189.7	
83 3-Nitroaniline	138	7.739	7.728	0.011	94	793558	200.0	201.8	
84 Acenaphthene	153	7.816	7.810	0.006	95	2161568	200.0	183.8	
86 2,4-Dinitrophenol	184	7.839	7.828	0.011	82	903939	400.0	406.0	
87 4-Nitrophenol	109	7.886	7.869	0.017	94	814776	400.0	384.3	
89 2,4-Dinitrotoluene	165	7.963	7.951	0.012	92	798404	200.0	200.2	
90 Dibenzofuran	168	7.986	7.981	0.005	97	3062264	200.0	184.9	
92 2,3,4,6-Tetrachlorophenol	232	8.098	8.092	0.006	76	615581	200.0	200.8	
94 Diethyl phthalate	149	8.163	8.157	0.006	98	2499587	200.0	186.6	
96 4-Chlorophenyl phenyl ethe	204	8.304	8.298	0.006	96	1124576	200.0	187.6	
98 Fluorene	166	8.333	8.328	0.005	95	2502594	200.0	185.7	
99 4-Nitroaniline	138	8.375	8.357	0.018	84	738699	200.0	192.1	
100 4,6-Dinitro-2-methylphenol	198	8.380	8.363	0.017	84	958230	400.0	408.2	
102 N-Nitrosodiphenylamine	169	8.433	8.422	0.011	62	1845140	200.0	187.7	
103 Azobenzene	77	8.469	8.463	0.006	99	2812289	200.0	189.9	
104 1,2-Diphenylhydrazine	77	8.469	8.463	0.006	100	2812289	202.2	192.0	
111 4-Bromophenyl phenyl ether	248	8.804	8.798	0.006	72	598149	200.0	192.4	
112 Hexachlorobenzene	284	8.886	8.881	0.006	92	623678	200.0	193.1	
116 Pentachlorophenol	266	9.086	9.080	0.006	92	859647	400.0	405.0	
119 Phenanthrene	178	9.316	9.310	0.006	98	3407975	200.0	185.2	
120 Anthracene	178	9.369	9.357	0.012	98	3510820	200.0	186.2	
122 Carbazole	167	9.527	9.522	0.005	96	3612710	200.0	187.9	
123 Di-n-butyl phthalate	149	9.827	9.822	0.005	100	4377647	200.0	193.6	
128 Fluoranthene	202	10.792	10.786	0.006	98	3867766	200.0	191.9	
131 Pyrene	202	11.169	11.157	0.012	97	4045386	200.0	193.4	
136 Famphur	218	12.210	12.198	0.012	97	1098625	200.0	166.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
137 Butyl benzyl phthalate	149	12.304	12.298	0.006	98	2035238	200.0	206.1	
140 3,3'-Dichlorobenzidine	252	13.657	13.639	0.018	78	1242385	200.0	200.7	
141 Benzo[a]anthracene	228	13.692	13.680	0.012	99	3473559	200.0	192.9	
142 Bis(2-ethylhexyl) phthalat	149	13.674	13.668	0.006	97	2595812	200.0	201.2	
143 Chrysene	228	13.792	13.774	0.018	98	3298874	200.0	196.2	
144 Di-n-octyl phthalate	149	15.574	15.574	0.000	99	4782051	200.0	205.5	
146 Benzo[b]fluoranthene	252	16.751	16.727	0.024	99	3151061	200.0	202.1	
147 Benzo[k]fluoranthene	252	16.839	16.815	0.024	98	3328296	200.0	207.8	
148 Benzo[a]pyrene	252	17.750	17.727	0.023	81	3149998	200.0	210.1	
151 Indeno[1,2,3-cd]pyrene	276	21.156	21.127	0.029	97	2687797	200.0	210.2	M
152 Dibenz(a,h)anthracene	278	21.233	21.203	0.030	95	2616064	200.0	211.0	
153 Benzo[g,h,i]perylene	276	21.938	21.897	0.041	94	2789274	200.0	206.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA200_00015

Amount Added: 200.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D

Injection Date: 25-Feb-2015 14:59:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: STD200 HSL

Worklist Smp#: 10

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

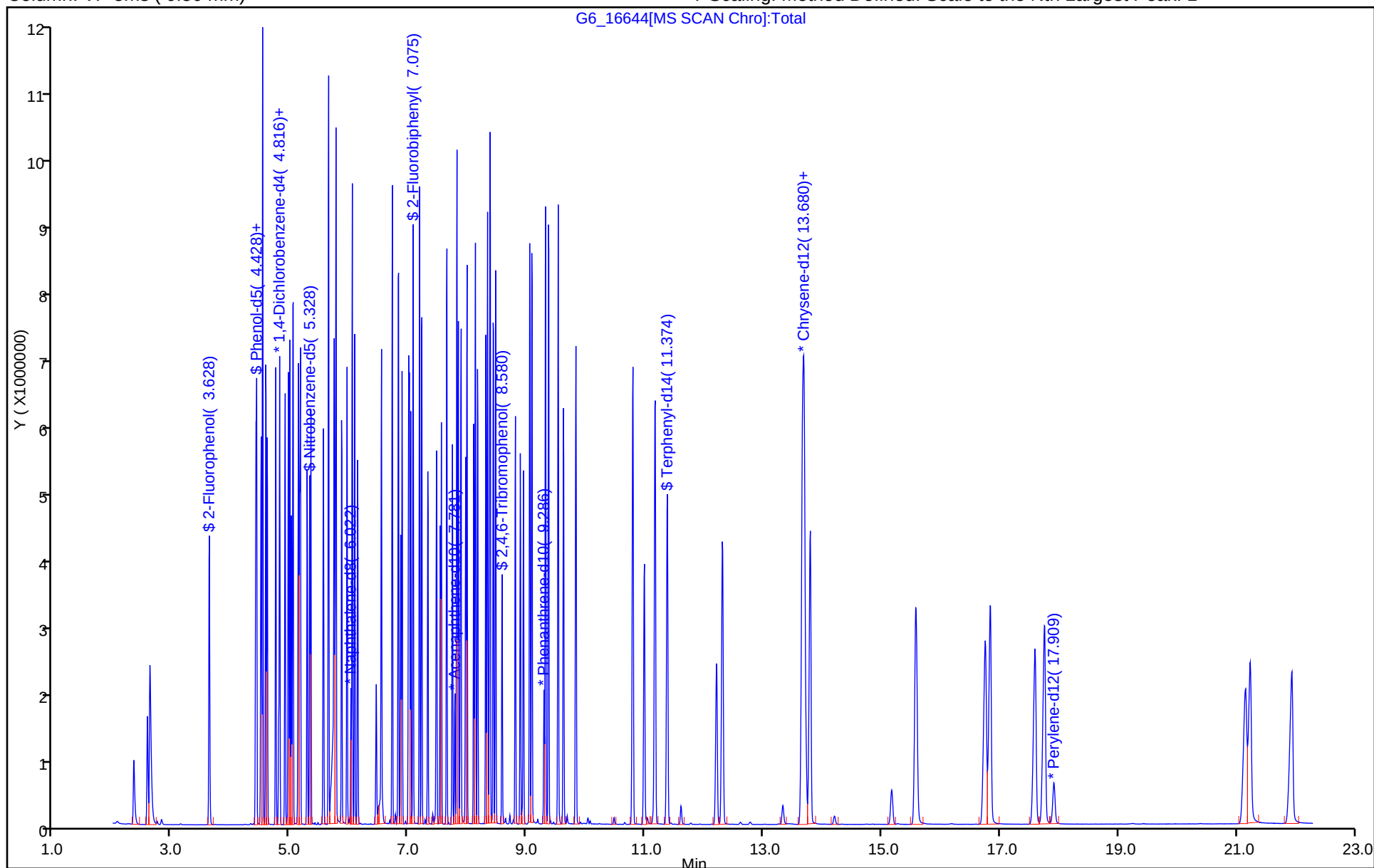
ALS Bottle#: 9

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



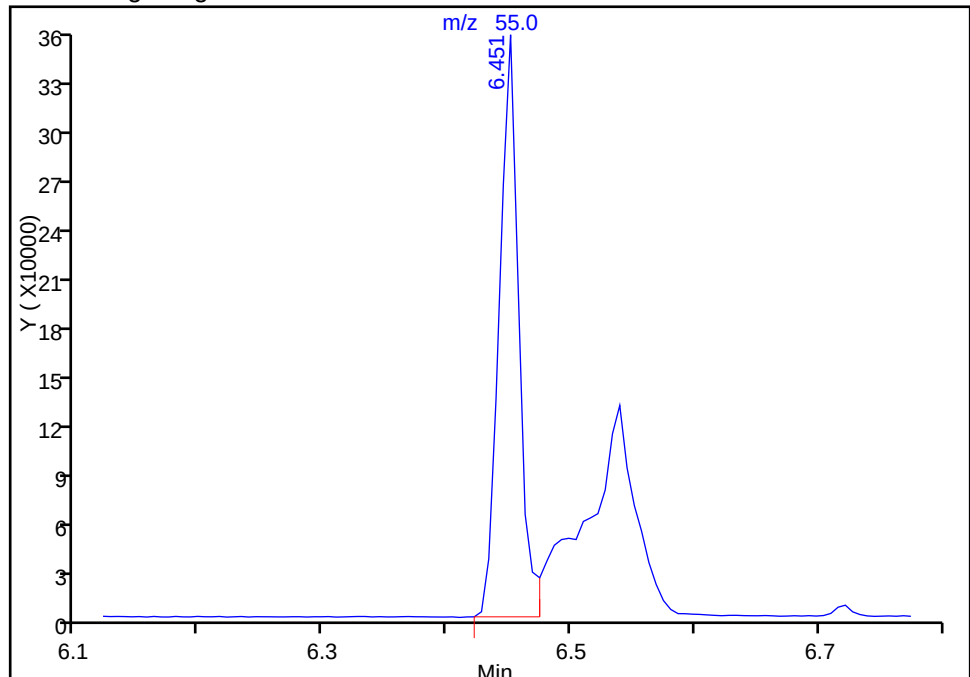
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
Injection Date: 25-Feb-2015 14:59:30 Instrument ID: SMS_G6
Lims ID: STD200 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

62 Caprolactam, CAS: 105-60-2

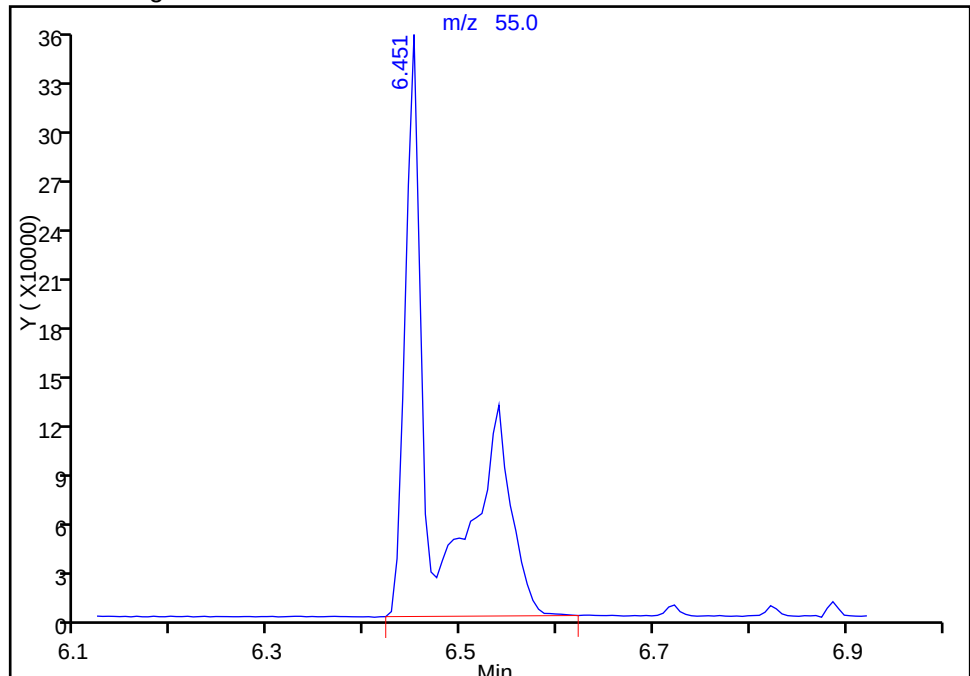
RT: 6.45
Area: 385948
Amount: 119.0334
Amount Units: ug/ml

Processing Integration Results



RT: 6.45
Area: 732007
Amount: 211.6461
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 10-Apr-2015 09:22:35
Audit Action: Manually Integrated
Audit Reason: Split Peak

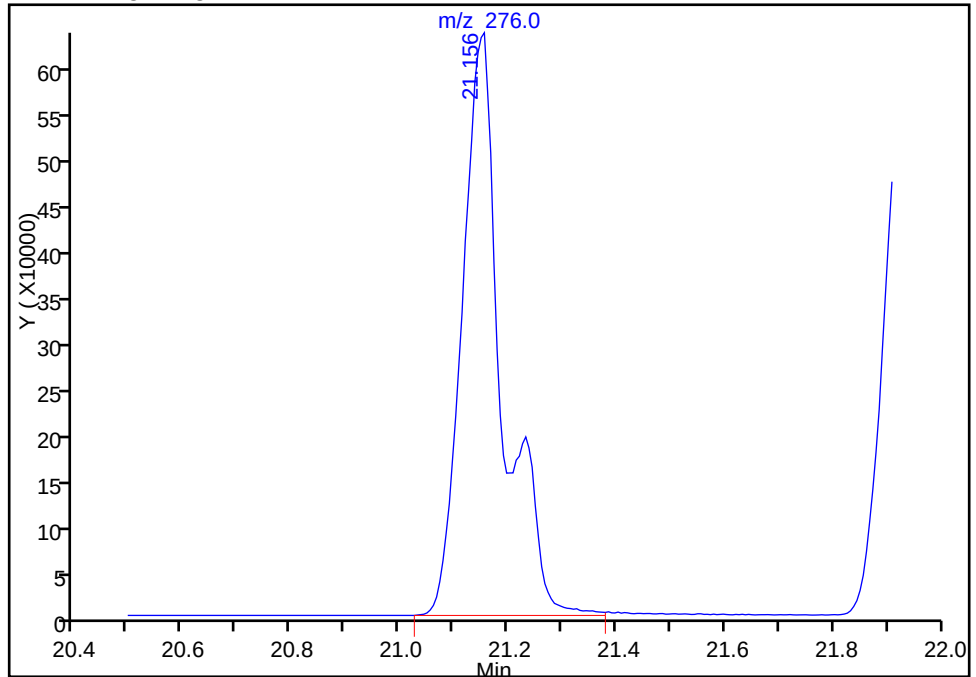
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
Injection Date: 25-Feb-2015 14:59:30 Instrument ID: SMS_G6
Lims ID: STD200 HSL
Client ID:
Operator ID: KIEKELD ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

151 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

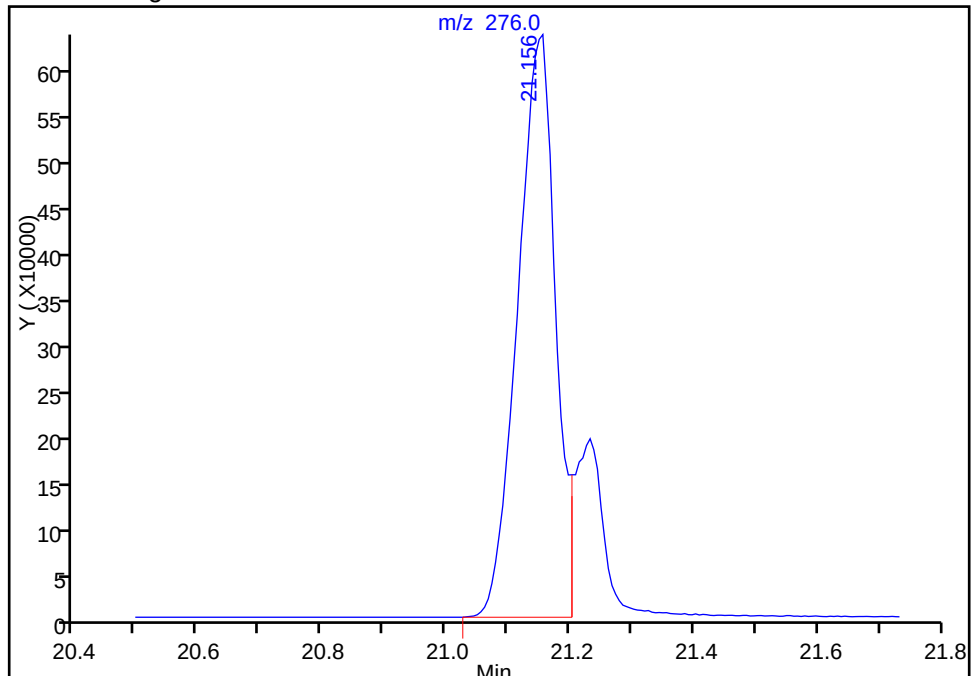
Processing Integration Results

RT: 21.16
Area: 3276282
Amount: 249.0016
Amount Units: ug/ml



Manual Integration Results

RT: 21.16
Area: 2687797
Amount: 210.1505
Amount Units: ug/ml



Reviewer: hoeflera, 10-Apr-2015 09:22:35
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Lab Sample ID: ICV 280-272059/11 Calibration Date: 02/25/2015 15:26

Instrument ID: SMS_G6 Calib Start Date: 02/25/2015 11:53

GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 02/25/2015 14:59

Lab File ID: G6_16645.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6137	0.5829		95.0	100	-5.0	30.0
N-Nitrosodimethylamine	Ave	0.9321	0.8898		95.5	100	-4.5	30.0
Pyridine	Ave	1.590	1.591		100	100	0.1	30.0
Phenol	Ave	1.828	1.782	0.8000	97.5	100	-2.5	30.0
Aniline	Ave	2.235	2.065		92.4	100	-7.6	30.0
Bis(2-chloroethyl)ether	Ave	1.435	1.326	0.7000	92.4	100	-7.6	30.0
2-Chlorophenol	Ave	1.492	1.435	0.8000	96.2	100	-3.8	30.0
1,3-Dichlorobenzene	Ave	1.514	1.471		97.1	100	-2.9	30.0
1,4-Dichlorobenzene	Ave	1.530	1.484		97.0	100	-3.0	30.0
Benzyl alcohol	Ave	0.9402	0.9405		100	100	0.0	30.0
1,2-Dichlorobenzene	Ave	1.471	1.406		95.6	100	-4.4	30.0
2-Methylphenol	Ave	1.355	1.303	0.7000	96.1	100	-3.9	30.0
bis (2-chloroisopropyl) ether	Ave	2.112	2.069	0.0100	70.5	72.0	-2.1	30.0
3 & 4 Methylphenol	Ave	1.405	1.360		96.8	100	-3.2	30.0
3-Methylphenol	Ave	1.405	1.360		96.8	100	-3.2	30.0
4-Methylphenol	Ave	1.405	1.360	0.6000	96.8	100	-3.2	30.0
N-Nitrosodi-n-propylamine	Ave	1.020	1.004	0.5000	98.5	100	-1.5	30.0
Acetophenone	Ave	1.974	1.893	0.0100	95.9	100	-4.1	30.0
Hexachloroethane	Ave	0.6565	0.6469	0.3000	98.5	100	-1.5	30.0
Nitrobenzene	Ave	0.3951	0.3825		96.8	100	-3.2	30.0
Isophorone	Ave	0.6711	0.7100	0.4000	106	100	5.8	30.0
2,4-Dimethylphenol	Ave	0.3608	0.3058	0.2000	84.7	100	-15.3	30.0
2-Nitrophenol	Ave	0.1969	0.1879	0.1000	95.4	100	-4.6	30.0
Bis(2-chloroethoxy)methane	Ave	0.4411	0.4105	0.3000	93.1	100	-6.9	30.0
Benzoic acid	Ave	0.2831	0.3036		214	200	7.2	30.0
2,4-Dichlorophenol	Ave	0.2955	0.2834	0.2000	95.9	100	-4.1	30.0
1,2,4-Trichlorobenzene	Ave	0.3003	0.2921		97.3	100	-2.7	30.0
Naphthalene	Ave	1.064	1.022	0.7000	96.0	100	-4.0	30.0
4-Chloroaniline	Ave	0.4813	0.4432	0.0100	92.1	100	-7.9	30.0
Hexachlorobutadiene	Ave	0.1636	0.1576	0.0100	96.3	100	-3.7	30.0
4-Chloro-3-methylphenol	Ave	0.3163	0.3048	0.2000	96.4	100	-3.6	30.0
2-Methylnaphthalene	Ave	0.6836	0.6500	0.4000	95.1	100	-4.9	30.0
1-Methylnaphthalene	Ave	0.6430	0.6099		94.9	100	-5.1	30.0
Hexachlorocyclopentadiene	Ave	0.3143	0.3438	0.0500	109	100	9.4	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2846	0.2770	0.0100	97.3	100	-2.7	30.0
2,4,6-Trichlorophenol	Ave	0.3592	0.3534	0.2000	98.4	100	-1.6	30.0
2,4,5-Trichlorophenol	Ave	0.3826	0.3767	0.2000	98.5	100	-1.5	30.0
1,1'-Biphenyl	Ave	1.506	1.446		96.1	100	-3.9	30.0
2-Chloronaphthalene	Ave	1.135	1.087	0.8000	95.8	100	-4.2	30.0
2-Nitroaniline	Ave	0.4168	0.4117	0.0100	98.8	100	-1.2	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Lab Sample ID: ICV 280-272059/11 Calibration Date: 02/25/2015 15:26

Instrument ID: SMS_G6 Calib Start Date: 02/25/2015 11:53

GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 02/25/2015 14:59

Lab File ID: G6_16645.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.332	1.233	0.0100	92.6	100	-7.4	30.0
1,3-Dinitrobenzene	Ave	0.2362	0.2353		99.6	100	-0.4	30.0
2,6-Dinitrotoluene	Ave	0.3078	0.3024	0.2000	98.3	100	-1.7	30.0
Acenaphthylene	Ave	1.843	1.852	0.9000	100	100	0.5	30.0
3-Nitroaniline	Ave	0.3980	0.3797	0.0100	95.4	100	-4.6	30.0
Acenaphthene	Ave	1.190	1.174	0.9000	98.7	100	-1.3	30.0
2,4-Dinitrophenol	Lin2		0.2239	0.0100	200	200	0.1	30.0
4-Nitrophenol	Ave	0.2146	0.2082	0.0100	194	200	-3.0	30.0
2,4-Dinitrotoluene	Ave	0.4036	0.4040	0.2000	100	100	0.1	30.0
Dibenzofuran	Ave	1.676	1.618	0.8000	96.5	100	-3.5	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3102	0.3099	0.0100	99.9	100	-0.0	30.0
Diethyl phthalate	Ave	1.356	1.312	0.0100	96.8	100	-3.2	30.0
4-Chlorophenyl phenyl ether	Ave	0.6065	0.5809	0.4000	95.8	100	-4.2	30.0
Fluorene	Ave	1.364	1.335	0.9000	97.9	100	-2.1	30.0
4-Nitroaniline	Ave	0.3891	0.3770	0.0100	96.9	100	-3.1	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1415	0.1482	0.0100	209	200	4.7	30.0
N-Nitrosodiphenylamine	Ave	0.5925	0.5590	0.0100	94.3	100	-5.7	30.0
1,2-Diphenylhydrazine (as Azobenzene)	Ave	1.482	1.440		98.2	101	-2.9	30.0
Azobenzene	Ave	1.498	1.456		97.1	100	-2.9	30.0
4-Bromophenyl phenyl ether	Ave	0.1874	0.1831	0.1000	97.7	100	-2.3	30.0
Hexachlorobenzene	Ave	0.1947	0.1887	0.1000	96.9	100	-3.1	30.0
Pentachlorophenol	Ave	0.1280	0.1337	0.0500	209	200	4.5	30.0
Phenanthrene	Ave	1.109	1.061	0.7000	95.6	100	-4.4	30.0
Anthracene	Ave	1.137	1.092	0.7000	96.0	100	-4.0	30.0
Carbazole	Ave	1.159	1.094	0.0100	94.4	100	-5.6	30.0
Di-n-butyl phthalate	Ave	1.363	1.336	0.0100	98.0	100	-2.0	30.0
Fluoranthene	Ave	1.215	1.172	0.6000	96.5	100	-3.5	30.0
Pyrene	Ave	1.336	1.309	0.6000	98.0	100	-2.0	30.0
Butyl benzyl phthalate	Ave	0.6306	0.6514	0.0100	103	100	3.3	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.8237	0.8366	0.0100	102	100	1.6	30.0
Benzo[a]anthracene	Ave	1.150	1.121	0.8000	97.5	100	-2.5	30.0
Chrysene	Ave	1.074	1.079	0.7000	100	100	0.5	30.0
Di-n-octyl phthalate	Lin2		1.489	0.0100	101	100	1.0	30.0
Benzo[b]fluoranthene	Ave	1.169	1.152	0.7000	98.6	100	-1.4	30.0
Benzo[k]fluoranthene	Ave	1.200	1.201	0.7000	100	100	0.1	30.0
Benzo[a]pyrene	Ave	1.123	1.105	0.7000	98.4	100	-1.6	30.0
Indeno[1,2,3-cd]pyrene	Ave	0.8166	0.7800	0.5000	95.5	100	-4.5	30.0
Dibenz(a,h)anthracene	Ave	0.9288	0.9593	0.4000	103	100	3.3	30.0
Benzo[g,h,i]perylene	Ave	1.011	1.017	0.5000	101	100	0.7	30.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16645.D
 Lims ID: ICV HSL 1
 Client ID:
 Sample Type: ICV
 Inject. Date: 25-Feb-2015 15:26:30 ALS Bottle#: 10 Worklist Smp#: 11
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: ICV HSL 1
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist:
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:44 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:24:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	96	188037	40.0	40.0	
* 2 Naphthalene-d8	136	6.022	6.022	0.000	100	718467	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	93	393887	40.0	40.0	
* 4 Phenanthrene-d10	188	9.286	9.280	0.006	97	663955	40.0	40.0	
* 5 Chrysene-d12	240	13.710	13.710	0.000	96	625452	40.0	40.0	
* 6 Perylene-d12	264	17.909	17.903	0.006	95	534138	40.0	40.0	
13 1,4-Dioxane	88	2.352	2.352	0.000	98	273993	100.0	95.0	
14 N-Nitrosodimethylamine	74	2.581	2.581	0.000	91	418285	100.0	95.5	
15 Pyridine	79	2.622	2.622	0.000	91	748145	100.0	100.1	
23 Phenol	94	4.422	4.422	0.000	99	837710	100.0	97.5	
24 Aniline	93	4.499	4.498	0.000	98	970675	100.0	92.4	
25 Bis(2-chloroethyl)ether	93	4.528	4.528	0.000	88	623551	100.0	92.4	
26 2-Chlorophenol	128	4.604	4.604	0.000	97	674582	100.0	96.2	
27 1,3-Dichlorobenzene	146	4.751	4.751	0.000	97	691355	100.0	97.1	
28 1,4-Dichlorobenzene	146	4.816	4.816	0.000	92	697797	100.0	97.0	
29 Benzyl alcohol	108	4.904	4.904	0.000	93	442115	100.0	100.0	
30 1,2-Dichlorobenzene	146	4.963	4.963	0.000	96	660939	100.0	95.6	
31 2-Methylphenol	108	4.987	4.981	0.006	94	612489	100.0	96.1	
32 2,2'-oxybis[1-chloropropan	45	5.016	5.010	0.006	94	700124	72.0	70.5	
38 3 & 4 Methylphenol	108	5.128	5.128	0.000	98	639290	100.0	96.8	
39 3-Methylphenol	108	5.128	5.128	0.000	98	639290	100.0	96.8	
40 4-Methylphenol	108	5.128	5.128	0.000	93	639290	100.0	96.8	
41 N-Nitrosodi-n-propylamine	70	5.146	5.145	0.001	91	471958	100.0	98.5	
42 Acetophenone	105	5.163	5.163	0.000	96	889654	100.0	95.9	
43 Hexachloroethane	117	5.281	5.281	0.000	96	304123	100.0	98.5	
44 Nitrobenzene	77	5.340	5.340	0.000	92	687043	100.0	96.8	
46 Isophorone	82	5.551	5.545	0.006	99	1275320	100.0	105.8	
48 2-Nitrophenol	139	5.646	5.645	0.001	91	337503	100.0	95.4	
49 2,4-Dimethylphenol	107	5.640	5.640	0.000	89	549179	100.0	84.7	
50 Bis(2-chloroethoxy)methane	93	5.734	5.734	0.000	98	737363	100.0	93.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
52 Benzoic acid	105	5.740	5.728	0.012	62	1090730	200.0	214.5	
53 2,4-Dichlorophenol	162	5.863	5.863	0.000	97	509014	100.0	95.9	
54 1,2,4-Trichlorobenzene	180	5.957	5.951	0.006	94	524624	100.0	97.3	
57 Naphthalene	128	6.045	6.040	0.005	97	1834953	100.0	96.0	
58 4-Chloroaniline	127	6.081	6.081	0.000	96	795990	100.0	92.1	
59 Hexachlorobutadiene	225	6.134	6.134	0.000	98	283045	100.0	96.3	
64 4-Chloro-3-methylphenol	107	6.528	6.528	0.000	98	547506	100.0	96.4	
65 2-Methylnaphthalene	142	6.722	6.716	0.006	93	1167552	100.0	95.1	
67 1-Methylnaphthalene	142	6.822	6.822	0.000	94	1095488	100.0	94.9	
68 Hexachlorocyclopentadiene	237	6.863	6.863	0.000	95	338550	100.0	109.4	
69 1,2,4,5-Tetrachlorobenzene	216	6.887	6.887	0.001	98	497548	100.0	97.3	
70 2,4,6-Trichlorophenol	196	6.992	6.992	0.000	95	347961	100.0	98.4	
72 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	93	370987	100.0	98.5	
74 1,1'-Biphenyl	154	7.181	7.181	0.000	95	1424130	100.0	96.1	
75 2-Chloronaphthalene	162	7.216	7.216	0.000	98	1070439	100.0	95.8	
77 2-Nitroaniline	65	7.322	7.316	0.006	85	405449	100.0	98.8	
79 Dimethyl phthalate	163	7.463	7.463	0.000	98	1213708	100.0	92.6	
80 1,3-Dinitrobenzene	168	7.528	7.528	0.000	82	231683	100.0	99.6	
81 2,6-Dinitrotoluene	165	7.545	7.545	0.000	93	297820	100.0	98.3	
82 Acenaphthylene	152	7.639	7.639	0.000	99	1823356	100.0	100.5	
83 3-Nitroaniline	138	7.734	7.728	0.006	94	373849	100.0	95.4	
84 Acenaphthene	153	7.810	7.810	0.000	95	1156147	100.0	98.7	
86 2,4-Dinitrophenol	184	7.834	7.828	0.006	82	440859	200.0	200.3	
87 4-Nitrophenol	109	7.869	7.869	0.000	95	410060	200.0	194.1	
89 2,4-Dinitrotoluene	165	7.957	7.951	0.006	91	397792	100.0	100.1	
90 Dibenzofuran	168	7.981	7.981	0.000	97	1592968	100.0	96.5	
92 2,3,4,6-Tetrachlorophenol	232	8.098	8.092	0.006	75	305136	100.0	99.9	
94 Diethyl phthalate	149	8.163	8.157	0.006	97	1292089	100.0	96.8	
96 4-Chlorophenyl phenyl ethe	204	8.304	8.298	0.006	95	572039	100.0	95.8	
98 Fluorene	166	8.328	8.328	0.000	96	1315039	100.0	97.9	
99 4-Nitroaniline	138	8.357	8.357	0.000	85	371247	100.0	96.9	
100 4,6-Dinitro-2-methylphenol	198	8.369	8.363	0.006	83	491977	200.0	209.4	
102 N-Nitrosodiphenylamine	169	8.428	8.422	0.006	63	927943	100.0	94.3	
103 Azobenzene	77	8.463	8.463	0.000	99	1433394	100.0	97.1	
104 1,2-Diphenylhydrazine	77	8.463	8.463	0.000	100	1433394	101.1	98.2	
111 4-Bromophenyl phenyl ether	248	8.804	8.798	0.006	73	303952	100.0	97.7	
112 Hexachlorobenzene	284	8.886	8.881	0.006	92	313262	100.0	96.9	
116 Pentachlorophenol	266	9.081	9.080	0.001	89	443743	200.0	208.9	
119 Phenanthrene	178	9.310	9.310	0.000	98	1760445	100.0	95.6	
120 Anthracene	178	9.363	9.357	0.006	98	1812001	100.0	96.0	
122 Carbazole	167	9.528	9.522	0.006	96	1816093	100.0	94.4	
123 Di-n-butyl phthalate	149	9.828	9.822	0.006	100	2217309	100.0	98.0	
128 Fluoranthene	202	10.786	10.786	0.000	98	1946063	100.0	96.5	
131 Pyrene	202	11.163	11.157	0.006	97	2046147	100.0	98.0	
137 Butyl benzyl phthalate	149	12.304	12.298	0.006	98	1018562	100.0	103.3	
141 Benzo[a]anthracene	228	13.680	13.680	0.000	99	1753483	100.0	97.5	
142 Bis(2-ethylhexyl) phthalat	149	13.674	13.668	0.006	97	1308106	100.0	101.6	
143 Chrysene	228	13.780	13.774	0.006	98	1686807	100.0	100.5	
144 Di-n-octyl phthalate	149	15.574	15.574	0.000	99	2328363	100.0	101.0	
146 Benzo[b]fluoranthene	252	16.733	16.727	0.006	99	1538895	100.0	98.6	
147 Benzo[k]fluoranthene	252	16.821	16.815	0.006	98	1604191	100.0	100.1	
148 Benzo[a]pyrene	252	17.733	17.727	0.006	80	1475603	100.0	98.4	

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16645.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
151 Indeno[1,2,3-cd]pyrene	276	21.127	21.127	0.000	98	1219599	100.0	95.5	M
152 Dibenz(a,h)anthracene	278	21.215	21.203	0.012	94	1281000	100.0	103.3	
153 Benzo[g,h,i]perylene	276	21.915	21.897	0.018	96	1358418	100.0	100.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLB1B3SSV_00022

Amount Added: 200.00

Units: uL

Report Date: 10-Apr-2015 12:09:46

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16645.D

Injection Date: 25-Feb-2015 15:26:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: ICV HSL 1

Worklist Smp#: 11

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

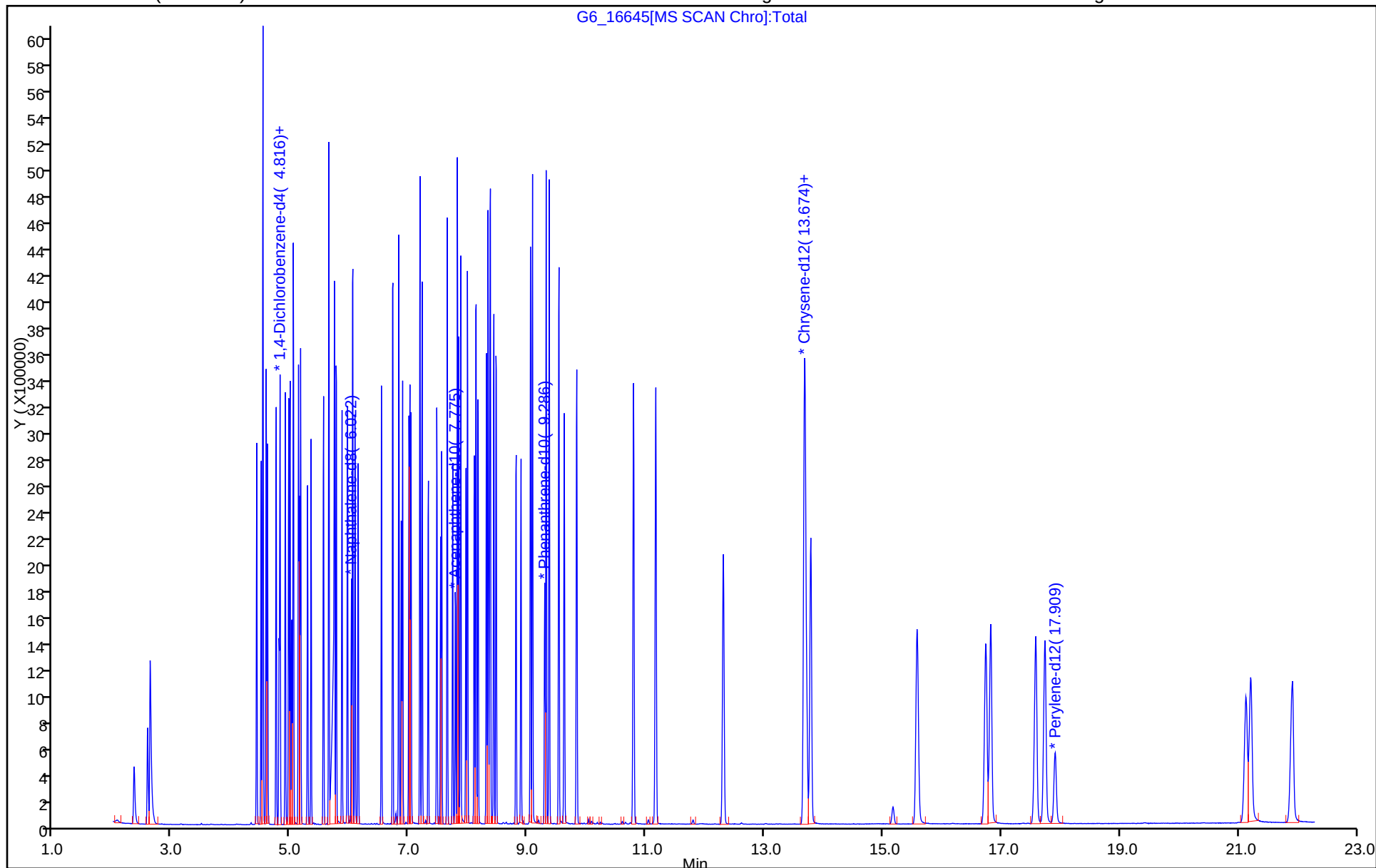
ALS Bottle#: 10

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



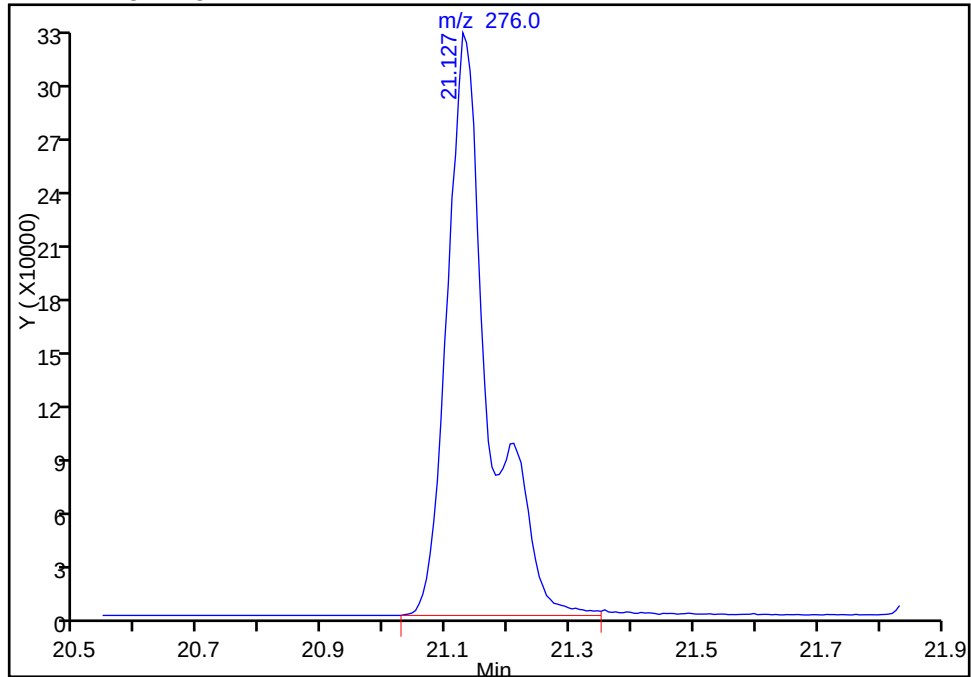
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16645.D
Injection Date: 25-Feb-2015 15:26:30 Instrument ID: SMS_G6
Lims ID: ICV HSL 1
Client ID:
Operator ID: KIEKELD ALS Bottle#: 10 Worklist Smp#: 11
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

151 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

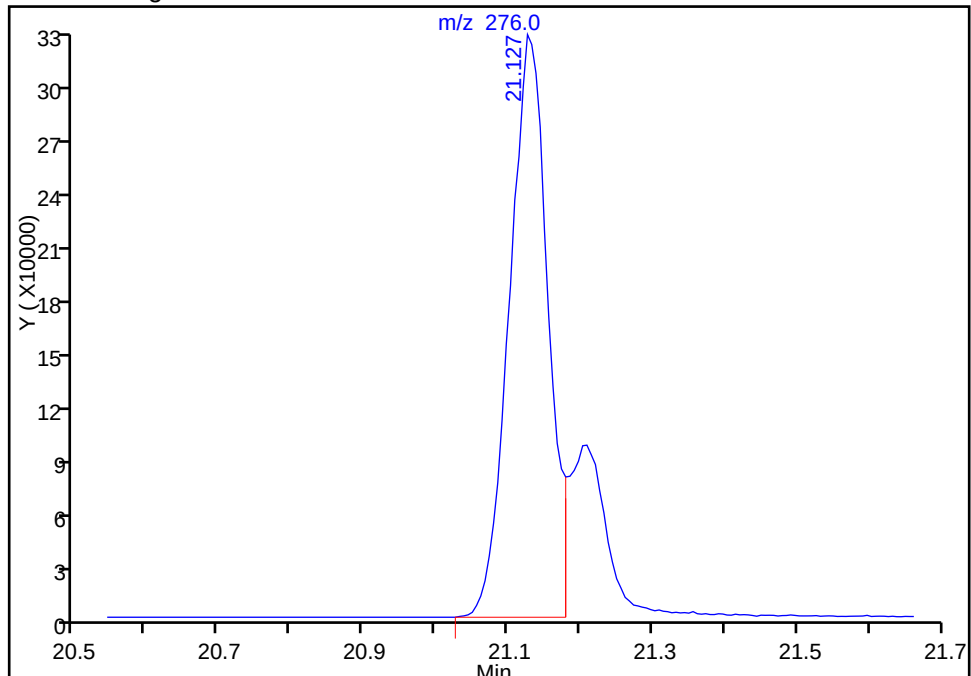
Processing Integration Results

RT: 21.13
Area: 1550066
Amount: 121.3925
Amount Units: ug/ml



Manual Integration Results

RT: 21.13
Area: 1219599
Amount: 95.512153
Amount Units: ug/ml



Reviewer: hoeflera, 10-Apr-2015 09:24:38
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Lab Sample ID: ICV 280-272059/12 Calibration Date: 02/25/2015 15:52
Instrument ID: SMS_G6 Calib Start Date: 05/14/2014 14:05
GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 05/14/2014 17:05
Lab File ID: G6_16646.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzidine	Ave	0.6743			50.0	100		30.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16646.D
 Lims ID: ICV HSL 2
 Client ID:
 Sample Type: ICV
 Inject. Date: 25-Feb-2015 15:52:30 ALS Bottle#: 11 Worklist Smp#: 12
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: ICV HSL 2
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist:
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:44 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:25:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	97	185167	40.0	40.0	
* 2 Naphthalene-d8	136	6.022	6.022	0.000	100	715813	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	93	400054	40.0	40.0	
* 4 Phenanthrene-d10	188	9.280	9.280	0.000	97	674469	40.0	40.0	
* 5 Chrysene-d12	240	13.698	13.710	-0.012	96	649859	40.0	40.0	
* 6 Perylene-d12	264	17.898	17.903	-0.005	95	546537	40.0	40.0	
62 Caprolactam	55	6.416	6.428	-0.012	78	352151	100.0	104.0	
129 Benzidine	184		10.466				ND	ND	
140 3,3'-Dichlorobenzidine	252	13.639	13.639	0.000	76	707262	100.0	110.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MS-HSLB2SSV_00020

Amount Added: 200.00

Units: uL

Report Date: 10-Apr-2015 12:09:46

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16646.D

Injection Date: 25-Feb-2015 15:52:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: ICV HSL 2

Worklist Smp#: 12

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

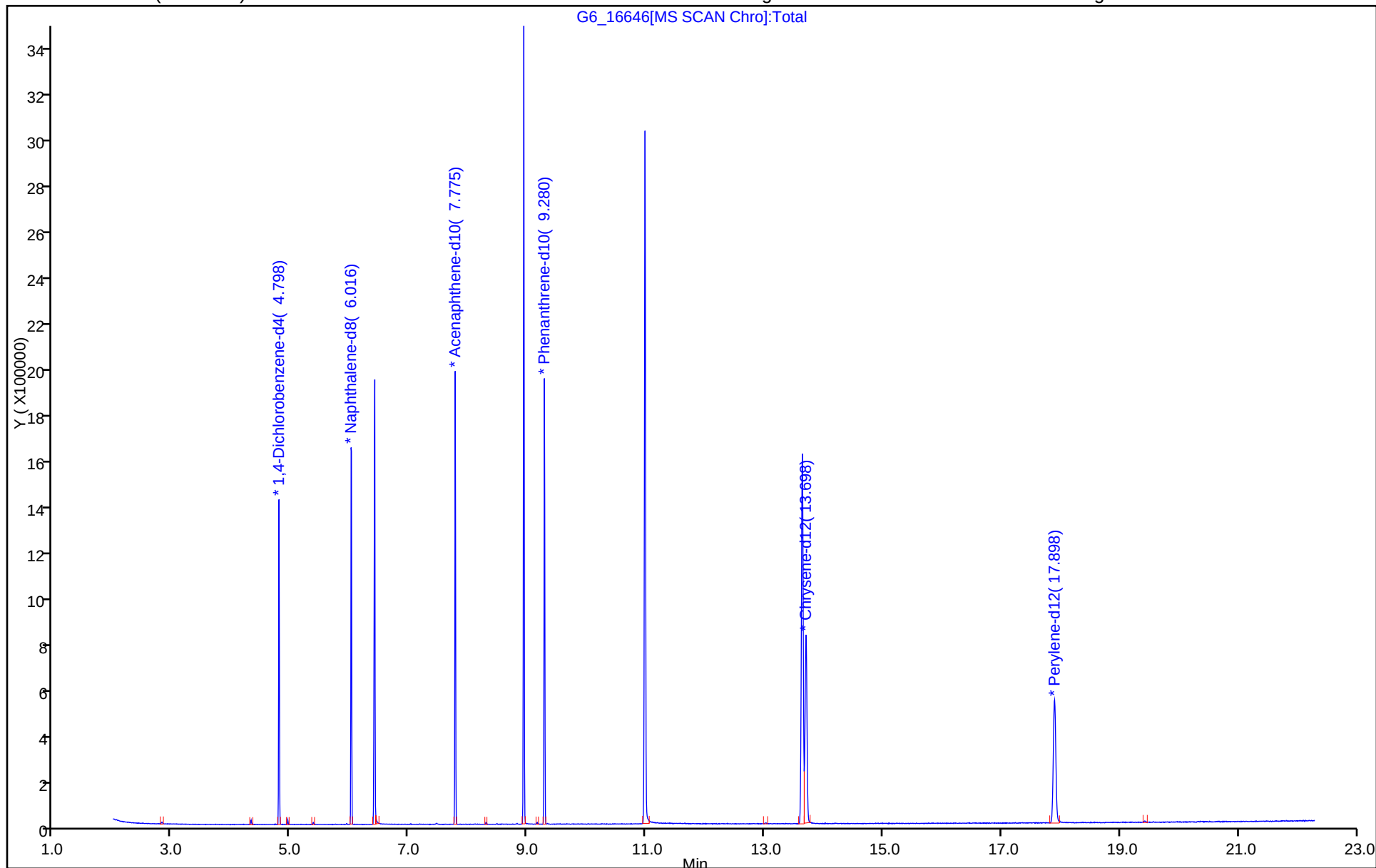
ALS Bottle#: 11

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Lab Sample ID: ICV 280-272059/12 Calibration Date: 02/25/2015 15:52
Instrument ID: SMS_G6 Calib Start Date: 02/25/2015 11:53
GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 02/25/2015 14:59
Lab File ID: G6_16646.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Caprolactam	Ave	0.1892	0.1968		104	100	4.0	30.0
3,3'-Dichlorobenzidine	Ave	0.3953	0.4353	0.0100	110	100	10.1	30.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16646.D
 Lims ID: ICV HSL 2
 Client ID:
 Sample Type: ICV
 Inject. Date: 25-Feb-2015 15:52:30 ALS Bottle#: 11 Worklist Smp#: 12
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: ICV HSL 2
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist:
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:44 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:25:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	97	185167	40.0	40.0	
* 2 Naphthalene-d8	136	6.022	6.022	0.000	100	715813	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	93	400054	40.0	40.0	
* 4 Phenanthrene-d10	188	9.280	9.280	0.000	97	674469	40.0	40.0	
* 5 Chrysene-d12	240	13.698	13.710	-0.012	96	649859	40.0	40.0	
* 6 Perylene-d12	264	17.898	17.903	-0.005	95	546537	40.0	40.0	
62 Caprolactam	55	6.416	6.428	-0.012	78	352151	100.0	104.0	
129 Benzidine	184		10.466				ND	ND	
140 3,3'-Dichlorobenzidine	252	13.639	13.639	0.000	76	707262	100.0	110.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MS-HSLB2SSV_00020

Amount Added: 200.00

Units: uL

Report Date: 10-Apr-2015 12:09:46

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16646.D

Injection Date: 25-Feb-2015 15:52:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: ICV HSL 2

Worklist Smp#: 12

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

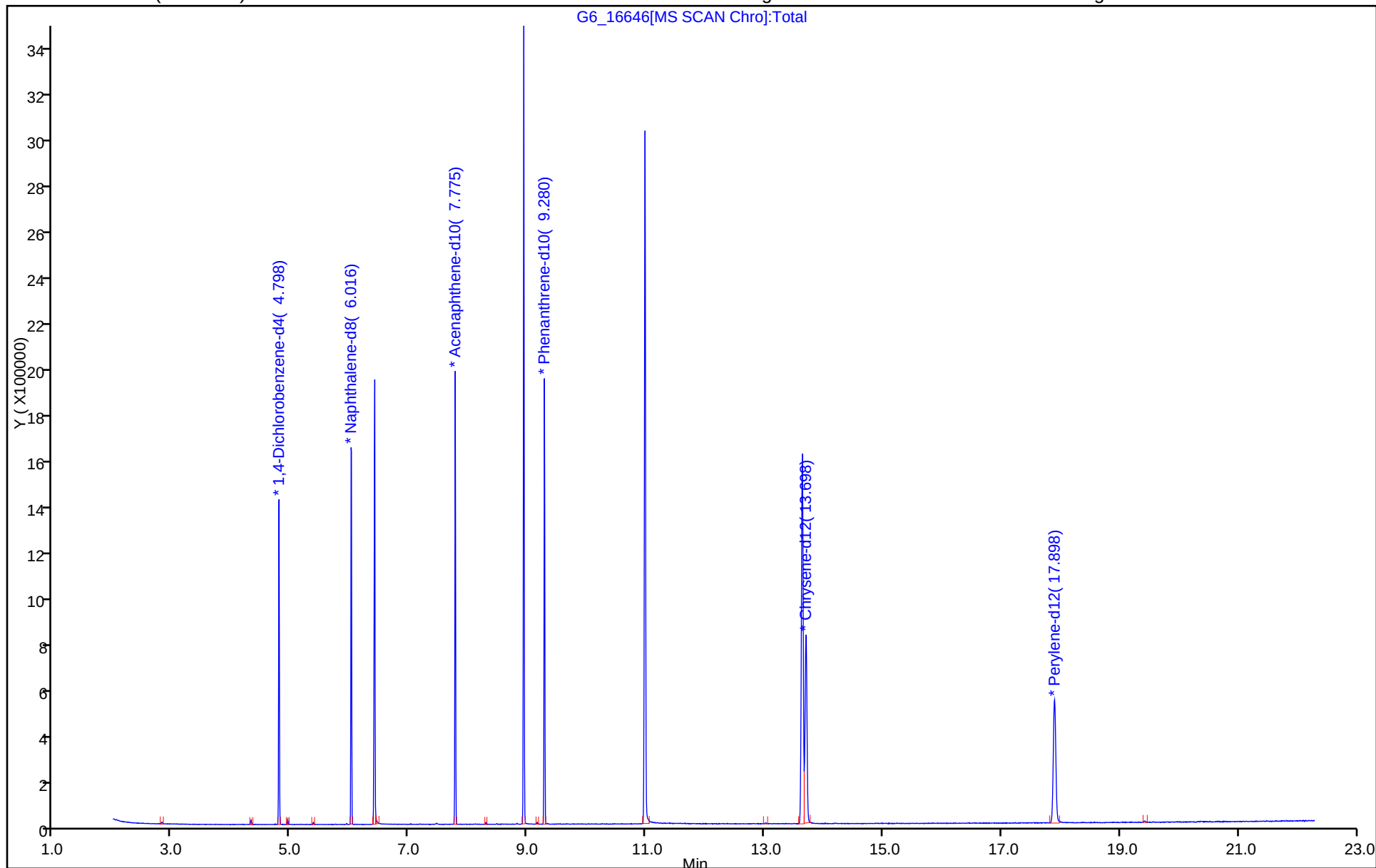
ALS Bottle#: 11

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Lab Sample ID: ICV 280-272059/13 Calibration Date: 02/25/2015 16:19
Instrument ID: SMS_G6 Calib Start Date: 02/25/2015 11:53
GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 02/25/2015 14:59
Lab File ID: G6_16647.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Famphur	Ave	0.4215	0.4268		101	100	1.2	30.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16647.D
 Lims ID: ICV FAM
 Client ID:
 Sample Type: ICV
 Inject. Date: 25-Feb-2015 16:19:30 ALS Bottle#: 12 Worklist Smp#: 13
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: ICV FAM
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Sublist:
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:44 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: hoeflera

Date: 10-Apr-2015 09:26:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.798	4.798	0.000	97	186013	40.0	40.0	
* 2 Naphthalene-d8	136	6.016	6.022	-0.006	100	710514	40.0	40.0	
* 3 Acenaphthene-d10	164	7.775	7.775	0.000	92	389552	40.0	40.0	
* 4 Phenanthrene-d10	188	9.281	9.280	0.001	98	665613	40.0	40.0	
* 5 Chrysene-d12	240	13.704	13.710	-0.006	96	633484	40.0	40.0	
* 6 Perylene-d12	264	17.904	17.903	0.001	95	533431	40.0	40.0	
136 Famphur	218	12.204	12.198	0.006	97	675896	100.0	101.2	

Reagents:

MS-FAMSSV_100_00013

Amount Added: 200.00

Units: uL

Report Date: 10-Apr-2015 12:09:47

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16647.D

Injection Date: 25-Feb-2015 16:19:30

Instrument ID: SMS_G6

Operator ID: KIEKELD

Lims ID: ICV FAM

Worklist Smp#: 13

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

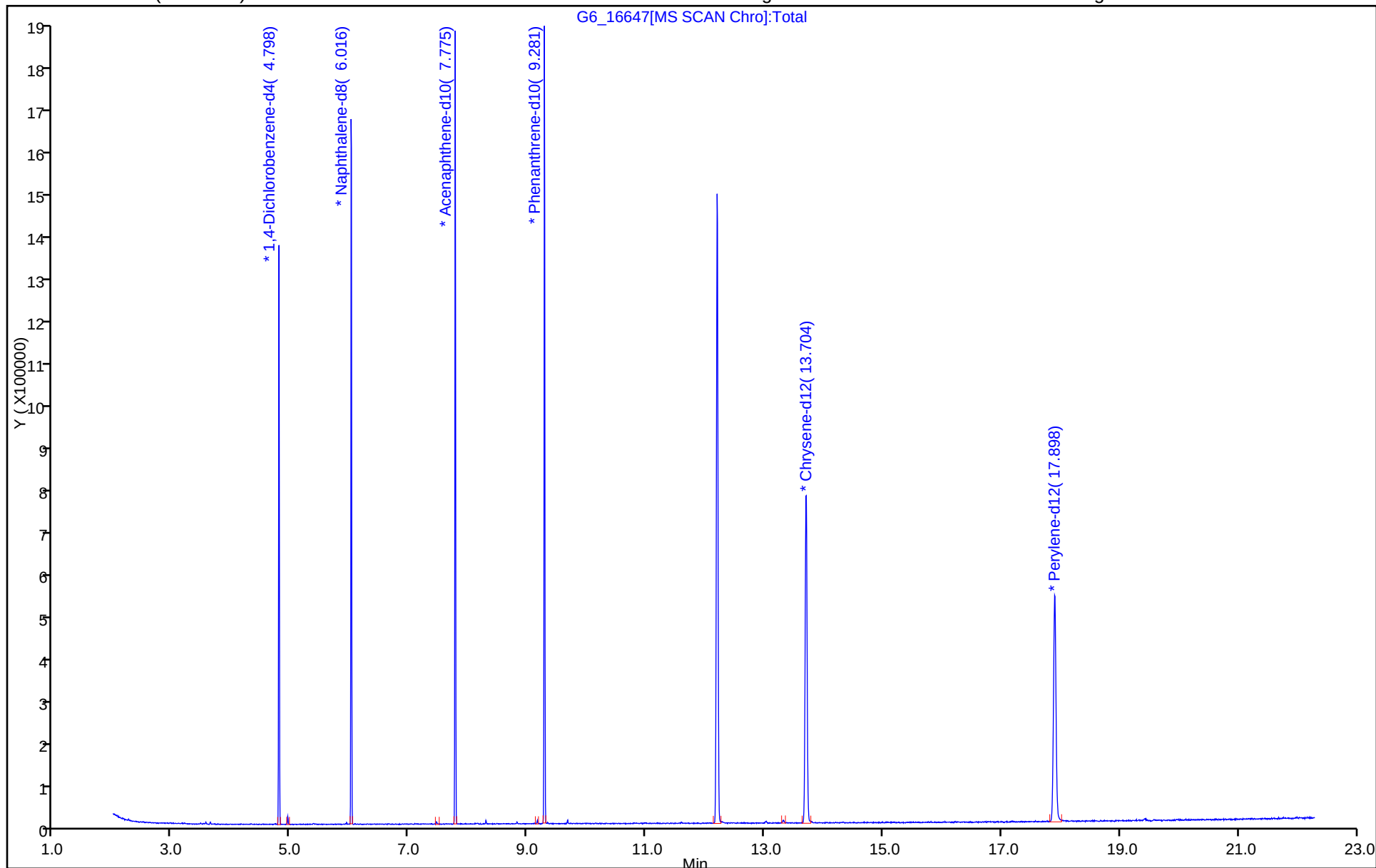
ALS Bottle#: 12

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Lab Sample ID: CCV 280-273264/3 Calibration Date: 04/17/2015 18:13
Instrument ID: SMS_G6 Calib Start Date: 05/14/2014 14:05
GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 05/14/2014 17:05
Lab File ID: G6_17382.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzidine	Ave	0.6743			50.0	80.0		

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17382.D
 Lims ID: CCV HSL
 Client ID:
 Sample Type: CCV
 Inject. Date: 17-Apr-2015 18:13:30 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: CCV HSL
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 22-Apr-2015 15:45:14 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: kiekeld

Date: 22-Apr-2015 15:45:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	96	239754	40.0	40.0	
* 2 Naphthalene-d8	136	5.945	5.945	0.000	100	925984	40.0	40.0	
* 3 Acenaphthene-d10	164	7.704	7.704	0.000	92	501846	40.0	40.0	
* 4 Phenanthrene-d10	188	9.204	9.204	0.000	97	823535	40.0	40.0	
* 5 Chrysene-d12	240	13.515	13.515	0.000	96	728595	40.0	40.0	
* 6 Perylene-d12	264	17.639	17.639	0.000	95	611014	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.481	3.481	0.000	92	720586	80.0	82.7	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	845728	80.0	77.4	
\$ 9 Nitrobenzene-d5	82	5.239	5.239	0.000	90	754293	80.0	79.4	
\$ 10 2-Fluorobiphenyl	172	6.998	6.998	0.000	99	1339879	80.0	79.0	
\$ 11 2,4,6-Tribromophenol	330	8.498	8.498	0.000	90	158147	80.0	83.8	
\$ 12 Terphenyl-d14	244	11.233	11.233	0.000	99	1200925	80.0	82.9	
13 1,4-Dioxane	88	2.034	2.034	0.000	96	324097	80.0	88.1	
14 N-Nitrosodimethylamine	74	2.299	2.299	0.000	92	488430	80.0	87.4	
15 Pyridine	79	2.346	2.346	0.000	95	784843	80.0	82.4	
23 Phenol	94	4.340	4.340	0.000	98	836959	80.0	76.4	
24 Aniline	93	4.398	4.398	0.000	99	1036172	80.0	77.4	
25 Bis(2-chloroethyl)ether	93	4.428	4.428	0.000	90	653108	80.0	75.9	
26 2-Chlorophenol	128	4.504	4.504	0.000	97	725442	80.0	81.1	
27 1,3-Dichlorobenzene	146	4.651	4.651	0.000	96	725784	80.0	80.0	
28 1,4-Dichlorobenzene	146	4.722	4.722	0.000	93	734007	80.0	80.0	
29 Benzyl alcohol	108	4.822	4.822	0.000	94	456512	80.0	81.0	
30 1,2-Dichlorobenzene	146	4.869	4.869	0.000	95	710542	80.0	80.6	
31 2-Methylphenol	108	4.910	4.910	0.000	94	645418	80.0	79.5	
32 2,2'-oxybis[1-chloropropan	45	4.928	4.928	0.000	93	886919	80.0	70.0	
38 3 & 4 Methylphenol	108	5.057	5.057	0.000	93	645799	80.0	76.7	
39 3-Methylphenol	108	5.057	5.057	0.000	93	645799	80.0	76.7	
40 4-Methylphenol	108	5.057	5.057	0.000	92	645799	80.0	76.7	
41 N-Nitrosodi-n-propylamine	70	5.063	5.063	0.000	87	459056	80.0	75.1	
42 Acetophenone	105	5.081	5.081	0.000	98	945134	80.0	79.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.192	5.192	0.000	91	321892	80.0	81.8	
44 Nitrobenzene	77	5.257	5.257	0.000	89	710642	80.0	77.7	
46 Isophorone	82	5.469	5.469	0.000	100	1218590	80.0	78.4	
48 2-Nitrophenol	139	5.563	5.563	0.000	95	369263	80.0	81.0	
49 2,4-Dimethylphenol	107	5.575	5.575	0.000	94	632682	80.0	75.7	
50 Bis(2-chloroethoxy)methane	93	5.663	5.663	0.000	98	810290	80.0	79.4	
52 Benzoic acid	105	5.687	5.687	0.000	89	1012608	160.0	154.5	
53 2,4-Dichlorophenol	162	5.792	5.792	0.000	96	548417	80.0	80.2	
54 1,2,4-Trichlorobenzene	180	5.881	5.881	0.000	93	562375	80.0	80.9	
57 Naphthalene	128	5.969	5.969	0.000	97	1944452	80.0	78.9	
58 4-Chloroaniline	127	6.010	6.010	0.000	86	888211	80.0	79.7	
59 Hexachlorobutadiene	225	6.063	6.063	0.000	96	306864	80.0	81.0	
62 Caprolactam	55	6.363	6.363	0.000	78	320793	80.0	73.2	
64 4-Chloro-3-methylphenol	107	6.475	6.475	0.000	96	563726	80.0	77.0	
65 2-Methylnaphthalene	142	6.645	6.645	0.000	92	1238243	80.0	78.2	
67 1-Methylnaphthalene	142	6.751	6.751	0.000	92	1164195	80.0	78.2	
68 Hexachlorocyclopentadiene	237	6.792	6.792	0.000	88	284992	80.0	72.3	
69 1,2,4,5-Tetrachlorobenzene	216	6.816	6.816	0.000	97	517668	80.0	78.6	
70 2,4,6-Trichlorophenol	196	6.922	6.922	0.000	93	359490	80.0	79.8	
72 2,4,5-Trichlorophenol	196	6.963	6.963	0.000	93	382070	80.0	79.6	
74 1,1'-Biphenyl	154	7.104	7.104	0.000	95	1488140	80.0	78.8	
75 2-Chloronaphthalene	162	7.145	7.145	0.000	96	1145117	80.0	80.4	
77 2-Nitroaniline	65	7.245	7.245	0.000	86	402178	80.0	76.9	
79 Dimethyl phthalate	163	7.392	7.392	0.000	98	1275292	80.0	76.3	
80 1,3-Dinitrobenzene	168	7.451	7.451	0.000	84	257441	80.0	86.9	
81 2,6-Dinitrotoluene	165	7.475	7.475	0.000	96	315345	80.0	81.7	
82 Acenaphthylene	152	7.563	7.563	0.000	92	1858983	80.0	80.4	
83 3-Nitroaniline	138	7.657	7.657	0.000	94	405736	80.0	81.3	
84 Acenaphthene	153	7.733	7.733	0.000	95	1166231	80.0	78.1	
86 2,4-Dinitrophenol	184	7.757	7.757	0.000	82	436065	160.0	156.2	
87 4-Nitrophenol	109	7.810	7.810	0.000	92	404038	160.0	150.1	
89 2,4-Dinitrotoluene	165	7.880	7.880	0.000	86	421658	80.0	83.3	
90 Dibenzofuran	168	7.904	7.904	0.000	90	1677508	80.0	79.8	
92 2,3,4,6-Tetrachlorophenol	232	8.022	8.022	0.000	74	316481	80.0	81.3	
94 Diethyl phthalate	149	8.086	8.086	0.000	98	1365417	80.0	80.3	
96 4-Chlorophenyl phenyl ethe	204	8.228	8.228	0.000	93	595484	80.0	78.3	
98 Fluorene	166	8.251	8.251	0.000	94	1358473	80.0	79.4	
99 4-Nitroaniline	138	8.280	8.280	0.000	81	399801	80.0	81.9	
100 4,6-Dinitro-2-methylphenol	198	8.292	8.292	0.000	81	497503	160.0	170.7	
102 N-Nitrosodiphenylamine	169	8.351	8.351	0.000	61	1003037	80.0	82.2	
103 Azobenzene	77	8.386	8.386	0.000	99	1453845	80.0	77.3	
104 1,2-Diphenylhydrazine	77	8.386	8.386	0.000	100	1453845	80.9	78.2	
111 4-Bromophenyl phenyl ether	248	8.722	8.722	0.000	67	316618	80.0	82.1	
112 Hexachlorobenzene	284	8.804	8.804	0.000	88	326340	80.0	81.4	
116 Pentachlorophenol	266	9.004	9.004	0.000	88	415783	160.0	157.8	
119 Phenanthrene	178	9.227	9.227	0.000	98	1798037	80.0	78.7	
120 Anthracene	178	9.280	9.280	0.000	98	1873072	80.0	80.0	
122 Carbazole	167	9.439	9.439	0.000	82	1898224	80.0	79.6	
123 Di-n-butyl phthalate	149	9.733	9.733	0.000	100	2294432	80.0	81.8	
128 Fluoranthene	202	10.663	10.663	0.000	98	1932472	80.0	77.2	
129 Benzidine	184		10.466				ND	ND	
131 Pyrene	202	11.027	11.027	0.000	97	2002510	80.0	82.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
136 Famphur	218	12.039	12.039	0.000	97	615962	80.0	80.2	
137 Butyl benzyl phthalate	149	12.139	12.139	0.000	97	1000665	80.0	87.1	
140 3,3'-Dichlorobenzidine	252	13.451	13.451	0.000	73	591019	80.0	82.1	
141 Benzo[a]anthracene	228	13.486	13.486	0.000	99	1672520	80.0	79.9	
142 Bis(2-ethylhexyl) phthalat	149	13.480	13.480	0.000	89	1259459	80.0	83.9	
143 Chrysene	228	13.586	13.586	0.000	96	1615322	80.0	82.6	
144 Di-n-octyl phthalate	149	15.351	15.351	0.000	99	2214015	80.0	82.8	
146 Benzo[b]fluoranthene	252	16.486	16.486	0.000	96	1445857	80.0	81.0	
147 Benzo[k]fluoranthene	252	16.568	16.568	0.000	98	1572604	80.0	85.8	
148 Benzo[a]pyrene	252	17.474	17.474	0.000	78	1483910	80.0	86.5	
151 Indeno[1,2,3-cd]pyrene	276	20.833	20.833	0.000	96	1152621	80.0	77.5	M
152 Dibenz(a,h)anthracene	278	20.915	20.915	0.000	79	1192739	80.0	84.1	
153 Benzo[g,h,i]perylene	276	21.609	21.609	0.000	90	1258729	80.0	81.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MS-HSLACCV080_00038

Amount Added: 200.00

Units: uL

Report Date: 22-Apr-2015 15:45:14

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17382.D

Injection Date: 17-Apr-2015 18:13:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: CCV HSL

Worklist Smp#: 3

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

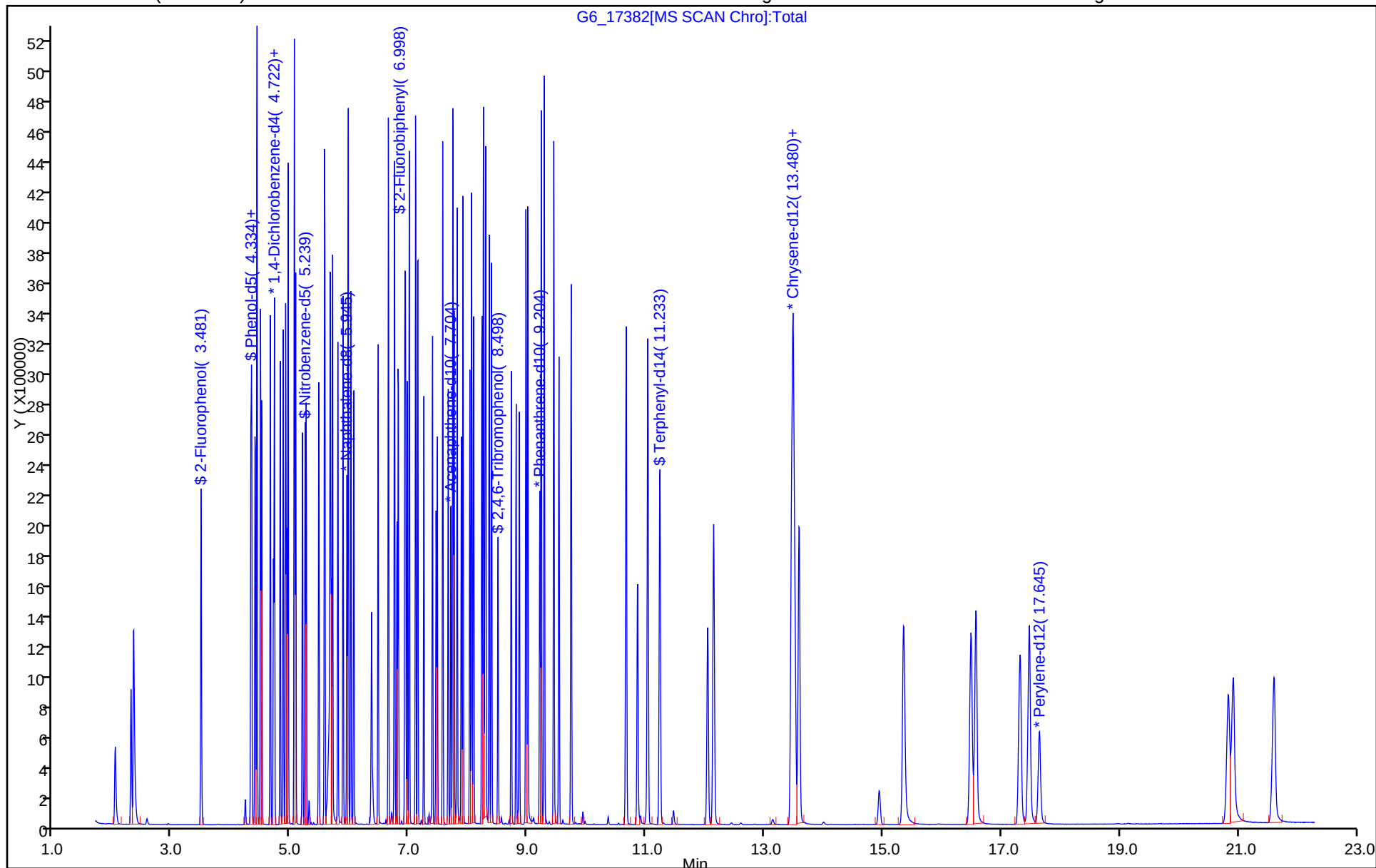
ALS Bottle#: 2

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Lab Sample ID: CCV 280-273264/3 Calibration Date: 04/17/2015 18:13

Instrument ID: SMS_G6 Calib Start Date: 02/25/2015 11:53

GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 02/25/2015 14:59

Lab File ID: G6_17382.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6137	0.6759		88.1	80.0	10.1	20.0
N-Nitrosodimethylamine	Ave	0.9321	1.019		87.4	80.0	9.3	20.0
Pyridine	Ave	1.590	1.637		82.4	80.0	3.0	20.0
Phenol	Ave	1.828	1.745	0.8000	76.4	80.0	-4.5	20.0
Aniline	Ave	2.235	2.161		77.4	80.0	-3.3	20.0
Bis(2-chloroethyl)ether	Ave	1.435	1.362	0.7000	75.9	80.0	-5.1	20.0
2-Chlorophenol	Ave	1.492	1.513	0.8000	81.1	80.0	1.4	20.0
1,3-Dichlorobenzene	Ave	1.514	1.514		80.0	80.0	-0.0	20.0
1,4-Dichlorobenzene	Ave	1.530	1.531		80.0	80.0	0.0	20.0
Benzyl alcohol	Ave	0.9402	0.9520		81.0	80.0	1.3	20.0
1,2-Dichlorobenzene	Ave	1.471	1.482		80.6	80.0	0.7	20.0
2-Methylphenol	Ave	1.355	1.346	0.7000	79.5	80.0	-0.7	20.0
bis (2-chloroisopropyl) ether	Ave	2.112	1.850	0.0100	70.0	80.0	-12.4	20.0
3 & 4 Methylphenol	Ave	1.405	1.347		76.7	80.0	-4.1	20.0
3-Methylphenol	Ave	1.405	1.347		76.7	80.0	-4.1	20.0
4-Methylphenol	Ave	1.405	1.347	0.6000	76.7	80.0	-4.1	20.0
N-Nitrosodi-n-propylamine	Ave	1.020	0.9574	0.5000	75.1	80.0	-6.1	20.0
Acetophenone	Ave	1.974	1.971	0.0100	79.9	80.0	-0.2	20.0
Hexachloroethane	Ave	0.6565	0.6713	0.3000	81.8	80.0	2.2	20.0
Nitrobenzene	Ave	0.3951	0.3837		77.7	80.0	-2.9	20.0
Isophorone	Ave	0.6711	0.6580	0.4000	78.4	80.0	-1.9	20.0
2-Nitrophenol	Ave	0.1969	0.1994	0.1000	81.0	80.0	1.3	20.0
2,4-Dimethylphenol	Ave	0.3608	0.3416	0.2000	75.7	80.0	-5.3	20.0
Bis(2-chloroethoxy)methane	Ave	0.4411	0.4375	0.3000	79.4	80.0	-0.8	20.0
Benzoic acid	Ave	0.2831	0.2734		154	160	-3.4	20.0
2,4-Dichlorophenol	Ave	0.2955	0.2961	0.2000	80.2	80.0	0.2	20.0
1,2,4-Trichlorobenzene	Ave	0.3003	0.3037		80.9	80.0	1.1	20.0
Naphthalene	Ave	1.064	1.050	0.7000	78.9	80.0	-1.3	20.0
4-Chloroaniline	Ave	0.4813	0.4796	0.0100	79.7	80.0	-0.3	20.0
Hexachlorobutadiene	Ave	0.1636	0.1657	0.0100	81.0	80.0	1.3	20.0
Caprolactam	Ave	0.1892	0.1732		73.2	80.0	-8.5	20.0
4-Chloro-3-methylphenol	Ave	0.3163	0.3044	0.2000	77.0	80.0	-3.8	20.0
2-Methylnaphthalene	Ave	0.6836	0.6686	0.4000	78.2	80.0	-2.2	20.0
1-Methylnaphthalene	Ave	0.6430	0.6286		78.2	80.0	-2.2	20.0
Hexachlorocyclopentadiene	Ave	0.3143	0.2839	0.0500	72.3	80.0	-9.7	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2846	0.2795	0.0100	78.6	80.0	-1.8	20.0
2,4,6-Trichlorophenol	Ave	0.3592	0.3582	0.2000	79.8	80.0	-0.3	20.0
2,4,5-Trichlorophenol	Ave	0.3826	0.3807	0.2000	79.6	80.0	-0.5	20.0
1,1'-Biphenyl	Ave	1.506	1.483		78.8	80.0	-1.5	20.0
2-Chloronaphthalene	Ave	1.135	1.141	0.8000	80.4	80.0	0.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Lab Sample ID: CCV 280-273264/3 Calibration Date: 04/17/2015 18:13

Instrument ID: SMS_G6 Calib Start Date: 02/25/2015 11:53

GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 02/25/2015 14:59

Lab File ID: G6_17382.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Ave	0.4168	0.4007	0.0100	76.9	80.0	-3.9	20.0
Dimethyl phthalate	Ave	1.332	1.271	0.0100	76.3	80.0	-4.6	20.0
1,3-Dinitrobenzene	Ave	0.2362	0.2565		86.9	80.0	8.6	20.0
2,6-Dinitrotoluene	Ave	0.3078	0.3142	0.2000	81.7	80.0	2.1	20.0
Acenaphthylene	Ave	1.843	1.852	0.9000	80.4	80.0	0.5	20.0
3-Nitroaniline	Ave	0.3980	0.4042	0.0100	81.3	80.0	1.6	20.0
Acenaphthene	Ave	1.190	1.162	0.9000	78.1	80.0	-2.4	20.0
2,4-Dinitrophenol	Lin2		0.2172	0.0100	156	160	-2.4	20.0
4-Nitrophenol	Ave	0.2146	0.2013	0.0100	150	160	-6.2	20.0
2,4-Dinitrotoluene	Ave	0.4036	0.4201	0.2000	83.3	80.0	4.1	20.0
Dibenzofuran	Ave	1.676	1.671	0.8000	79.8	80.0	-0.3	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3102	0.3153	0.0100	81.3	80.0	1.7	20.0
Diethyl phthalate	Ave	1.356	1.360	0.0100	80.3	80.0	0.4	20.0
4-Chlorophenyl phenyl ether	Ave	0.6065	0.5933	0.4000	78.3	80.0	-2.2	20.0
Fluorene	Ave	1.364	1.353	0.9000	79.4	80.0	-0.7	20.0
4-Nitroaniline	Ave	0.3891	0.3983	0.0100	81.9	80.0	2.4	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1415	0.1510	0.0100	171	160	6.7	20.0
N-Nitrosodiphenylamine	Ave	0.5925	0.6090	0.0100	82.2	80.0	2.8	20.0
1,2-Diphenylhydrazine (as Azobenzene)	Ave	1.482	1.433		78.2	80.9	-3.3	20.0
Azobenzene	Ave	1.498	1.449		77.3	80.0	-3.3	20.0
4-Bromophenyl phenyl ether	Ave	0.1874	0.1922	0.1000	82.1	80.0	2.6	20.0
Hexachlorobenzene	Ave	0.1947	0.1981	0.1000	81.4	80.0	1.8	20.0
Pentachlorophenol	Ave	0.1280	0.1262	0.0500	158	160	-1.4	20.0
Phenanthrene	Ave	1.109	1.092	0.7000	78.7	80.0	-1.6	20.0
Anthracene	Ave	1.137	1.137	0.7000	80.0	80.0	0.0	20.0
Carbazole	Ave	1.159	1.152	0.0100	79.6	80.0	-0.5	20.0
Di-n-butyl phthalate	Ave	1.363	1.393	0.0100	81.8	80.0	2.2	20.0
Fluoranthene	Ave	1.215	1.173	0.6000	77.2	80.0	-3.4	20.0
Pyrene	Ave	1.336	1.374	0.6000	82.3	80.0	2.9	20.0
Famphur	Ave	0.4215	0.4227		80.2	80.0	0.3	20.0
Butyl benzyl phthalate	Ave	0.6306	0.6867	0.0100	87.1	80.0	8.9	20.0
3,3'-Dichlorobenzidine	Ave	0.3953	0.4056	0.0100	82.1	80.0	2.6	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8237	0.8643	0.0100	83.9	80.0	4.9	20.0
Benzo[a]anthracene	Ave	1.150	1.148	0.8000	79.9	80.0	-0.2	20.0
Chrysene	Ave	1.074	1.109	0.7000	82.6	80.0	3.3	20.0
Di-n-octyl phthalate	Lin2		1.519	0.0100	82.8	80.0	3.5	20.0
Benzo[b]fluoranthene	Ave	1.169	1.183	0.7000	81.0	80.0	1.3	20.0
Benzo[k]fluoranthene	Ave	1.200	1.287	0.7000	85.8	80.0	7.2	20.0
Benzo[a]pyrene	Ave	1.123	1.214	0.7000	86.5	80.0	8.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.8166	0.7910	0.5000	77.5	80.0	-3.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67484-2
 SDG No.: _____
 Lab Sample ID: CCV 280-273264/3 Calibration Date: 04/17/2015 18:13
 Instrument ID: SMS_G6 Calib Start Date: 02/25/2015 11:53
 GC Column: Vf-5MS (30.25) ID: 0.25 (mm) Calib End Date: 02/25/2015 14:59
 Lab File ID: G6_17382.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibenz(a,h)anthracene	Ave	0.9288	0.9760	0.4000	84.1	80.0	5.1	20.0
Benzo[g,h,i]perylene	Ave	1.011	1.030	0.5000	81.5	80.0	1.9	20.0
2-Fluorophenol (Surr)	Ave	1.454	1.503		82.7	80.0	3.3	20.0
Phenol-d5 (Surr)	Ave	1.823	1.764		77.4	80.0	-3.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4101	0.4073		79.4	80.0	-0.7	20.0
2-Fluorobiphenyl	Ave	1.352	1.335		79.0	80.0	-1.3	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1504	0.1576		83.8	80.0	4.7	20.0
Terphenyl-d14 (Surr)	Ave	0.7949	0.8241		82.9	80.0	3.7	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17382.D
 Lims ID: CCV HSL
 Client ID:
 Sample Type: CCV
 Inject. Date: 17-Apr-2015 18:13:30 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: CCV HSL
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Sublist: chrom-SMS_G6_8270D*sub6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 22-Apr-2015 15:45:14 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: kiekeld

Date: 22-Apr-2015 15:45:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	96	239754	40.0	40.0	
* 2 Naphthalene-d8	136	5.945	5.945	0.000	100	925984	40.0	40.0	
* 3 Acenaphthene-d10	164	7.704	7.704	0.000	92	501846	40.0	40.0	
* 4 Phenanthrene-d10	188	9.204	9.204	0.000	97	823535	40.0	40.0	
* 5 Chrysene-d12	240	13.515	13.515	0.000	96	728595	40.0	40.0	
* 6 Perylene-d12	264	17.639	17.639	0.000	95	611014	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.481	3.481	0.000	92	720586	80.0	82.7	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	845728	80.0	77.4	
\$ 9 Nitrobenzene-d5	82	5.239	5.239	0.000	90	754293	80.0	79.4	
\$ 10 2-Fluorobiphenyl	172	6.998	6.998	0.000	99	1339879	80.0	79.0	
\$ 11 2,4,6-Tribromophenol	330	8.498	8.498	0.000	90	158147	80.0	83.8	
\$ 12 Terphenyl-d14	244	11.233	11.233	0.000	99	1200925	80.0	82.9	
13 1,4-Dioxane	88	2.034	2.034	0.000	96	324097	80.0	88.1	
14 N-Nitrosodimethylamine	74	2.299	2.299	0.000	92	488430	80.0	87.4	
15 Pyridine	79	2.346	2.346	0.000	95	784843	80.0	82.4	
23 Phenol	94	4.340	4.340	0.000	98	836959	80.0	76.4	
24 Aniline	93	4.398	4.398	0.000	99	1036172	80.0	77.4	
25 Bis(2-chloroethyl)ether	93	4.428	4.428	0.000	90	653108	80.0	75.9	
26 2-Chlorophenol	128	4.504	4.504	0.000	97	725442	80.0	81.1	
27 1,3-Dichlorobenzene	146	4.651	4.651	0.000	96	725784	80.0	80.0	
28 1,4-Dichlorobenzene	146	4.722	4.722	0.000	93	734007	80.0	80.0	
29 Benzyl alcohol	108	4.822	4.822	0.000	94	456512	80.0	81.0	
30 1,2-Dichlorobenzene	146	4.869	4.869	0.000	95	710542	80.0	80.6	
31 2-Methylphenol	108	4.910	4.910	0.000	94	645418	80.0	79.5	
32 2,2'-oxybis[1-chloropropan	45	4.928	4.928	0.000	93	886919	80.0	70.0	
38 3 & 4 Methylphenol	108	5.057	5.057	0.000	93	645799	80.0	76.7	
39 3-Methylphenol	108	5.057	5.057	0.000	93	645799	80.0	76.7	
40 4-Methylphenol	108	5.057	5.057	0.000	92	645799	80.0	76.7	
41 N-Nitrosodi-n-propylamine	70	5.063	5.063	0.000	87	459056	80.0	75.1	
42 Acetophenone	105	5.081	5.081	0.000	98	945134	80.0	79.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.192	5.192	0.000	91	321892	80.0	81.8	
44 Nitrobenzene	77	5.257	5.257	0.000	89	710642	80.0	77.7	
46 Isophorone	82	5.469	5.469	0.000	100	1218590	80.0	78.4	
48 2-Nitrophenol	139	5.563	5.563	0.000	95	369263	80.0	81.0	
49 2,4-Dimethylphenol	107	5.575	5.575	0.000	94	632682	80.0	75.7	
50 Bis(2-chloroethoxy)methane	93	5.663	5.663	0.000	98	810290	80.0	79.4	
52 Benzoic acid	105	5.687	5.687	0.000	89	1012608	160.0	154.5	
53 2,4-Dichlorophenol	162	5.792	5.792	0.000	96	548417	80.0	80.2	
54 1,2,4-Trichlorobenzene	180	5.881	5.881	0.000	93	562375	80.0	80.9	
57 Naphthalene	128	5.969	5.969	0.000	97	1944452	80.0	78.9	
58 4-Chloroaniline	127	6.010	6.010	0.000	86	888211	80.0	79.7	
59 Hexachlorobutadiene	225	6.063	6.063	0.000	96	306864	80.0	81.0	
62 Caprolactam	55	6.363	6.363	0.000	78	320793	80.0	73.2	
64 4-Chloro-3-methylphenol	107	6.475	6.475	0.000	96	563726	80.0	77.0	
65 2-Methylnaphthalene	142	6.645	6.645	0.000	92	1238243	80.0	78.2	
67 1-Methylnaphthalene	142	6.751	6.751	0.000	92	1164195	80.0	78.2	
68 Hexachlorocyclopentadiene	237	6.792	6.792	0.000	88	284992	80.0	72.3	
69 1,2,4,5-Tetrachlorobenzene	216	6.816	6.816	0.000	97	517668	80.0	78.6	
70 2,4,6-Trichlorophenol	196	6.922	6.922	0.000	93	359490	80.0	79.8	
72 2,4,5-Trichlorophenol	196	6.963	6.963	0.000	93	382070	80.0	79.6	
74 1,1'-Biphenyl	154	7.104	7.104	0.000	95	1488140	80.0	78.8	
75 2-Chloronaphthalene	162	7.145	7.145	0.000	96	1145117	80.0	80.4	
77 2-Nitroaniline	65	7.245	7.245	0.000	86	402178	80.0	76.9	
79 Dimethyl phthalate	163	7.392	7.392	0.000	98	1275292	80.0	76.3	
80 1,3-Dinitrobenzene	168	7.451	7.451	0.000	84	257441	80.0	86.9	
81 2,6-Dinitrotoluene	165	7.475	7.475	0.000	96	315345	80.0	81.7	
82 Acenaphthylene	152	7.563	7.563	0.000	92	1858983	80.0	80.4	
83 3-Nitroaniline	138	7.657	7.657	0.000	94	405736	80.0	81.3	
84 Acenaphthene	153	7.733	7.733	0.000	95	1166231	80.0	78.1	
86 2,4-Dinitrophenol	184	7.757	7.757	0.000	82	436065	160.0	156.2	
87 4-Nitrophenol	109	7.810	7.810	0.000	92	404038	160.0	150.1	
89 2,4-Dinitrotoluene	165	7.880	7.880	0.000	86	421658	80.0	83.3	
90 Dibenzofuran	168	7.904	7.904	0.000	90	1677508	80.0	79.8	
92 2,3,4,6-Tetrachlorophenol	232	8.022	8.022	0.000	74	316481	80.0	81.3	
94 Diethyl phthalate	149	8.086	8.086	0.000	98	1365417	80.0	80.3	
96 4-Chlorophenyl phenyl ethe	204	8.228	8.228	0.000	93	595484	80.0	78.3	
98 Fluorene	166	8.251	8.251	0.000	94	1358473	80.0	79.4	
99 4-Nitroaniline	138	8.280	8.280	0.000	81	399801	80.0	81.9	
100 4,6-Dinitro-2-methylphenol	198	8.292	8.292	0.000	81	497503	160.0	170.7	
102 N-Nitrosodiphenylamine	169	8.351	8.351	0.000	61	1003037	80.0	82.2	
103 Azobenzene	77	8.386	8.386	0.000	99	1453845	80.0	77.3	
104 1,2-Diphenylhydrazine	77	8.386	8.386	0.000	100	1453845	80.9	78.2	
111 4-Bromophenyl phenyl ether	248	8.722	8.722	0.000	67	316618	80.0	82.1	
112 Hexachlorobenzene	284	8.804	8.804	0.000	88	326340	80.0	81.4	
116 Pentachlorophenol	266	9.004	9.004	0.000	88	415783	160.0	157.8	
119 Phenanthrene	178	9.227	9.227	0.000	98	1798037	80.0	78.7	
120 Anthracene	178	9.280	9.280	0.000	98	1873072	80.0	80.0	
122 Carbazole	167	9.439	9.439	0.000	82	1898224	80.0	79.6	
123 Di-n-butyl phthalate	149	9.733	9.733	0.000	100	2294432	80.0	81.8	
128 Fluoranthene	202	10.663	10.663	0.000	98	1932472	80.0	77.2	
129 Benzidine	184		10.466				ND	ND	
131 Pyrene	202	11.027	11.027	0.000	97	2002510	80.0	82.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
136 Famphur	218	12.039	12.039	0.000	97	615962	80.0	80.2	
137 Butyl benzyl phthalate	149	12.139	12.139	0.000	97	1000665	80.0	87.1	
140 3,3'-Dichlorobenzidine	252	13.451	13.451	0.000	73	591019	80.0	82.1	
141 Benzo[a]anthracene	228	13.486	13.486	0.000	99	1672520	80.0	79.9	
142 Bis(2-ethylhexyl) phthalat	149	13.480	13.480	0.000	89	1259459	80.0	83.9	
143 Chrysene	228	13.586	13.586	0.000	96	1615322	80.0	82.6	
144 Di-n-octyl phthalate	149	15.351	15.351	0.000	99	2214015	80.0	82.8	
146 Benzo[b]fluoranthene	252	16.486	16.486	0.000	96	1445857	80.0	81.0	
147 Benzo[k]fluoranthene	252	16.568	16.568	0.000	98	1572604	80.0	85.8	
148 Benzo[a]pyrene	252	17.474	17.474	0.000	78	1483910	80.0	86.5	
151 Indeno[1,2,3-cd]pyrene	276	20.833	20.833	0.000	96	1152621	80.0	77.5	M
152 Dibenz(a,h)anthracene	278	20.915	20.915	0.000	79	1192739	80.0	84.1	
153 Benzo[g,h,i]perylene	276	21.609	21.609	0.000	90	1258729	80.0	81.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MS-HSLACCV080_00038

Amount Added: 200.00

Units: uL

Report Date: 22-Apr-2015 15:45:14

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17382.D

Injection Date: 17-Apr-2015 18:13:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: CCV HSL

Worklist Smp#: 3

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

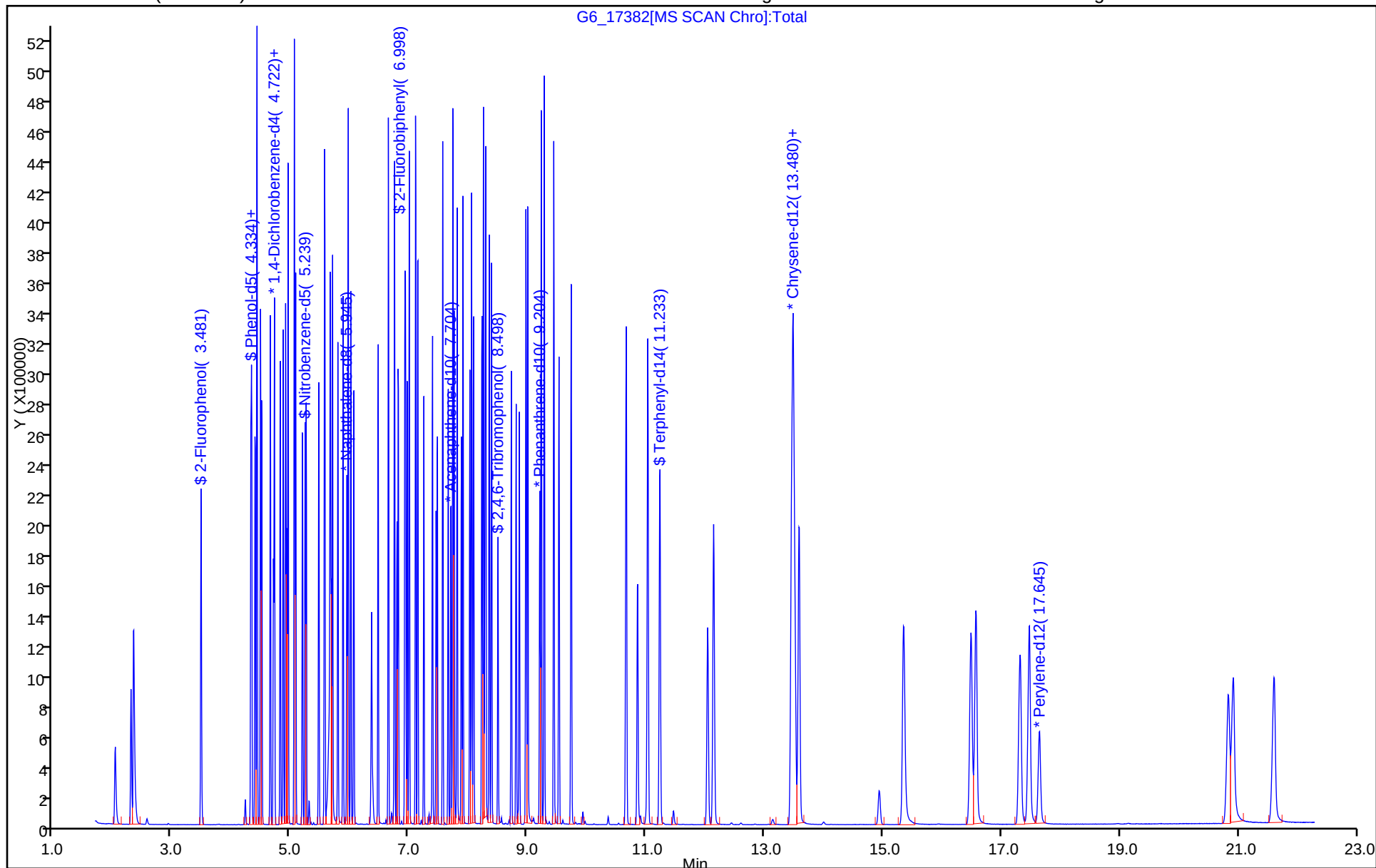
ALS Bottle#: 2

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



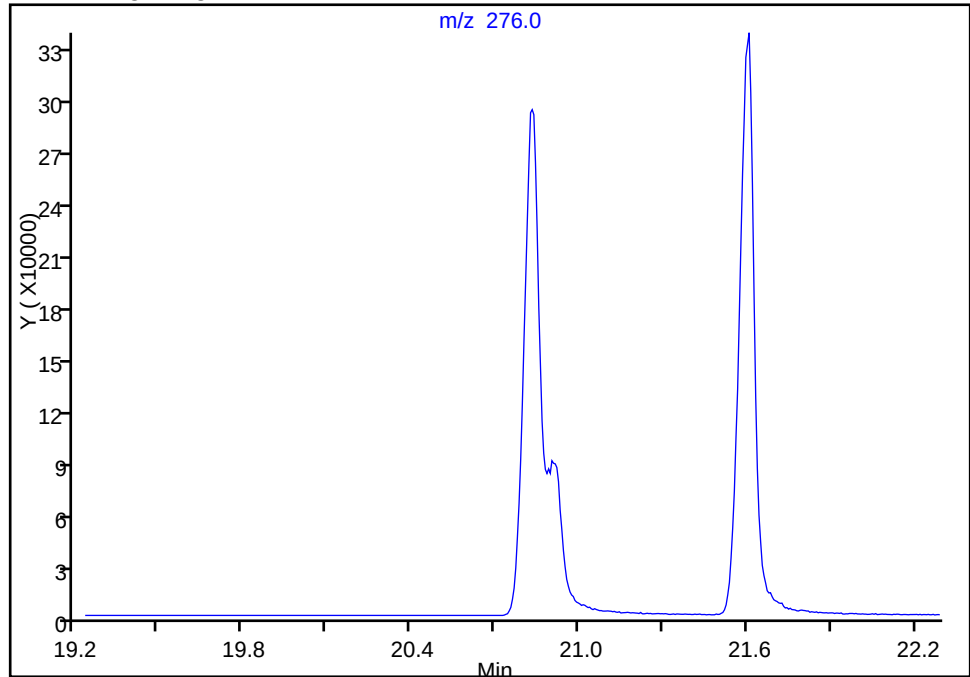
TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17382.D
Injection Date: 17-Apr-2015 18:13:30 Instrument ID: SMS_G6
Lims ID: CCV HSL
Client ID:
Operator ID: HOEFLERA ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector: MS SCAN

151 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

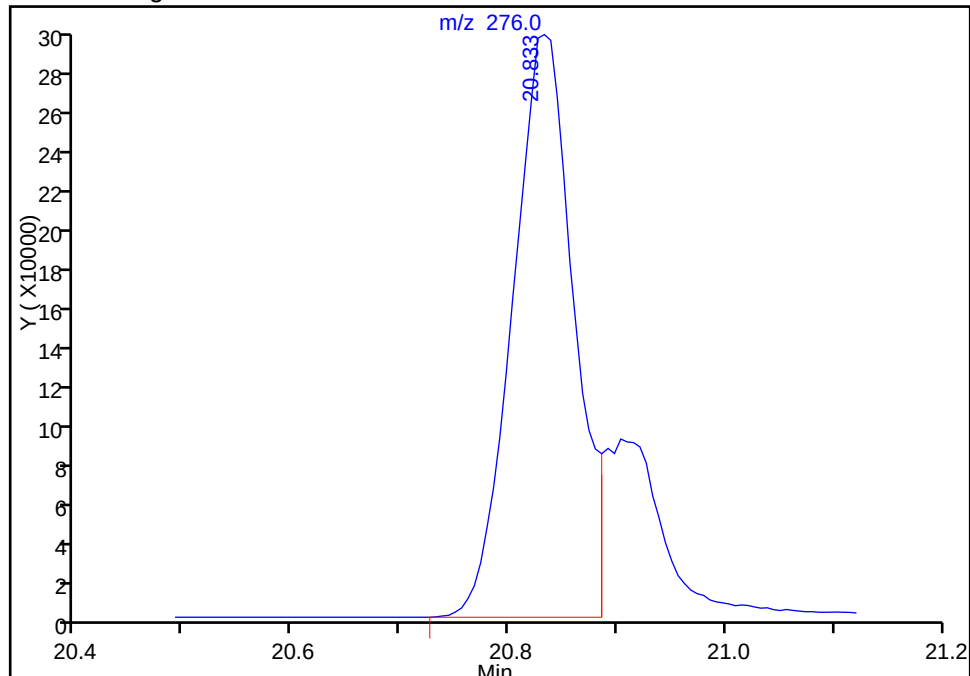
Not Detected
Expected RT: 20.83

Processing Integration Results



RT: 20.83
Area: 1152621
Amount: 77.488259
Amount Units: ug/ml

Manual Integration Results



Reviewer: hoeflera, 20-Apr-2015 10:53:26
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16636.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 25-Feb-2015 11:44:30 ALS Bottle#: 1 Worklist Smp#: 2
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Operator ID: KIEKELD Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 10-Apr-2015 12:09:37 Calib Date: 25-Feb-2015 14:59:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16644.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK023

First Level Reviewer: kiekeld

Date: 10-Apr-2015 08:08:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
20 Pentachlorophenol_T	266	3.898	3.898	0.000	90	188400	NR	NR	7
35 Benzidine_T	184	5.051	5.051	0.000	100	1315879	NR	NR	7
156 DFTPP									
157 4,4'-DDE	246	5.169	5.169	0.000	58	654	NR	NR	7
158 4,4'-DDD	235	5.487	5.487	0.000	94	10699	NR	NR	7
159 4,4'-DDT	235	5.734	5.734	0.000	97	496436	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

MS-DFTPP_00038

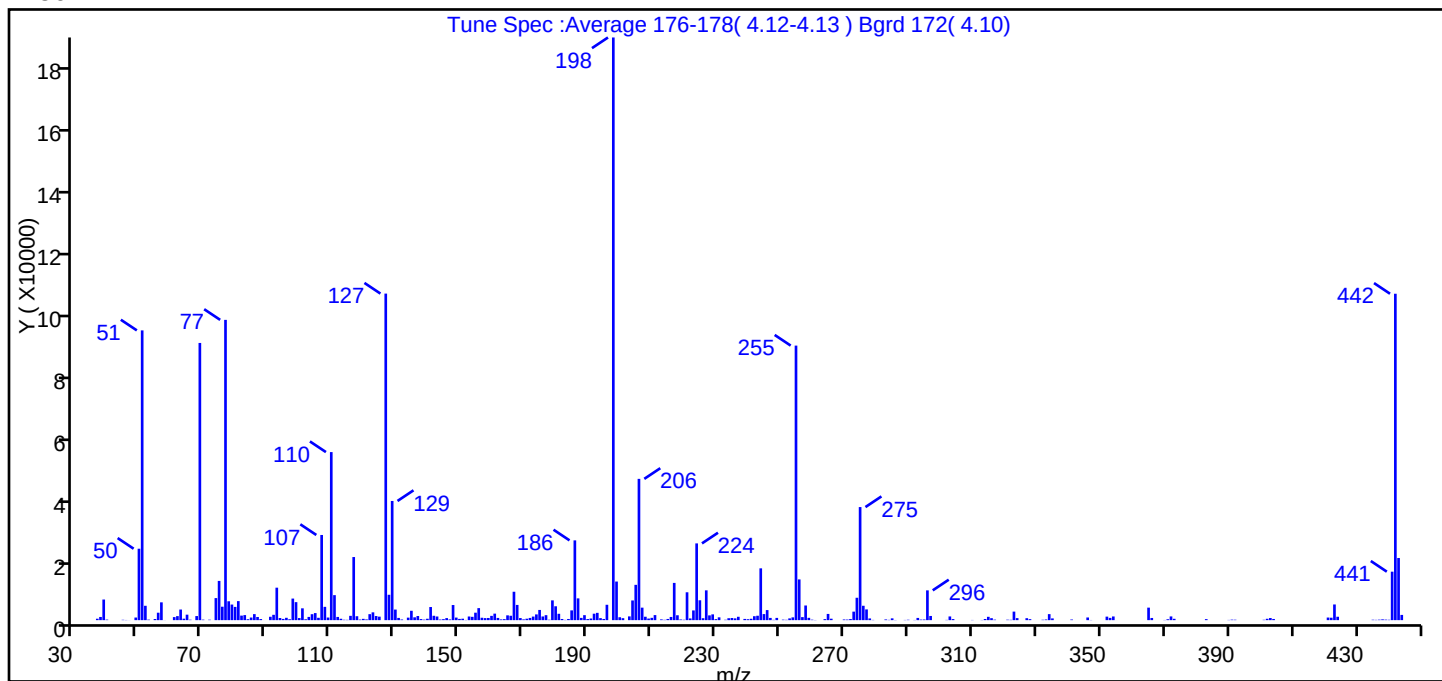
Amount Added: 200.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16636.D
Injection Date: 25-Feb-2015 11:44:30 Instrument ID: SMS_G6
Lims ID: DFTPP
Client ID:
Operator ID: KIEKELD ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Tune Method: DFTPP Method 8270

156 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	49.7
68	<2% of mass 69	0.7 (1.5)
69	Present	47.6
70	<2% of mass 69	0.1 (0.2)
127	40-60% of mass 198	56.0
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.6
275	10-30% of mass 198	19.4
365	>1% of mass 198	2.1
441	Present but less than mass 443	8.3 (78.0)
442	>40% of mass 198	56.0
443	17-23% of mass 442	10.7 (19.0)

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16636.D\SMS_G6_8270D.rslt\spectra.d
Injection Date: 25-Feb-2015 11:44:30
Spectrum: Tune Spec :Average 176-178(4.12-4.13) Bgrd 172(4.10)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 285

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	459	121.00	232	194.00	649	277.00	3468
38.00	1028	122.00	1930	195.00	379	278.00	551
39.00	6660	123.00	2519	196.00	4964	279.00	72
40.00	175	124.00	1326	198.00	188224	283.00	229
45.00	111	125.00	1129	199.00	12470	284.00	86
46.00	56	127.00	105488	200.00	938	285.00	577
47.00	18	128.00	8194	201.00	634	286.00	51
49.00	841	129.00	38496	203.00	1213	289.00	66
50.00	23072	130.00	3418	204.00	6363	290.00	132
51.00	93600	131.00	719	205.00	11405	292.00	60
52.00	4637	132.00	207	206.00	45640	293.00	716
53.00	168	133.00	8	207.00	4035	294.00	175
55.00	369	134.00	809	208.00	1101	295.00	204
56.00	2402	135.00	3026	209.00	516	296.00	9622
57.00	5751	136.00	912	210.00	745	297.00	1351
58.00	19	137.00	1332	211.00	1629	302.00	79
61.00	984	138.00	345	213.00	241	303.00	1194
62.00	1301	139.00	162	214.00	105	304.00	346
63.00	3429	140.00	450	215.00	382	310.00	61
64.00	473	141.00	4239	216.00	1029	313.00	58
65.00	1769	142.00	1410	217.00	12030	314.00	373
66.00	142	143.00	1176	218.00	1576	315.00	1075
68.00	1318	144.00	194	219.00	212	316.00	634
69.00	89544	145.00	322	220.00	128	317.00	162
70.00	167	146.00	661	221.00	9001	321.00	150
72.00	147	147.00	230	222.00	550	322.00	108
74.00	7124	148.00	4884	223.00	3140	323.00	2758
75.00	12670	149.00	828	224.00	24792	324.00	651
76.00	4339	150.00	402	225.00	6420	327.00	629
77.00	97000	151.00	465	226.00	621	328.00	325
78.00	6095	152.00	62	227.00	9628	332.00	128
79.00	5037	153.00	1178	228.00	1542	333.00	215
80.00	4279	154.00	1072	229.00	1866	334.00	1943

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16636.D\SMS_G6_8270D.rsl\spectra.d

Injection Date: 25-Feb-2015 11:44:30

Spectrum: Tune Spec :Average 176-178(4.12-4.13) Bgrd 172(4.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 285

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	6145	155.00	2405	230.00	331	335.00	561
82.00	1463	156.00	3883	231.00	909	341.00	204
83.00	1631	157.00	773	233.00	124	346.00	858
84.00	302	158.00	659	234.00	617	347.00	53
85.00	841	159.00	698	235.00	689	352.00	1135
86.00	1946	160.00	1385	236.00	574	353.00	731
87.00	1021	161.00	2102	237.00	1086	354.00	1189
88.00	349	162.00	717	239.00	395	355.00	7
89.00	5	163.00	237	240.00	309	365.00	4039
91.00	1091	164.00	319	241.00	444	366.00	704
92.00	1723	165.00	1551	242.00	1272	370.00	57
93.00	10487	166.00	1415	243.00	1423	371.00	292
94.00	690	167.00	9174	244.00	16736	372.00	1201
95.00	398	168.00	4916	245.00	1957	373.00	434
96.00	758	169.00	673	246.00	3250	383.00	328
97.00	297	170.00	245	247.00	721	390.00	70
98.00	6968	171.00	465	248.00	88	391.00	164
99.00	5816	172.00	712	249.00	724	392.00	137
100.00	676	173.00	1157	251.00	163	401.00	116
101.00	3817	174.00	1856	252.00	105	402.00	438
102.00	279	175.00	3296	253.00	569	403.00	684
103.00	1041	176.00	1189	254.00	898	404.00	379
104.00	1921	177.00	1604	255.00	88688	421.00	838
105.00	2282	178.00	135	256.00	13156	422.00	784
106.00	758	179.00	6388	257.00	978	423.00	5066
107.00	27512	180.00	4482	258.00	4733	424.00	1095
108.00	4296	181.00	2051	259.00	747	435.00	136
109.00	843	182.00	372	260.00	153	436.00	96
110.00	54288	183.00	82	261.00	51	437.00	156
111.00	8075	184.00	376	264.00	330	438.00	252
112.00	1035	185.00	3153	265.00	2008	439.00	169
113.00	446	186.00	25768	266.00	463	440.00	121
114.00	128	187.00	7034	270.00	218	441.00	15657
115.00	102	188.00	729	271.00	188	442.00	105440

Report Date: 10-Apr-2015 12:09:37

Chrom Revision: 2.2 13-Mar-2015 11:20:44

Data File: \\Denchrom\ChromData\SMS_G6\20150410-33765.b\G6_16636.D\SMS_G6_8270D.rslt\spectra.d

Injection Date: 25-Feb-2015 11:44:30

Spectrum: Tune Spec :Average 176-178(4.12-4.13) Bgrd 172(4.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 285

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1390	189.00	1612	272.00	353	443.00	20072
117.00	20384	190.00	354	273.00	2747	444.00	1689
118.00	1268	191.00	522	274.00	7230		
119.00	185	192.00	2080	275.00	36528		
120.00	419	193.00	2355	276.00	4643		

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17381.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 17-Apr-2015 18:00:30 ALS Bottle#: 1 Worklist Smp#: 2
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 20-Apr-2015 13:36:56 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK031

First Level Reviewer: kiekeld

Date: 20-Apr-2015 13:36:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
20 Pentachlorophenol_T	266	3.798	3.798	0.000	89	114559	NR	NR	7
35 Benzidine_T	184	4.975	4.975	0.000	100	907784	NR	NR	7
156 DFTPP									
157 4,4'-DDE	246	5.098	5.098	0.000	1	407	NR	NR	7
158 4,4'-DDD	235	5.410	5.410	0.000	94	6844	NR	NR	7
159 4,4'-DDT	235	5.645	5.645	0.000	97	342808	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

MS-DFTPP_00038

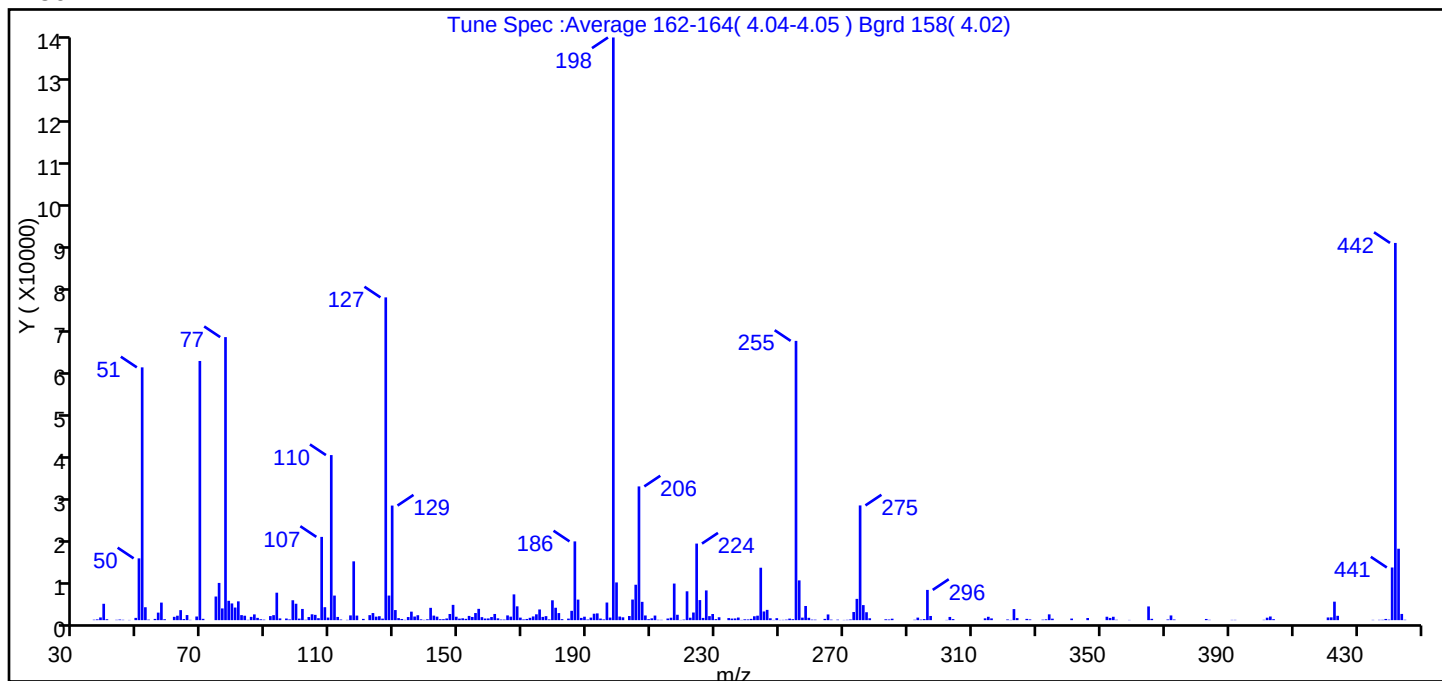
Amount Added: 200.00

Units: uL

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17381.D
Injection Date: 17-Apr-2015 18:00:30 Instrument ID: SMS_G6
Lims ID: DFTPP
Client ID:
Operator ID: HOEFLERA ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Method: SMS_G6_8270D Limit Group: MSSV - 8270D
Tune Method: DFTPP Method 8270

156 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	43.4
68	<2% of mass 69	0.6 (1.4)
69	Present	44.5
70	<2% of mass 69	0.2 (0.5)
127	40-60% of mass 198	55.4
197	<1% of mass 198	0.4
199	5-9% of mass 198	6.5
275	10-30% of mass 198	19.7
365	>1% of mass 198	2.4
441	Present but less than mass 443	9.0 (73.7)
442	>40% of mass 198	64.7
443	17-23% of mass 442	12.3 (18.9)

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17381.D\SMS_G6_8270D.rslt\spectra.d
Injection Date: 17-Apr-2015 18:00:30
Spectrum: Tune Spec :Average 162-164(4.04-4.05) Bgrd 158(4.02)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 277

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	107	122.00	1188	193.00	1607	271.00	82
37.00	183	123.00	1688	194.00	374	272.00	160
38.00	641	124.00	831	195.00	172	273.00	1932
39.00	3895	125.00	939	196.00	4194	274.00	5062
40.00	216	126.00	361	197.00	611	275.00	27304
43.00	81	127.00	76824	198.00	138688	276.00	3580
44.00	148	128.00	5852	199.00	8977	277.00	1884
45.00	82	129.00	27272	200.00	854	278.00	446
47.00	50	130.00	2398	201.00	675	283.00	206
49.00	536	131.00	482	203.00	983	284.00	154
50.00	14708	132.00	277	204.00	4903	285.00	343
51.00	60168	133.00	78	205.00	8427	292.00	94
52.00	3072	134.00	737	206.00	31832	293.00	602
53.00	127	135.00	2022	207.00	4356	294.00	120
55.00	295	136.00	859	208.00	1113	295.00	241
56.00	1790	137.00	1171	209.00	231	296.00	7196
57.00	4179	138.00	188	210.00	429	297.00	994
58.00	218	139.00	69	211.00	1091	302.00	55
61.00	789	140.00	201	212.00	89	303.00	763
62.00	1055	141.00	2930	213.00	73	304.00	252
63.00	2385	142.00	1079	215.00	387	314.00	427
64.00	261	143.00	830	216.00	575	315.00	799
65.00	1211	144.00	221	217.00	8708	316.00	415
66.00	69	145.00	230	218.00	1281	321.00	166
68.00	867	146.00	399	219.00	53	322.00	50
69.00	61688	147.00	1466	220.00	128	323.00	2633
70.00	315	148.00	3637	221.00	6866	324.00	483
74.00	5622	149.00	808	222.00	579	327.00	300
75.00	8860	150.00	360	223.00	1816	328.00	173
76.00	2792	151.00	442	224.00	18224	332.00	119
77.00	67368	152.00	307	225.00	4776	333.00	192
78.00	4609	153.00	1005	226.00	532	334.00	1380
79.00	3978	154.00	761	227.00	7074	335.00	351

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17381.D\SMS_G6_8270D.rsl\spectra.d

Injection Date: 17-Apr-2015 18:00:30

Spectrum: Tune Spec :Average 162-164(4.04-4.05) Bgrd 158(4.02)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 277

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	3001	155.00	1692	228.00	956	341.00	375
81.00	4471	156.00	2690	229.00	1458	346.00	505
82.00	1197	157.00	714	230.00	241	352.00	810
83.00	1054	158.00	385	231.00	686	353.00	527
84.00	78	159.00	404	234.00	492	354.00	804
85.00	779	160.00	741	235.00	376	355.00	94
86.00	1371	161.00	1471	236.00	403	359.00	52
87.00	540	162.00	429	237.00	621	365.00	3266
88.00	207	163.00	142	238.00	54	366.00	315
89.00	120	164.00	134	239.00	195	371.00	164
91.00	965	165.00	1128	240.00	168	372.00	1118
92.00	1188	166.00	829	241.00	302	373.00	155
93.00	6533	167.00	6133	242.00	923	383.00	281
94.00	414	168.00	3287	243.00	1062	384.00	76
96.00	384	169.00	602	244.00	12478	391.00	64
97.00	167	170.00	170	245.00	2069	392.00	68
98.00	4736	171.00	284	246.00	2444	401.00	81
99.00	3905	172.00	556	247.00	442	402.00	583
100.00	365	173.00	885	248.00	52	403.00	870
101.00	2664	174.00	1390	249.00	468	404.00	230
102.00	88	175.00	2545	250.00	54	421.00	636
103.00	742	176.00	774	251.00	70	422.00	662
104.00	1394	177.00	953	252.00	122	423.00	4398
105.00	1261	178.00	174	253.00	364	424.00	1031
106.00	464	179.00	4722	254.00	226	435.00	67
107.00	19816	180.00	2951	255.00	66472	437.00	76
108.00	3080	181.00	1684	256.00	9466	438.00	82
109.00	611	182.00	235	257.00	600	439.00	286
110.00	39288	184.00	367	258.00	3368	440.00	124
111.00	5847	185.00	2219	259.00	559	441.00	12533
112.00	764	186.00	18744	260.00	123	442.00	89784
113.00	149	187.00	4891	261.00	111	443.00	17000
115.00	70	188.00	533	264.00	300	444.00	1478
116.00	1129	189.00	821	265.00	1357	445.00	95

Report Date: 20-Apr-2015 13:36:57

Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17381.D\SMS_G6_8270D.rslt\spectra.d

Injection Date: 17-Apr-2015 18:00:30

Spectrum: Tune Spec :Average 162-164(4.04-4.05) Bgrd 158(4.02)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 277

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	13995	190.00	149	266.00	118		
118.00	1087	191.00	604	268.00	118		
120.00	298	192.00	1528	270.00	52		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 280-272762/1-A
Matrix: Water Lab File ID: G6_17386.D
Analysis Method: 8270D Date Collected: _____
Extract. Method: 3520C Date Extracted: 04/09/2015 15:30
Sample wt/vol: 1000 (mL) Date Analyzed: 04/17/2015 19:49
Con. Extract Vol.: 1 (mL) Dilution Factor: 1
Injection Volume: 0.5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 273264 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.5	U	5.0	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	80		48-135
321-60-8	2-Fluorobiphenyl	84		48-135
367-12-4	2-Fluorophenol (Surr)	87		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	87		42-135
4165-62-2	Phenol-d5 (Surr)	87		46-135
1718-51-0	Terphenyl-d14 (Surr)	84		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17386.D
 Lims ID: MB 280-272762/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 17-Apr-2015 19:49:30 ALS Bottle#: 6 Worklist Smp#: 25
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: MB280-271917_1-A
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 20-Apr-2015 12:00:33 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: hoeflera

Date: 18-Apr-2015 11:22:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	96	161024	40.0	40.0	
* 2 Naphthalene-d8	136	5.940	5.945	-0.005	100	608970	40.0	40.0	
* 3 Acenaphthene-d10	164	7.698	7.698	0.000	92	332203	40.0	40.0	
* 4 Phenanthrene-d10	188	9.198	9.198	0.000	97	556677	40.0	40.0	
* 5 Chrysene-d12	240	13.498	13.498	0.000	97	521559	40.0	40.0	
* 6 Perylene-d12	264	17.627	17.627	0.000	95	435159	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.481	3.481	0.000	93	508030	100.0	86.8	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	640663	100.0	87.3	
\$ 9 Nitrobenzene-d5	82	5.234	5.239	-0.005	90	544508	100.0	87.2	
\$ 10 2-Fluorobiphenyl	172	6.998	6.998	0.000	100	939601	100.0	83.7	
\$ 11 2,4,6-Tribromophenol	330	8.492	8.498	-0.006	88	100142	100.0	80.2	
\$ 12 Terphenyl-d14	244	11.227	11.233	-0.006	99	872635	100.0	84.2	
13 1,4-Dioxane	88		2.034					ND	
14 N-Nitrosodimethylamine	74		2.299					ND	
15 Pyridine	79		2.346					ND	
16 2-Picoline	93		2.987					ND	
17 N-Nitrosomethylethylamine	88		3.075					ND	
18 Methyl methanesulfonate	80		3.345					ND	
19 N-Nitrosodiethylamine	102		3.698					ND	
20 Pentachlorophenol_T	266		3.798					ND	
21 Ethyl methanesulfonate	79		3.963					ND	
22 Pentachloroethane	117		4.440					ND	
23 Phenol	94		4.340					ND	
24 Aniline	93		4.398					ND	
25 Bis(2-chloroethyl)ether	93		4.428					ND	
26 2-Chlorophenol	128		4.504					ND	
27 1,3-Dichlorobenzene	146		4.651					ND	
28 1,4-Dichlorobenzene	146		4.722					ND	
29 Benzyl alcohol	108		4.822					ND	
30 1,2-Dichlorobenzene	146		4.869					ND	
31 2-Methylphenol	108		4.910					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
32 2,2'-oxybis[1-chloropropan	45		4.928					ND	
33 N-Nitrosopyrrolidine	100		5.069					ND	
34 N-Nitrosomorpholine	116		5.098					ND	
35 Benzidine_T	184		4.975					ND	
36 2-Toluidine	106		5.116					ND	
37 Benzaldehyde	106		5.015					ND	
38 3 & 4 Methylphenol	108		5.057					ND	
39 3-Methylphenol	108		5.057					ND	
40 4-Methylphenol	108		5.057					ND	
41 N-Nitrosodi-n-propylamine	70		5.063					ND	
42 Acetophenone	105		5.081					ND	
43 Hexachloroethane	117		5.192					ND	
44 Nitrobenzene	77		5.257					ND	
45 N-Nitrosopiperidine	114		5.404					ND	
46 Isophorone	82		5.469					ND	
47 o,o',o''-Triethylphosphoro	198		5.616					ND	
48 2-Nitrophenol	139		5.563					ND	
49 2,4-Dimethylphenol	107		5.575					ND	
50 Bis(2-chloroethoxy)methane	93		5.663					ND	
51 alpha,alpha-Dimethyl phene	58		5.810					ND	
52 Benzoic acid	105		5.687					ND	
53 2,4-Dichlorophenol	162		5.792					ND	
54 1,2,4-Trichlorobenzene	180		5.881					ND	
55 2,6-Dichlorophenol	162		6.016					ND	
56 Hexachloropropene	213		6.039					ND	
57 Naphthalene	128		5.969					ND	
58 4-Chloroaniline	127		6.010					ND	
59 Hexachlorobutadiene	225		6.063					ND	
60 N-Nitrosodi-n-butylamine	84		6.304					ND	
61 p-Phenylene diamine	108		6.357					ND	
62 Caprolactam	55		6.363					ND	
63 Safrole, Total	162		6.534					ND	
64 4-Chloro-3-methylphenol	107		6.475					ND	
65 2-Methylnaphthalene	142		6.645					ND	
66 Isosafrole Peak 1	162		6.828					ND	
67 1-Methylnaphthalene	142		6.751					ND	
68 Hexachlorocyclopentadiene	237		6.792					ND	
69 1,2,4,5-Tetrachlorobenzene	216		6.816					ND	
70 2,4,6-Trichlorophenol	196		6.922					ND	
71 Isosafrole Peak 2	104		7.057					ND	
72 2,4,5-Trichlorophenol	196		6.963					ND	
73 1-Chloronaphthalene	162		7.163					ND	
74 1,1'-Biphenyl	154		7.104					ND	
75 2-Chloronaphthalene	162		7.145					ND	
76 1,4-Naphthoquinone	158		7.316					ND	
77 2-Nitroaniline	65		7.245					ND	
78 1,4-Dinitrobenzene	168		7.375					ND	
79 Dimethyl phthalate	163		7.392					ND	
80 1,3-Dinitrobenzene	168		7.451					ND	
81 2,6-Dinitrotoluene	165		7.475					ND	
82 Acenaphthylene	152		7.563					ND	
83 3-Nitroaniline	138		7.657					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
84 Acenaphthene	153		7.733					ND	
85 Pentachlorobenzene	250		7.857					ND	
86 2,4-Dinitrophenol	184		7.757					ND	
87 4-Nitrophenol	109		7.810					ND	
88 1-Naphthylamine	143		7.986					ND	
89 2,4-Dinitrotoluene	165		7.880					ND	
90 Dibenzofuran	168		7.904					ND	
91 2-Naphthylamine	143		8.063					ND	
92 2,3,4,6-Tetrachlorophenol	232		8.022					ND	
93 Thionazin	97		8.163					ND	
94 Diethyl phthalate	149		8.086					ND	
95 N-Nitro-o-toluidine	152		8.257					ND	
96 4-Chlorophenyl phenyl ethe	204		8.228					ND	
97 Diphenylamine	169		8.345					ND	
98 Fluorene	166		8.251					ND	
99 4-Nitroaniline	138		8.280					ND	
100 4,6-Dinitro-2-methylphenol	198		8.292					ND	
101 Sulfotepp	97		8.445					ND	
102 N-Nitrosodiphenylamine	169		8.351					ND	
103 Azobenzene	77		8.386					ND	
104 1,2-Diphenylhydrazine	77		8.386					ND	
105 Diallate Peak 1	86		8.604					ND	
106 1,3,5-Trinitrobenzene	213		8.610					ND	
107 Phorate	121		8.616					ND	
108 Phenacetin	108		8.639					ND	
109 Diallate Peak 2	86		8.698					ND	
110 Dimethoate	87		8.810					ND	
111 4-Bromophenyl phenyl ether	248		8.722					ND	
112 Hexachlorobenzene	284		8.804					ND	
113 4-Aminobiphenyl	169		8.992					ND	
114 Pentachloronitrobenzene	237		9.004					ND	
115 Pronamide	173		9.004					ND	
116 Pentachlorophenol	266		9.004					ND	
117 Disulfoton	88		9.139					ND	
118 Dinoseb	211		9.145					ND	
119 Phenanthrene	178		9.227					ND	
120 Anthracene	178		9.280					ND	
121 Methyl parathion	109		9.539					ND	
122 Carbazole	167		9.439					ND	
123 Di-n-butyl phthalate	149		9.733					ND	
124 Ethyl Parathion	109		9.969					ND	
125 4-Nitroquinoline-1-oxide	190		10.092					ND	
126 Methapyrilene	97		10.116					ND	
127 Isodrin	193		10.421					ND	
128 Fluoranthene	202		10.663					ND	
129 Benzidine	184		10.466					ND	
130 Aramite Peak 1	185		11.127					ND	
131 Pyrene	202		11.027					ND	
132 Aramite Peak 2	185		11.257					ND	
133 p-Dimethylamino azobenzene	120		11.474					ND	
134 Chlorobenzilate	251		11.527					ND	
135 3,3'-Dimethylbenzidine	212		12.163					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
136 Famphur	218		12.039					ND	
137 Butyl benzyl phthalate	149		12.139					ND	
138 2-Acetylaminofluorene	181		12.721					ND	
139 4,4'-Methylene bis(2-chlor	231		13.439					ND	
140 3,3'-Dichlorobenzidine	252		13.451					ND	
141 Benzo[a]anthracene	228		13.486					ND	
142 Bis(2-ethylhexyl) phthalat	149		13.480					ND	
143 Chrysene	228		13.586					ND	
144 Di-n-octyl phthalate	149		15.351					ND	
145 7,12-Dimethylbenz(a)anthra	256		16.462					ND	
146 Benzo[b]fluoranthene	252		16.486					ND	
147 Benzo[k]fluoranthene	252		16.568					ND	
148 Benzo[a]pyrene	252		17.315					ND	
149 3-Methylcholanthrene	268		18.521					ND	
150 Dibenz[a,j]acridine	279		20.321					ND	
151 Indeno[1,2,3-cd]pyrene	276		20.833					ND	
152 Dibenz(a,h)anthracene	278		20.915					ND	
153 Benzo[g,h,i]perylene	276		21.609					ND	
S 160 Aramite, Total	185		15.047					ND	
S 161 Isosafrole	162		15.047					ND	
S 162 Diallate	86		15.047					ND	
154 Total Cresols	1		0.000					ND	
155 Tetraethyl Pyrophosphate (	1		0.000					ND	
157 4,4'-DDE	246		4.981					ND	
158 4,4'-DDD	235		5.381					ND	
159 4,4'-DDT	235		5.510					ND	
S 163 Methyl Phenols, Total	1		0.000					ND	

Reagents:

MS-IS_00007

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17386.D

Injection Date: 17-Apr-2015 19:49:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: MB 280-272762/1-A

Worklist Smp#: 25

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

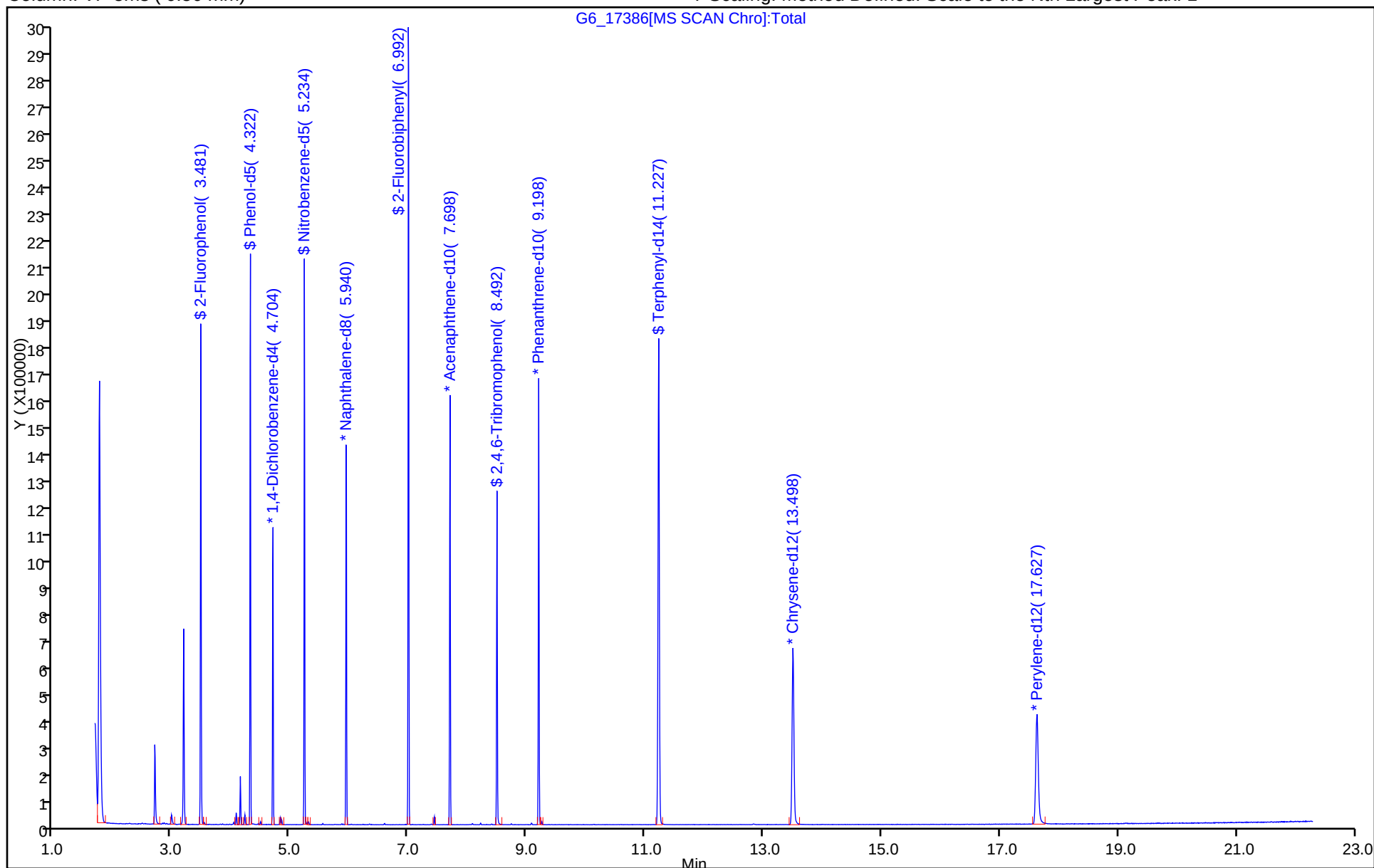
ALS Bottle#: 6

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-272762/2-A
Matrix: Water Lab File ID: G6_17387.D
Analysis Method: 8270D Date Collected: _____
Extract. Method: 3520C Date Extracted: 04/09/2015 15:30
Sample wt/vol: 1000 (mL) Date Analyzed: 04/17/2015 20:16
Con. Extract Vol.: 1 (mL) Dilution Factor: 1
Injection Volume: 0.5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 273264 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	72.4		5.0	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	96		48-135
321-60-8	2-Fluorobiphenyl	91		48-135
367-12-4	2-Fluorophenol (Surr)	95		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	94		42-135
4165-62-2	Phenol-d5 (Surr)	94		46-135
1718-51-0	Terphenyl-d14 (Surr)	89		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17387.D
 Lims ID: LCS 280-272762/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 17-Apr-2015 20:16:30 ALS Bottle#: 7 Worklist Smp#: 26
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: LCS280-271917_2-A
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 20-Apr-2015 12:00:33 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: hoeflera

Date: 18-Apr-2015 11:29:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	95	152610	40.0	40.0	
* 2 Naphthalene-d8	136	5.945	5.945	0.000	99	584545	40.0	40.0	
* 3 Acenaphthene-d10	164	7.698	7.698	0.000	92	326423	40.0	40.0	
* 4 Phenanthrene-d10	188	9.198	9.198	0.000	97	549491	40.0	40.0	
* 5 Chrysene-d12	240	13.498	13.498	0.000	95	505539	40.0	40.0	
* 6 Perylene-d12	264	17.627	17.627	0.000	95	423107	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.481	3.481	0.000	92	525852	100.0	94.8	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	651388	100.0	93.7	
\$ 9 Nitrobenzene-d5	82	5.240	5.239	0.001	89	565091	100.0	94.3	
\$ 10 2-Fluorobiphenyl	172	6.998	6.998	0.000	100	1008125	100.0	91.4	
\$ 11 2,4,6-Tribromophenol	330	8.492	8.498	-0.006	85	117543	100.0	95.8	
\$ 12 Terphenyl-d14	244	11.221	11.233	-0.012	98	891178	100.0	88.7	
13 1,4-Dioxane	88	2.028	2.034	-0.006	97	171914	80.2	73.4	
14 N-Nitrosodimethylamine	74	2.299	2.299	0.001	91	291906	80.0	82.1	
15 Pyridine	79	2.340	2.346	-0.006	93	423257	80.0	69.8	
23 Phenol	94	4.334	4.340	-0.006	99	540086	80.3	77.4	
24 Aniline	93	4.393	4.398	-0.005	98	484764	80.1	56.9	
25 Bis(2-chloroethyl)ether	93	4.428	4.428	0.000	96	434056	80.1	79.3	
26 2-Chlorophenol	128	4.504	4.504	0.000	97	450442	80.0	79.1	
27 1,3-Dichlorobenzene	146	4.651	4.651	0.000	97	431454	80.1	74.7	
28 1,4-Dichlorobenzene	146	4.722	4.722	0.000	93	438624	80.2	75.1	
29 Benzyl alcohol	108	4.816	4.822	-0.006	93	290277	80.0	80.9	
30 1,2-Dichlorobenzene	146	4.869	4.869	0.000	95	420978	80.3	75.0	
31 2-Methylphenol	108	4.910	4.910	0.000	94	403783	80.1	78.1	
32 2,2'-oxybis[1-chloropropan	45	4.928	4.928	0.000	94	551865	80.0	68.5	
37 Benzaldehyde	106	5.075	5.015	0.060	70	45748	NC	NC	
38 3 & 4 Methylphenol	108	5.051	5.057	-0.006	94	419972	80.0	78.4	
39 3-Methylphenol	108	5.051	5.057	-0.006	94	419972	80.0	78.4	
40 4-Methylphenol	108	5.051	5.057	-0.006	93	419972	80.0	78.4	
41 N-Nitrosodi-n-propylamine	70	5.057	5.063	-0.006	84	294992	80.2	75.8	
42 Acetophenone	105	5.075	5.081	-0.006	97	601947	80.1	79.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
43 Hexachloroethane	117	5.192	5.192	0.000	92	185684	80.2	74.1	
44 Nitrobenzene	77	5.257	5.257	0.000	88	445589	80.0	77.2	
46 Isophorone	82	5.469	5.469	0.000	99	776942	80.0	79.2	
48 2-Nitrophenol	139	5.563	5.563	0.000	93	231113	80.0	80.3	
49 2,4-Dimethylphenol	107	5.569	5.575	-0.006	93	389298	80.1	73.8	
50 Bis(2-chloroethoxy)methane	93	5.663	5.663	0.000	99	514854	80.2	79.9	
52 Benzoic acid	105	5.645	5.687	-0.042	89	301053	80.1	72.8	
53 2,4-Dichlorophenol	162	5.792	5.792	0.000	94	353287	80.0	81.8	
54 1,2,4-Trichlorobenzene	180	5.881	5.881	0.000	94	340918	80.0	77.7	
55 2,6-Dichlorophenol	162	6.016	6.016	0.000	95	338766	80.0	83.3	
57 Naphthalene	128	5.963	5.969	-0.006	97	1186653	80.1	76.3	
58 4-Chloroaniline	127	6.010	6.010	0.000	81	380396	80.0	54.1	
59 Hexachlorobutadiene	225	6.057	6.063	-0.006	95	178146	80.0	74.5	
62 Caprolactam	55	6.345	6.363	-0.018	77	200164	80.0	72.4	
64 4-Chloro-3-methylphenol	107	6.469	6.475	-0.006	96	362886	80.1	78.5	
65 2-Methylnaphthalene	142	6.645	6.645	0.000	92	788435	79.9	78.9	
67 1-Methylnaphthalene	142	6.745	6.751	-0.006	92	686691	80.0	73.1	
68 Hexachlorocyclopentadiene	237	6.786	6.792	-0.006	94	111277	80.1	43.4	
69 1,2,4,5-Tetrachlorobenzene	216	6.810	6.816	-0.006	97	317217	80.0	76.3	
70 2,4,6-Trichlorophenol	196	6.922	6.922	0.000	93	233240	80.1	79.6	
72 2,4,5-Trichlorophenol	196	6.963	6.963	0.000	94	248358	80.0	79.5	
74 1,1'-Biphenyl	154	7.104	7.104	0.000	95	943482	80.2	76.8	
75 2-Chloronaphthalene	162	7.139	7.145	-0.006	97	719205	80.0	77.6	
77 2-Nitroaniline	65	7.239	7.245	-0.006	83	256751	80.2	75.5	
79 Dimethyl phthalate	163	7.386	7.392	-0.006	98	815197	80.0	75.0	
80 1,3-Dinitrobenzene	168	7.445	7.451	-0.006	84	161008	80.3	83.5	
81 2,6-Dinitrotoluene	165	7.469	7.475	-0.006	95	205074	80.1	81.7	
82 Acenaphthylene	152	7.563	7.563	0.000	92	1201149	80.0	79.9	
83 3-Nitroaniline	138	7.651	7.657	-0.006	94	193782	80.1	59.7	
84 Acenaphthene	153	7.733	7.733	0.000	94	742146	80.1	76.4	
86 2,4-Dinitrophenol	184	7.751	7.757	-0.006	82	264885	160.3	146.1	
87 4-Nitrophenol	109	7.804	7.810	-0.006	91	265394	160.0	151.6	
89 2,4-Dinitrotoluene	165	7.875	7.880	-0.005	86	272735	80.1	82.8	
90 Dibenzofuran	168	7.904	7.904	0.000	90	1074563	80.1	78.6	
92 2,3,4,6-Tetrachlorophenol	232	8.016	8.022	-0.006	76	200555	80.1	79.2	
94 Diethyl phthalate	149	8.081	8.086	-0.005	97	873465	80.0	79.0	
96 4-Chlorophenyl phenyl ethe	204	8.222	8.228	-0.006	95	379135	80.0	76.6	
97 Diphenylamine	169	8.345	8.345	0.000	95	1231080	137.1	131.9	
98 Fluorene	166	8.245	8.251	-0.006	93	872501	80.0	78.4	
99 4-Nitroaniline	138	8.275	8.280	-0.005	81	243644	80.1	76.7	
100 4,6-Dinitro-2-methylphenol	198	8.286	8.292	-0.006	82	318767	160.1	164.0	
102 N-Nitrosodiphenylamine	169	8.345	8.351	-0.006	61	1231080	160.0	151.2	
103 Azobenzene	77	8.386	8.386	0.000	99	883192	80.1	72.2	
111 4-Bromophenyl phenyl ether	248	8.716	8.722	-0.006	69	202361	80.0	78.6	
112 Hexachlorobenzene	284	8.798	8.804	-0.006	88	213509	80.1	79.8	
116 Pentachlorophenol	266	8.998	9.004	-0.006	88	253215	160.0	144.0	
119 Phenanthrene	178	9.222	9.227	-0.005	98	1218869	80.0	80.0	
120 Anthracene	178	9.275	9.280	-0.005	98	1212715	80.0	77.7	
122 Carbazole	167	9.433	9.439	-0.006	82	1238829	80.0	77.8	
123 Di-n-butyl phthalate	149	9.727	9.733	-0.006	100	1473632	80.0	78.7	
128 Fluoranthene	202	10.657	10.663	-0.006	98	1274669	80.0	76.4	
129 Benzidine	184		10.466				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
131 Pyrene	202	11.022	11.027	-0.005	97	1344676	80.0	79.7	
137 Butyl benzyl phthalate	149	12.127	12.139	-0.012	97	649608	80.0	81.5	
140 3,3'-Dichlorobenzidine	252	13.439	13.451	-0.012	73	270812	80.1	54.2	
141 Benzo[a]anthracene	228	13.474	13.486	-0.012	99	1119265	80.1	77.0	
142 Bis(2-ethylhexyl) phthalat	149	13.463	13.480	-0.017	89	837406	80.0	80.4	
143 Chrysene	228	13.568	13.586	-0.018	96	1073039	80.3	79.1	
144 Di-n-octyl phthalate	149	15.333	15.351	-0.018	99	1410686	80.1	76.1	
146 Benzo[b]fluoranthene	252	16.468	16.486	-0.018	94	947727	80.0	76.7	
147 Benzo[k]fluoranthene	252	16.551	16.568	-0.017	98	1042090	80.1	82.1	
148 Benzo[a]pyrene	252	17.450	17.315	0.135	79	945642	80.1	79.6	
151 Indeno[1,2,3-cd]pyrene	276	20.815	20.833	-0.018	96	747595	80.0	72.4	M
152 Dibenz(a,h)anthracene	278	20.897	20.915	-0.018	78	753096	80.2	76.7	
153 Benzo[g,h,i]perylene	276	21.586	21.609	-0.023	90	841612	80.0	78.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MS-IS_00007

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 20-Apr-2015 12:00:37

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17387.D

Injection Date: 17-Apr-2015 20:16:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: LCS 280-272762/2-A

Worklist Smp#: 26

Client ID:

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

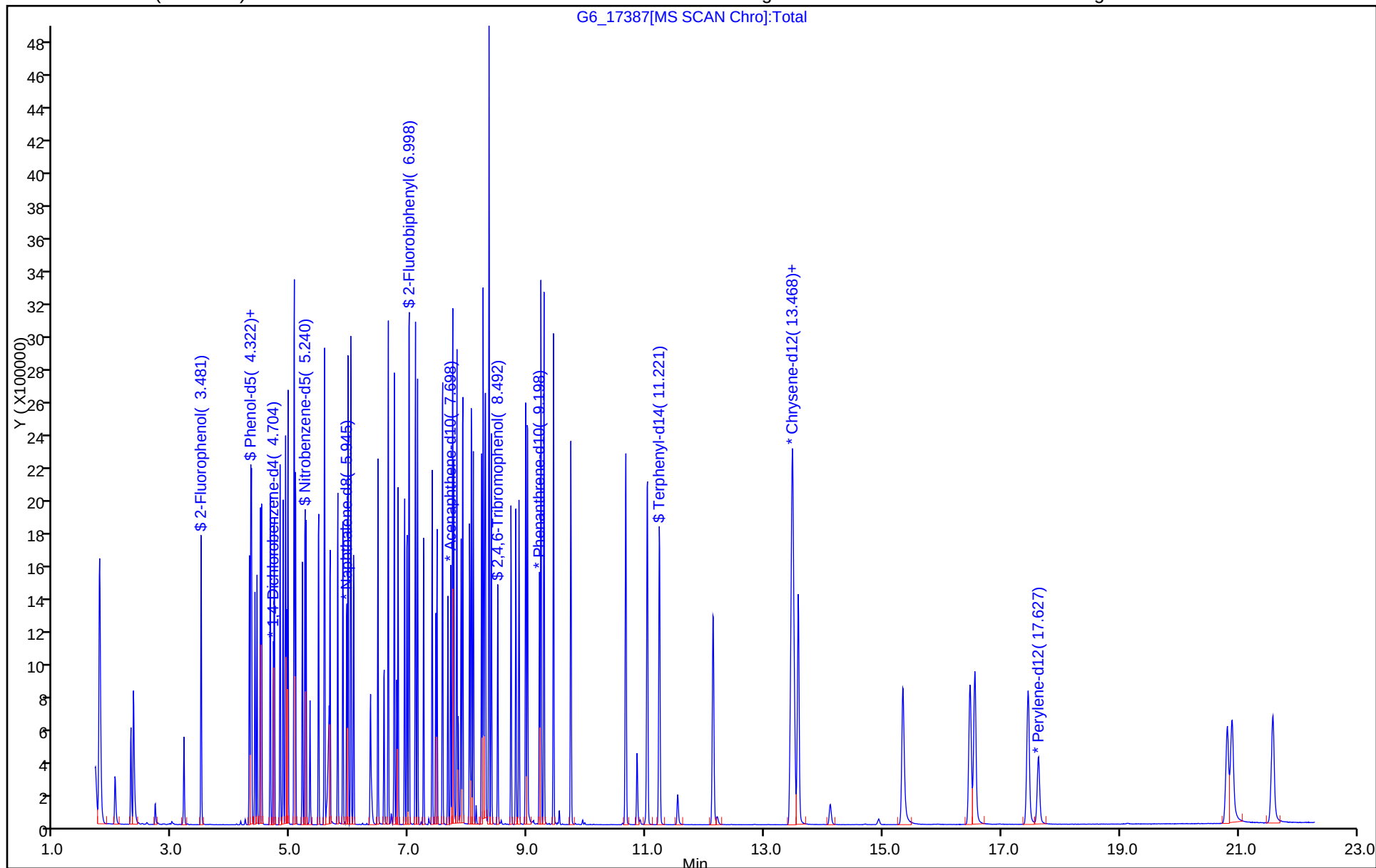
ALS Bottle#: 7

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Client Sample ID: MW23042015 MS Lab Sample ID: 280-67484-5 MS

Matrix: Water Lab File ID: G6_17401.D

Analysis Method: 8270D Date Collected: 04/07/2015 09:40

Extract. Method: 3520C Date Extracted: 04/09/2015 15:30

Sample wt/vol: 998.5 (mL) Date Analyzed: 04/18/2015 02:30

Con. Extract Vol.: 1 (mL) Dilution Factor: 1

Injection Volume: 0.5 (uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 273264 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	68.5		5.0	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	89		48-135
321-60-8	2-Fluorobiphenyl	77		48-135
367-12-4	2-Fluorophenol (Surr)	73		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	74		42-135
4165-62-2	Phenol-d5 (Surr)	75		46-135
1718-51-0	Terphenyl-d14 (Surr)	72		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17401.D
 Lims ID: 280-67484-F-5-B MS
 Client ID: MW23042015
 Sample Type: MS
 Inject. Date: 18-Apr-2015 02:30:30 ALS Bottle#: 21 Worklist Smp#: 39
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: 280-67484-F-5-A MS
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 22-Apr-2015 15:45:14 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: hoeflera

Date: 18-Apr-2015 12:16:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	95	156371	40.0	40.0	
* 2 Naphthalene-d8	136	5.940	5.945	-0.005	100	602498	40.0	40.0	
* 3 Acenaphthene-d10	164	7.698	7.704	-0.006	92	336082	40.0	40.0	
* 4 Phenanthrene-d10	188	9.198	9.204	-0.006	97	568048	40.0	40.0	
* 5 Chrysene-d12	240	13.504	13.515	-0.011	97	518151	40.0	40.0	
* 6 Perylene-d12	264	17.633	17.639	-0.006	96	435897	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.487	3.481	0.006	91	417886	100.0	73.5	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	534965	100.0	75.1	
\$ 9 Nitrobenzene-d5	82	5.234	5.239	-0.005	91	455051	100.0	73.7	
\$ 10 2-Fluorobiphenyl	172	6.992	6.998	-0.006	100	869972	100.0	76.6	
\$ 11 2,4,6-Tribromophenol	330	8.492	8.498	-0.006	86	112214	100.0	88.8	
\$ 12 Terphenyl-d14	244	11.222	11.233	-0.011	98	745091	100.0	72.4	
13 1,4-Dioxane	88	2.034	2.034	0.000	97	134881	80.2	56.2	
14 N-Nitrosodimethylamine	74	2.299	2.299	0.001	91	234117	80.0	64.2	
15 Pyridine	79	2.346	2.346	0.000	93	357014	80.0	57.5	
16 2-Picoline	93		2.987					ND	
17 N-Nitrosomethylethylamine	88		3.075					ND	
18 Methyl methanesulfonate	80		3.345					ND	
19 N-Nitrosodiethylamine	102		3.698					ND	
20 Pentachlorophenol_T	266		3.798					ND	
21 Ethyl methanesulfonate	79		3.963					ND	
22 Pentachloroethane	117		4.440					ND	
23 Phenol	94	4.334	4.340	-0.006	99	443792	80.3	62.1	
24 Aniline	93	4.393	4.398	-0.005	98	436519	80.1	50.0	
25 Bis(2-chloroethyl)ether	93	4.428	4.428	0.000	95	347081	80.1	61.9	
26 2-Chlorophenol	128	4.504	4.504	0.000	97	360926	80.0	61.9	
27 1,3-Dichlorobenzene	146	4.651	4.651	0.000	96	335207	80.1	56.6	
28 1,4-Dichlorobenzene	146	4.722	4.722	0.000	94	343828	80.2	57.5	
29 Benzyl alcohol	108	4.816	4.822	-0.006	93	242963	80.0	66.1	
30 1,2-Dichlorobenzene	146	4.869	4.869	0.000	96	334067	80.3	58.1	
31 2-Methylphenol	108	4.910	4.910	0.000	93	335605	80.1	63.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
32 2,2'-oxybis[1-chloropropan	45	4.928	4.928	0.000	93	438100	80.0	53.0	
33 N-Nitrosopyrrolidine	100		5.069					ND	
34 N-Nitrosomorpholine	116		5.098					ND	
35 Benzidine_T	184		4.975					ND	
36 2-Toluidine	106		5.116					ND	
37 Benzaldehyde	106		5.015				ND	ND	
38 3 & 4 Methylphenol	108	5.051	5.057	-0.006	93	356196	80.0	64.9	
39 3-Methylphenol	108	5.051	5.057	-0.006	93	356196	80.0	64.9	
40 4-Methylphenol	108	5.051	5.057	-0.006	93	356196	80.0	64.9	
41 N-Nitrosodi-n-propylamine	70	5.057	5.063	-0.006	84	245101	80.2	61.5	
42 Acetophenone	105	5.075	5.081	-0.006	97	487500	80.1	63.2	
43 Hexachloroethane	117	5.193	5.192	0.000	92	145206	80.2	56.6	
44 Nitrobenzene	77	5.257	5.257	0.000	89	386467	80.0	64.9	
45 N-Nitrosopiperidine	114		5.404					ND	
46 Isophorone	82	5.469	5.469	0.000	99	667495	80.0	66.0	
47 o,o',o''-Triethylphosphoro	198		5.616					ND	
48 2-Nitrophenol	139	5.563	5.563	0.000	93	191497	80.0	64.6	
49 2,4-Dimethylphenol	107	5.569	5.575	-0.006	93	342721	80.1	63.1	
50 Bis(2-chloroethoxy)methane	93	5.663	5.663	0.000	100	421315	80.2	63.4	
51 alpha,alpha-Dimethyl phene	58		5.810					ND	
52 Benzoic acid	105	5.645	5.687	-0.042	88	277394	80.1	65.0	
53 2,4-Dichlorophenol	162	5.792	5.792	0.000	94	300152	80.0	67.4	
54 1,2,4-Trichlorobenzene	180	5.875	5.881	-0.006	93	268043	80.0	59.3	
55 2,6-Dichlorophenol	162	6.016	6.016	0.000	94	286250	80.0	68.3	
56 Hexachloropropene	213		6.039					ND	
57 Naphthalene	128	5.963	5.969	-0.006	97	967146	80.1	60.3	
58 4-Chloroaniline	127	6.010	6.010	0.000	82	380280	80.0	52.5	
59 Hexachlorobutadiene	225	6.057	6.063	-0.006	95	136697	80.0	55.5	
60 N-Nitrosodi-n-butylamine	84		6.304					ND	
61 p-Phenylene diamine	108		6.357					ND	
62 Caprolactam	55	6.345	6.363	-0.018	79	194842	80.0	68.4	
63 Safrole, Total	162		6.534					ND	
64 4-Chloro-3-methylphenol	107	6.469	6.475	-0.006	96	330653	80.1	69.4	
65 2-Methylnaphthalene	142	6.645	6.645	0.000	92	659524	79.9	64.1	
66 Isosafrole Peak 1	162		6.828					ND	
67 1-Methylnaphthalene	142	6.745	6.751	-0.006	92	588567	80.0	60.8	
68 Hexachlorocyclopentadiene	237	6.787	6.792	-0.005	94	58663	80.1	22.2	
69 1,2,4,5-Tetrachlorobenzene	216	6.810	6.816	-0.006	98	266332	80.0	62.1	
70 2,4,6-Trichlorophenol	196	6.922	6.922	0.000	92	210640	80.1	69.8	
71 Isosafrole Peak 2	104		7.057					ND	
72 2,4,5-Trichlorophenol	196	6.963	6.963	0.000	93	228255	80.0	71.0	
73 1-Chloronaphthalene	162		7.163					ND	
74 1,1'-Biphenyl	154	7.104	7.104	0.000	95	809192	80.2	64.0	
75 2-Chloronaphthalene	162	7.139	7.145	-0.006	96	613753	80.0	64.4	
76 1,4-Naphthoquinone	158		7.316					ND	
77 2-Nitroaniline	65	7.239	7.245	-0.006	83	222463	80.2	63.5	
78 1,4-Dinitrobenzene	168		7.375					ND	
79 Dimethyl phthalate	163	7.386	7.392	-0.006	98	753522	80.0	67.3	
80 1,3-Dinitrobenzene	168	7.445	7.451	-0.006	84	145557	80.3	73.3	
81 2,6-Dinitrotoluene	165	7.469	7.475	-0.006	95	186221	80.1	72.0	
82 Acenaphthylene	152	7.563	7.563	0.000	94	1053332	80.0	68.0	
83 3-Nitroaniline	138	7.651	7.657	-0.006	95	164639	80.1	49.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
84 Acenaphthene	153	7.734	7.733	0.001	94	654752	80.1	65.5	
85 Pentachlorobenzene	250		7.857					ND	
86 2,4-Dinitrophenol	184	7.751	7.757	-0.006	83	261456	160.3	140.2	
87 4-Nitrophenol	109	7.804	7.810	-0.006	93	262169	160.0	145.4	
88 1-Naphthylamine	143		7.986					ND	
89 2,4-Dinitrotoluene	165	7.875	7.880	-0.005	91	254551	80.1	75.1	
90 Dibenzofuran	168	7.904	7.904	0.000	91	953581	80.1	67.7	
91 2-Naphthylamine	143		8.063					ND	
92 2,3,4,6-Tetrachlorophenol	232	8.016	8.022	-0.006	76	190797	80.1	73.2	
93 Thionazin	97		8.163					ND	
94 Diethyl phthalate	149	8.081	8.086	-0.005	98	819697	80.0	72.0	
95 N-Nitro-o-toluidine	152		8.257					ND	
96 4-Chlorophenyl phenyl ethe	204	8.222	8.228	-0.006	94	337763	80.0	66.3	
97 Diphenylamine	169	8.345	8.345	0.000	95	1116778	137.1	116.2	
98 Fluorene	166	8.245	8.251	-0.006	93	786995	80.0	68.7	
99 4-Nitroaniline	138	8.275	8.280	-0.005	78	157002	80.1	48.0	
100 4,6-Dinitro-2-methylphenol	198	8.286	8.292	-0.006	84	300208	160.1	149.4	
101 Sulfotepp	97		8.445					ND	
102 N-Nitrosodiphenylamine	169	8.345	8.351	-0.006	61	1116778	160.0	132.7	
103 Azobenzene	77	8.386	8.386	0.000	99	799541	80.1	63.5	
104 1,2-Diphenylhydrazine	77		8.386					ND	
105 Diallate Peak 1	86		8.604					ND	
106 1,3,5-Trinitrobenzene	213		8.610					ND	
107 Phorate	121		8.616					ND	
108 Phenacetin	108		8.639					ND	
109 Diallate Peak 2	86		8.698					ND	
110 Dimethoate	87		8.810					ND	
111 4-Bromophenyl phenyl ether	248	8.716	8.722	-0.006	68	182749	80.0	68.7	
112 Hexachlorobenzene	284	8.798	8.804	-0.006	88	185022	80.1	66.9	
113 4-Aminobiphenyl	169		8.992					ND	
114 Pentachloronitrobenzene	237		9.004					ND	
115 Pronamide	173		9.004					ND	
116 Pentachlorophenol	266	8.998	9.004	-0.006	88	246951	160.0	135.9	
117 Disulfoton	88		9.139					ND	
118 Dinoseb	211		9.145					ND	
119 Phenanthrene	178	9.222	9.227	-0.005	98	1115193	80.0	70.8	
120 Anthracene	178	9.275	9.280	-0.005	98	1095056	80.0	67.8	
121 Methyl parathion	109		9.539					ND	
122 Carbazole	167	9.433	9.439	-0.006	82	1177078	80.0	71.5	
123 Di-n-butyl phthalate	149	9.728	9.733	-0.005	100	1349627	80.0	69.7	
124 Ethyl Parathion	109		9.969					ND	
125 4-Nitroquinoline-1-oxide	190		10.092					ND	
126 Methapyrilene	97		10.116					ND	
127 Isodrin	193		10.421					ND	
128 Fluoranthene	202	10.657	10.663	-0.006	98	1169360	80.0	67.8	
129 Benzidine	184		10.466				ND	ND	
130 Aramite Peak 1	185		11.127					ND	
131 Pyrene	202	11.022	11.027	-0.005	97	1220567	80.0	70.5	
132 Aramite Peak 2	185		11.257					ND	
133 p-Dimethylamino azobenzene	120		11.474					ND	
134 Chlorobenzilate	251		11.527					ND	
135 3,3'-Dimethylbenzidine	212		12.163					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
136 Famphur	218		12.039					ND	
137 Butyl benzyl phthalate	149	12.127	12.139	-0.012	97	590801	80.0	72.3	
138 2-Acetylaminofluorene	181		12.721					ND	
139 4,4'-Methylene bis(2-chlor	231		13.439					ND	
140 3,3'-Dichlorobenzidine	252	13.439	13.451	-0.012	49	38628	80.1	7.54	
141 Benzo[a]anthracene	228	13.474	13.486	-0.012	99	988962	80.1	66.4	
142 Bis(2-ethylhexyl) phthalat	149	13.468	13.480	-0.012	85	755496	80.0	70.8	
143 Chrysene	228	13.568	13.586	-0.018	96	950561	80.3	68.4	
144 Di-n-octyl phthalate	149	15.339	15.351	-0.012	99	1277889	80.1	67.5	
145 7,12-Dimethylbenz(a)anthra	256		16.462					ND	
146 Benzo[b]fluoranthene	252	16.468	16.486	-0.018	96	833643	80.0	65.5	
147 Benzo[k]fluoranthene	252	16.551	16.568	-0.017	98	908953	80.1	69.5	
148 Benzo[a]pyrene	252	17.451	17.474	-0.023	79	784135	80.1	64.1	
149 3-Methylcholanthrene	268		18.521					ND	
150 Dibenz[a,j]acridine	279		20.321					ND	
151 Indeno[1,2,3-cd]pyrene	276	20.815	20.833	-0.018	96	624981	80.0	59.1	M
152 Dibenz(a,h)anthracene	278	20.897	20.915	-0.018	90	653399	80.2	64.6	
153 Benzo[g,h,i]perylene	276	21.586	21.609	-0.023	90	688177	80.0	62.5	
S 160 Aramite, Total	185		15.047					ND	
S 161 Isosafrole	162		15.047					ND	
S 162 Diallate	86		15.047					ND	
154 Total Cresols	1		0.000					ND	
155 Tetraethyl Pyrophosphate (	1		0.000					ND	
157 4,4'-DDE	246		5.098					ND	
158 4,4'-DDD	235		5.410					ND	
159 4,4'-DDT	235		5.645					ND	
S 163 Methyl Phenols, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MS-IS_00007

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17401.D

Injection Date: 18-Apr-2015 02:30:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: 280-67484-F-5-B MS

Worklist Smp#: 39

Client ID: MW23042015

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

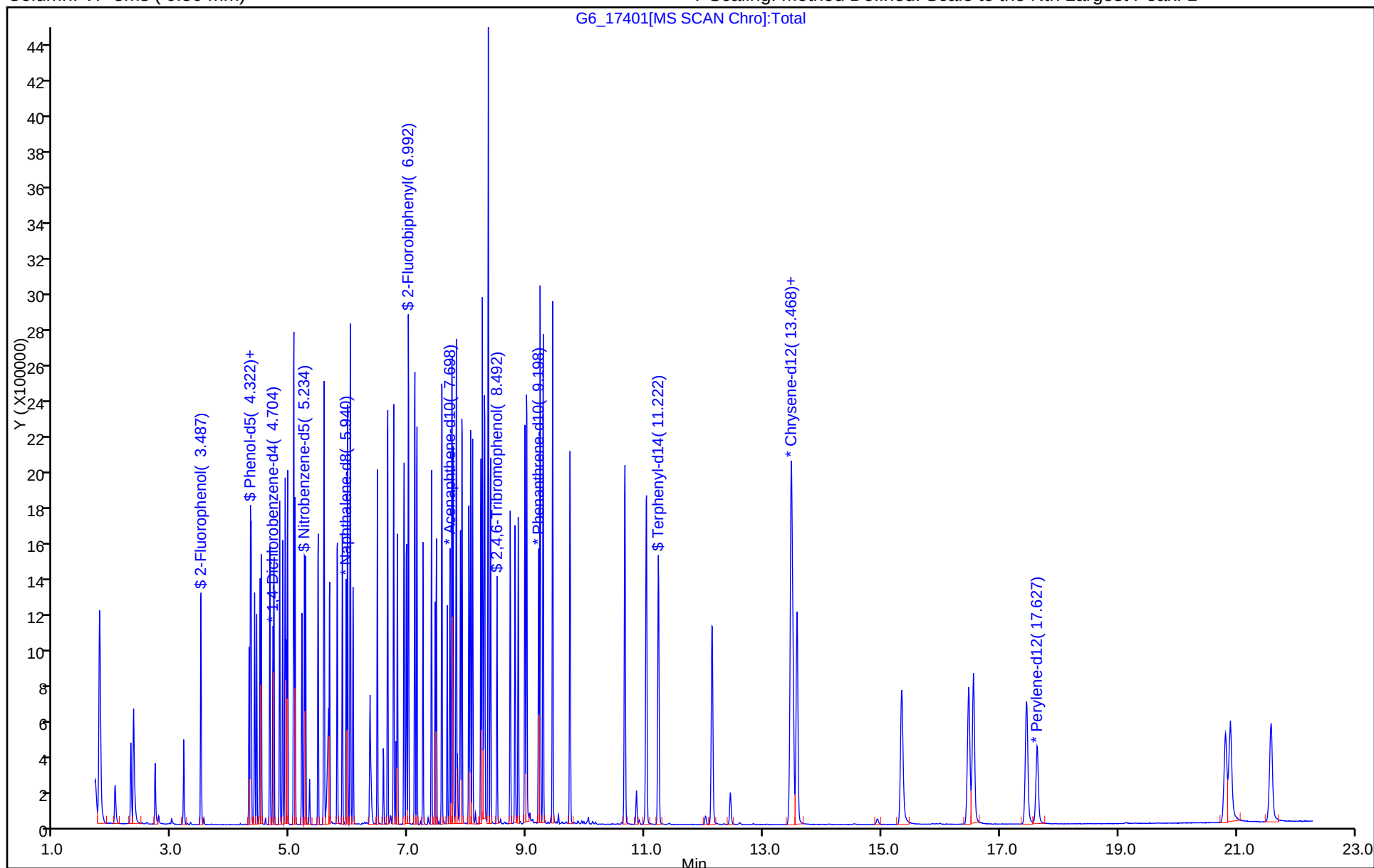
ALS Bottle#: 21

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Client Sample ID: MW23042015 MSD Lab Sample ID: 280-67484-5 MSD

Matrix: Water Lab File ID: G6_17402.D

Analysis Method: 8270D Date Collected: 04/07/2015 09:40

Extract. Method: 3520C Date Extracted: 04/09/2015 15:30

Sample wt/vol: 965.4 (mL) Date Analyzed: 04/18/2015 02:57

Con. Extract Vol.: 1 (mL) Dilution Factor: 1

Injection Volume: 0.5 (uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 273264 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	67.7		5.2	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	86		48-135
321-60-8	2-Fluorobiphenyl	81		48-135
367-12-4	2-Fluorophenol (Surr)	84		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	82		42-135
4165-62-2	Phenol-d5 (Surr)	82		46-135
1718-51-0	Terphenyl-d14 (Surr)	62		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17402.D
 Lims ID: 280-67484-J-5-B MSD
 Client ID: MW23042015
 Sample Type: MSD
 Inject. Date: 18-Apr-2015 02:57:30 ALS Bottle#: 22 Worklist Smp#: 40
 Injection Vol: 0.5 ul Dil. Factor: 1.0000
 Sample Info: 280-67484-J-5-A MSD
 Operator ID: HOEFLERA Instrument ID: SMS_G6
 Method: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\SMS_G6_8270D.m
 Limit Group: MSSV - 8270D
 Method Label: 8270D
 Last Update: 22-Apr-2015 15:45:14 Calib Date: 26-Feb-2015 10:02:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Denchrom\ChromData\SMS_G6\20150416-33972.b\G6_16673.D
 Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
 Process Host: XAWRK003

First Level Reviewer: hoeflera

Date: 18-Apr-2015 12:16:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	4.704	4.704	0.000	95	165571	40.0	40.0	
* 2 Naphthalene-d8	136	5.940	5.945	-0.005	100	640419	40.0	40.0	
* 3 Acenaphthene-d10	164	7.698	7.704	-0.006	92	354063	40.0	40.0	
* 4 Phenanthrene-d10	188	9.198	9.204	-0.006	97	599957	40.0	40.0	
* 5 Chrysene-d12	240	13.504	13.515	-0.011	97	550615	40.0	40.0	
* 6 Perylene-d12	264	17.627	17.639	-0.012	95	460509	40.0	40.0	
\$ 7 2-Fluorophenol	112	3.487	3.481	0.006	91	506531	100.0	84.1	
\$ 8 Phenol-d5	99	4.322	4.322	0.000	99	622100	100.0	82.4	
\$ 9 Nitrobenzene-d5	82	5.240	5.239	0.001	89	541520	100.0	82.5	
\$ 10 2-Fluorobiphenyl	172	6.992	6.998	-0.006	99	967232	100.0	80.8	
\$ 11 2,4,6-Tribromophenol	330	8.492	8.498	-0.006	86	115014	100.0	86.4	
\$ 12 Terphenyl-d14	244	11.222	11.233	-0.011	98	682980	100.0	62.4	
13 1,4-Dioxane	88	2.028	2.034	-0.006	97	167579	80.2	66.0	
14 N-Nitrosodimethylamine	74	2.299	2.299	0.001	92	277714	80.0	72.0	
15 Pyridine	79	2.340	2.346	-0.006	93	420954	80.0	64.0	
16 2-Picoline	93		2.987					ND	
17 N-Nitrosomethylethylamine	88		3.075					ND	
18 Methyl methanesulfonate	80		3.345					ND	
19 N-Nitrosodiethylamine	102		3.698					ND	
20 Pentachlorophenol_T	266		3.798					ND	
21 Ethyl methanesulfonate	79		3.963					ND	
22 Pentachloroethane	117		4.440					ND	
23 Phenol	94	4.334	4.340	-0.006	99	521725	80.3	68.9	
24 Aniline	93	4.393	4.398	-0.005	98	406944	80.1	44.0	
25 Bis(2-chloroethyl)ether	93	4.428	4.428	0.000	95	422578	80.1	71.1	
26 2-Chlorophenol	128	4.504	4.504	0.000	96	434495	80.0	70.3	
27 1,3-Dichlorobenzene	146	4.651	4.651	0.000	97	406432	80.1	64.8	
28 1,4-Dichlorobenzene	146	4.722	4.722	0.000	94	415541	80.2	65.6	
29 Benzyl alcohol	108	4.816	4.822	-0.006	92	284853	80.0	73.2	
30 1,2-Dichlorobenzene	146	4.869	4.869	0.000	96	404334	80.3	66.4	
31 2-Methylphenol	108	4.910	4.910	0.000	94	393571	80.1	70.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
32 2,2'-oxybis[1-chloropropan	45	4.928	4.928	0.000	94	535434	80.0	61.2	
33 N-Nitrosopyrrolidine	100		5.069					ND	
34 N-Nitrosomorpholine	116		5.098					ND	
35 Benzidine_T	184		4.975					ND	
36 2-Toluidine	106		5.116					ND	
37 Benzaldehyde	106		5.015				ND	ND	
38 3 & 4 Methylphenol	108	5.057	5.057	0.000	88	406449	80.0	69.9	
39 3-Methylphenol	108	5.057	5.057	0.000	88	406449	80.0	69.9	
40 4-Methylphenol	108	5.057	5.057	0.000	91	406449	80.0	69.9	
41 N-Nitrosodi-n-propylamine	70	5.057	5.063	-0.006	84	283502	80.2	67.2	
42 Acetophenone	105	5.075	5.081	-0.006	96	579096	80.1	70.9	
43 Hexachloroethane	117	5.192	5.192	0.000	92	176930	80.2	65.1	
44 Nitrobenzene	77	5.257	5.257	0.000	88	464243	80.0	73.4	
45 N-Nitrosopiperidine	114		5.404					ND	
46 Isophorone	82	5.469	5.469	0.000	99	768650	80.0	71.5	
47 o,o',o''-Triethylphosphoro	198		5.616					ND	
48 2-Nitrophenol	139	5.563	5.563	0.000	93	230716	80.0	73.2	
49 2,4-Dimethylphenol	107	5.569	5.575	-0.006	93	384782	80.1	66.6	
50 Bis(2-chloroethoxy)methane	93	5.663	5.663	0.000	99	496966	80.2	70.4	
51 alpha,alpha-Dimethyl phene	58		5.810					ND	
52 Benzoic acid	105	5.645	5.687	-0.042	88	289409	80.1	63.8	
53 2,4-Dichlorophenol	162	5.792	5.792	0.000	94	343663	80.0	72.6	
54 1,2,4-Trichlorobenzene	180	5.875	5.881	-0.006	92	325240	80.0	67.7	
55 2,6-Dichlorophenol	162	6.016	6.016	0.000	96	333304	80.0	74.8	
56 Hexachloropropene	213		6.039					ND	
57 Naphthalene	128	5.963	5.969	-0.006	97	1168685	80.1	68.6	
58 4-Chloroaniline	127	6.010	6.010	0.000	80	335711	80.0	43.6	
59 Hexachlorobutadiene	225	6.057	6.063	-0.006	96	166239	80.0	63.5	
60 N-Nitrosodi-n-butylamine	84		6.304					ND	
61 p-Phenylene diamine	108		6.357					ND	
62 Caprolactam	55	6.345	6.363	-0.018	77	198131	80.0	65.4	
63 Safrole, Total	162		6.534					ND	
64 4-Chloro-3-methylphenol	107	6.469	6.475	-0.006	96	356298	80.1	70.3	
65 2-Methylnaphthalene	142	6.645	6.645	0.000	91	767863	79.9	70.2	
66 Isosafrole Peak 1	162		6.828					ND	
67 1-Methylnaphthalene	142	6.745	6.751	-0.006	92	676965	80.0	65.8	
68 Hexachlorocyclopentadiene	237	6.787	6.792	-0.006	88	61356	80.1	22.1	
69 1,2,4,5-Tetrachlorobenzene	216	6.810	6.816	-0.006	96	311811	80.0	68.4	
70 2,4,6-Trichlorophenol	196	6.922	6.922	0.000	92	226421	80.1	71.2	
71 Isosafrole Peak 2	104		7.057					ND	
72 2,4,5-Trichlorophenol	196	6.963	6.963	0.000	93	240208	80.0	70.9	
73 1-Chloronaphthalene	162		7.163					ND	
74 1,1'-Biphenyl	154	7.104	7.104	0.000	94	917648	80.2	68.9	
75 2-Chloronaphthalene	162	7.139	7.145	-0.006	97	692773	80.0	68.9	
76 1,4-Naphthoquinone	158		7.316					ND	
77 2-Nitroaniline	65	7.239	7.245	-0.006	85	233573	80.2	63.3	
78 1,4-Dinitrobenzene	168		7.375					ND	
79 Dimethyl phthalate	163	7.386	7.392	-0.006	98	785107	80.0	66.6	
80 1,3-Dinitrobenzene	168	7.445	7.451	-0.006	84	155791	80.3	74.5	
81 2,6-Dinitrotoluene	165	7.469	7.475	-0.006	95	196950	80.1	72.3	
82 Acenaphthylene	152	7.557	7.563	-0.006	95	1146666	80.0	70.3	
83 3-Nitroaniline	138	7.651	7.657	-0.006	95	145170	80.1	41.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
84 Acenaphthene	153	7.728	7.733	-0.005	94	716572	80.1	68.0	
85 Pentachlorobenzene	250		7.857					ND	
86 2,4-Dinitrophenol	184	7.751	7.757	-0.006	83	281327	160.3	143.1	
87 4-Nitrophenol	109	7.804	7.810	-0.006	93	266276	160.0	140.2	
88 1-Naphthylamine	143		7.986					ND	
89 2,4-Dinitrotoluene	165	7.875	7.880	-0.005	91	262393	80.1	73.5	
90 Dibenzofuran	168	7.898	7.904	-0.006	91	1032262	80.1	69.6	
91 2-Naphthylamine	143		8.063					ND	
92 2,3,4,6-Tetrachlorophenol	232	8.016	8.022	-0.006	76	194872	80.1	71.0	
93 Thionazin	97		8.163					ND	
94 Diethyl phthalate	149	8.081	8.086	-0.005	98	842834	80.0	70.2	
95 N-Nitro-o-toluidine	152		8.257					ND	
96 4-Chlorophenyl phenyl ethe	204	8.222	8.228	-0.006	93	362128	80.0	67.5	
97 Diphenylamine	169	8.345	8.345	0.000	95	1159988	137.1	114.6	
98 Fluorene	166	8.245	8.251	-0.006	94	851105	80.0	70.5	
99 4-Nitroaniline	138	8.269	8.280	-0.011	82	163263	80.1	47.4	
100 4,6-Dinitro-2-methylphenol	198	8.286	8.292	-0.006	84	310310	160.1	146.2	
101 Sulfotepp	97		8.445					ND	
102 N-Nitrosodiphenylamine	169	8.345	8.351	-0.006	62	1159988	160.0	130.5	
103 Azobenzene	77	8.386	8.386	0.000	99	845616	80.1	63.8	
104 1,2-Diphenylhydrazine	77		8.386					ND	
105 Diallate Peak 1	86		8.604					ND	
106 1,3,5-Trinitrobenzene	213		8.610					ND	
107 Phorate	121		8.616					ND	
108 Phenacetin	108		8.639					ND	
109 Diallate Peak 2	86		8.698					ND	
110 Dimethoate	87		8.810					ND	
111 4-Bromophenyl phenyl ether	248	8.716	8.722	-0.006	68	191245	80.0	68.0	
112 Hexachlorobenzene	284	8.798	8.804	-0.006	88	189605	80.1	64.9	
113 4-Aminobiphenyl	169		8.992					ND	
114 Pentachloronitrobenzene	237		9.004					ND	
115 Pronamide	173		9.004					ND	
116 Pentachlorophenol	266	8.998	9.004	-0.006	90	251982	160.0	131.3	
117 Disulfoton	88		9.139					ND	
118 Dinoseb	211		9.145					ND	
119 Phenanthrene	178	9.222	9.227	-0.005	98	1154063	80.0	69.4	
120 Anthracene	178	9.275	9.280	-0.005	97	1120188	80.0	65.7	
121 Methyl parathion	109		9.539					ND	
122 Carbazole	167	9.433	9.439	-0.006	82	1208542	80.0	69.5	
123 Di-n-butyl phthalate	149	9.727	9.733	-0.006	100	1339215	80.0	65.5	
124 Ethyl Parathion	109		9.969					ND	
125 4-Nitroquinoline-1-oxide	190		10.092					ND	
126 Methapyrilene	97		10.116					ND	
127 Isodrin	193		10.421					ND	
128 Fluoranthene	202	10.657	10.663	-0.006	98	1176126	80.0	64.5	
129 Benzidine	184		10.466				ND	ND	
130 Aramite Peak 1	185		11.127					ND	
131 Pyrene	202	11.016	11.027	-0.011	97	1224557	80.0	66.6	
132 Aramite Peak 2	185		11.257					ND	
133 p-Dimethylamino azobenzene	120		11.474					ND	
134 Chlorobenzilate	251		11.527					ND	
135 3,3'-Dimethylbenzidine	212		12.163					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
136 Famphur	218		12.039					ND	
137 Butyl benzyl phthalate	149	12.133	12.139	-0.006	97	572687	80.0	66.0	
138 2-Acetylaminofluorene	181		12.721					ND	
139 4,4'-Methylene bis(2-chlor	231		13.439					ND	
140 3,3'-Dichlorobenzidine	252	13.439	13.451	-0.012	53	32919	80.1	6.05	
141 Benzo[a]anthracene	228	13.474	13.486	-0.012	99	956596	80.1	60.4	
142 Bis(2-ethylhexyl) phthalat	149	13.463	13.480	-0.017	90	732631	80.0	64.6	
143 Chrysene	228	13.568	13.586	-0.018	96	929936	80.3	62.9	
144 Di-n-octyl phthalate	149	15.339	15.351	-0.012	99	1237444	80.1	61.6	
145 7,12-Dimethylbenz(a)anthra	256		16.462					ND	
146 Benzo[b]fluoranthene	252	16.474	16.486	-0.012	96	819585	80.0	60.9	
147 Benzo[k]fluoranthene	252	16.551	16.568	-0.017	98	887905	80.1	64.3	
148 Benzo[a]pyrene	252	17.451	17.474	-0.023	78	753512	80.1	58.3	
149 3-Methylcholanthrene	268		18.521					ND	
150 Dibenz[a,j]acridine	279		20.321					ND	
151 Indeno[1,2,3-cd]pyrene	276	20.815	20.833	-0.018	96	608739	80.0	54.2	M
152 Dibenz(a,h)anthracene	278	20.897	20.915	-0.018	84	628942	80.2	58.8	
153 Benzo[g,h,i]perylene	276	21.586	21.609	-0.023	89	678033	80.0	58.3	
S 160 Aramite, Total	185		15.047					ND	
S 161 Isosafrole	162		15.047					ND	
S 162 Diallate	86		15.047					ND	
154 Total Cresols	1		0.000					ND	
155 Tetraethyl Pyrophosphate (	1		0.000					ND	
157 4,4'-DDE	246		5.098					ND	
158 4,4'-DDD	235		5.410					ND	
159 4,4'-DDT	235		5.645					ND	
S 163 Methyl Phenols, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MS-IS_00007

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Denver

Data File: \\Denchrom\ChromData\SMS_G6\20150417-34049.b\G6_17402.D

Injection Date: 18-Apr-2015 02:57:30

Instrument ID: SMS_G6

Operator ID: HOEFLERA

Lims ID: 280-67484-J-5-B MSD

Worklist Smp#: 40

Client ID: MW23042015

Injection Vol: 0.5 ul

Dil. Factor: 1.0000

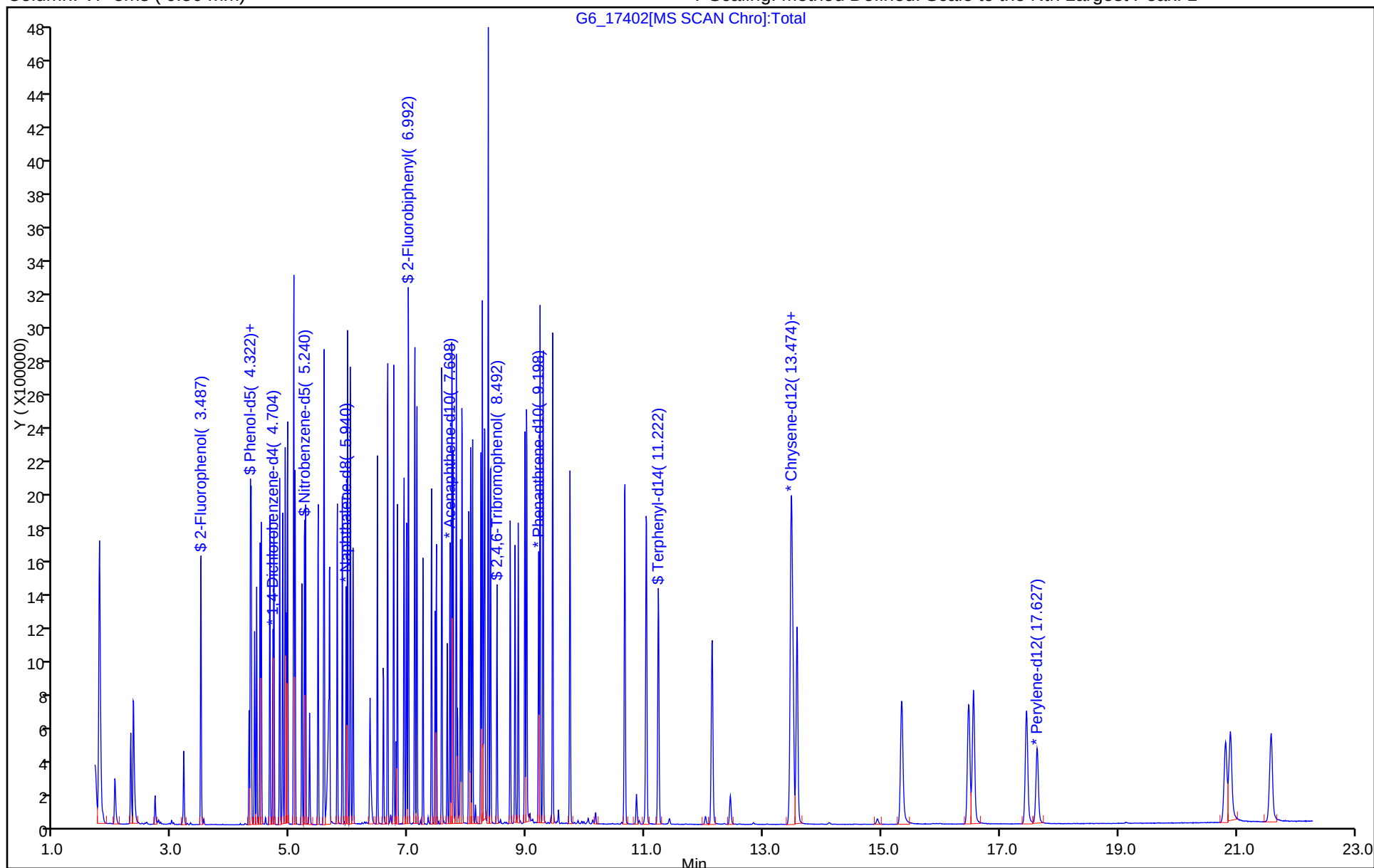
ALS Bottle#: 22

Method: SMS_G6_8270D

Limit Group: MSSV - 8270D

Column: VF-5ms (0.50 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Instrument ID: SMS_G6 Start Date: 02/25/2015 11:44Analysis Batch Number: 272059 End Date: 02/25/2015 16:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-272059/2		02/25/2015 11:44	1	G6_16636.D	Vf-5MS (30.25) 0.25 (mm)
ICIS 280-272059/3		02/25/2015 11:53	1	G6_16637.D	Vf-5MS (30.25) 0.25 (mm)
STD004 280-272059/4 IC		02/25/2015 12:19	1	G6_16638.D	Vf-5MS (30.25) 0.25 (mm)
STD010 280-272059/5 IC		02/25/2015 12:46	1	G6_16639.D	Vf-5MS (30.25) 0.25 (mm)
STD020 280-272059/6 IC		02/25/2015 13:12	1	G6_16640.D	Vf-5MS (30.25) 0.25 (mm)
STD050 280-272059/7 IC		02/25/2015 13:39	1	G6_16641.D	Vf-5MS (30.25) 0.25 (mm)
STD120 280-272059/8 IC		02/25/2015 14:06	1	G6_16642.D	Vf-5MS (30.25) 0.25 (mm)
STD160 280-272059/9 IC		02/25/2015 14:32	1	G6_16643.D	Vf-5MS (30.25) 0.25 (mm)
STD200 280-272059/10 IC		02/25/2015 14:59	1	G6_16644.D	Vf-5MS (30.25) 0.25 (mm)
ICV 280-272059/11		02/25/2015 15:26	1	G6_16645.D	Vf-5MS (30.25) 0.25 (mm)
ICV 280-272059/12		02/25/2015 15:52	1	G6_16646.D	Vf-5MS (30.25) 0.25 (mm)
ICV 280-272059/13		02/25/2015 16:19	1	G6_16647.D	Vf-5MS (30.25) 0.25 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Instrument ID: SMS_G6 Start Date: 04/17/2015 13:57Analysis Batch Number: 273264 End Date: 04/18/2015 05:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/17/2015 13:57	1		Vf-5MS (30.25) 0.25 (mm)
DFTTP 280-273264/2		04/17/2015 18:00	1	G6_17381.D	Vf-5MS (30.25) 0.25 (mm)
CCV 280-273264/3		04/17/2015 18:13	1	G6_17382.D	Vf-5MS (30.25) 0.25 (mm)
CCV 280-273264/4		04/17/2015 19:02	1	G6_17384.D	Vf-5MS (30.25) 0.25 (mm)
MB 280-272762/1-A		04/17/2015 19:49	1	G6_17386.D	Vf-5MS (30.25) 0.25 (mm)
LCS 280-272762/2-A		04/17/2015 20:16	1	G6_17387.D	Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 20:43	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 21:10	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 21:36	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 22:03	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 22:30	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 22:57	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 23:23	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/17/2015 23:50	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 00:17	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 00:43	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 01:10	1		Vf-5MS (30.25) 0.25 (mm)
280-67484-5	MW23042015	04/18/2015 02:03	1	G6_17400.D	Vf-5MS (30.25) 0.25 (mm)
280-67484-5 MS	MW23042015 MS	04/18/2015 02:30	1	G6_17401.D	Vf-5MS (30.25) 0.25 (mm)
280-67484-5 MSD	MW23042015 MSD	04/18/2015 02:57	1	G6_17402.D	Vf-5MS (30.25) 0.25 (mm)
280-67484-6	DMW23042015	04/18/2015 03:24	1	G6_17403.D	Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 03:50	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 04:17	5		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 04:44	1		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 05:10	5		Vf-5MS (30.25) 0.25 (mm)
ZZZZZ		04/18/2015 05:37	5		Vf-5MS (30.25) 0.25 (mm)

GC/MS SVOAC Continuing Calibration Review Checklist
Denver

TestAmerica

Instrument ID and Date: G6 HSL/AP9 8270D 041715 Work List 34049

Check Method Used: Analysis ☐ 625 ☒ 8270 ☐ 8270 SIM ☐ Other SV

Continuing Calibration	Review Items	Level 1		Level 2	Comments
		Yes	No		
1. DFTPP meets criteria?		X			
2. ICAL date and instrument ID verified?		X			
3. Do SPCC RRFs and CCC %Ds meet method criteria?		X			
4. Does %D meet criteria for non-CCC compounds?		X			Circle one: DOD / non-DOD
5. Isomeric pairs checked for correct peak assignment? Aniline and bis(2-chloroethyl) ether 1,3-Dichlorobenzene, 1,4-dichlorobenzene and 1,2-dichlorobenzene 2-Methylphenol, 3/4-Methylphenol 2,4-Dimethylphenol and 3,5-dimethylphenol 2,4,6-Trichlorophenol and 2,4,5-Trichlorophenol Phenanthrene and anthracene Fluoranthene and pyrene Benzo(a)anthracene and chrysene Benzo(e)pyrene and benzo(a)pyrene Benzo(b) and (k)fluoranthene		X			
6. Standards traceability properly documented?		X			
7. Manual integrations documented and checked?		X			
8. Do the Internal Standards meet criteria for %D against ICAL?		X			

1st Level Reviewer: Allyl Houlton Date: 041815

2nd Level Reviewer: [Signature] Date: 041815

Injection Log

Directory: C:\HPCHEM1\DATA\G6\041715.B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	G6_17372.D	1.	RINSE		17 Apr 2015 13:57
2	1	G6_17373.D	1.	DFTPP		17 Apr 2015 14:23
3	2	G6_17374.D	1.	CCV HSL		17 Apr 2015 14:32
4	3	G6_17375.D	1.	CCV AFC		17 Apr 2015 14:59
5	4	G6_17376.D	1.	CCV AP9		17 Apr 2015 15:21
6	5	G6_17377.D	1.	CCV BZHD		17 Apr 2015 15:47
7	6	G6_17378.D	1.	MB 280-271917_1-A		17 Apr 2015 16:09
8	7	G6_17379.D	1.	LCS 280-271917_2-A		17 Apr 2015 16:36
9	8	G6_17380.D	1.	MB 280-272505_1-A		17 Apr 2015 17:02
10	1	G6_17381.D	1.	DFTPP		17 Apr 2015 18:00
11	2	G6_17382.D	1.	CCV HSL		17 Apr 2015 18:13
12	3	G6_17383.D	1.	CCV AFC		17 Apr 2015 18:40
13	4	G6_17384.D	1.	CCV AP9		17 Apr 2015 19:02
14	5	G6_17385.D	1.	CCV BZHD		17 Apr 2015 19:27
15	6	G6_17386.D	1.	MB 280-271917_1-A		17 Apr 2015 19:49
16	7	G6_17387.D	1.	LCS 280-271917_2-A		17 Apr 2015 20:16
17	8	G6_17388.D	1.	MB 280-272505_1-A		17 Apr 2015 20:43
18	9	G6_17389.D	1.	LCS 280-272505_2-A		17 Apr 2015 21:10
19	10	G6_17390.D	1.	280-67438-C-1-A		17 Apr 2015 21:36
20	11	G6_17391.D	1.	280-67438-D-2-A		17 Apr 2015 22:03
21	12	G6_17392.D	1.	280-67438-C-3-A		17 Apr 2015 22:30
22	13	G6_17393.D	1.	280-67438-A-4-A		17 Apr 2015 22:57
23	14	G6_17394.D	1.	280-67438-B-7-A		17 Apr 2015 23:23
24	15	G6_17395.D	1.	280-67438-C-8-A		17 Apr 2015 23:50
25	16	G6_17396.D	1.	280-67438-B-9-A		18 Apr 2015 00:17
26	17	G6_17397.D	1.	280-67438-D-9-A MS		18 Apr 2015 00:43
27	18	G6_17398.D	1.	280-67438-I-9-A MSD		18 Apr 2015 01:10
28	19	G6_17399.D	1.	280-67508-D-8-A		18 Apr 2015 01:37
29	20	G6_17400.D	1.	280-67484-D-5-A		18 Apr 2015 02:03
30	21	G6_17401.D	1.	280-67484-F-5-A MS		18 Apr 2015 02:30
31	22	G6_17402.D	1.	280-67484-J-5-A MSD		18 Apr 2015 02:57
32	23	G6_17403.D	1.	280-67484-C-6-A		18 Apr 2015 03:24
33	24	G6_17404.D	1.	280-67625-A-2-B		18 Apr 2015 03:50
34	25	G6_17405.D	1.	280-67625-A-3-B 5X		18 Apr 2015 04:17
35	26	G6_17406.D	1.	280-67625-A-4-B		18 Apr 2015 04:44
36	27	G6_17407.D	1.	280-67625-A-5-B 5X		18 Apr 2015 05:10
37	28	G6_17408.D	1.	280-67625-A-6-B 5X		18 Apr 2015 05:37
38	98	G6_17409.D	1.	RINSE		18 Apr 2015 06:04
39	99	G6_17410.D	1.	RINSE		18 Apr 2015 06:30
40	100	G6_17411.D	1.	RINSE		18 Apr 2015 06:57
41		G6_17412.D	1.			

Dilution Solvent Lot #: 87975 Pipette ID: Sv18/Sv23 Method(s) Performed: 8270D/8270.DOD

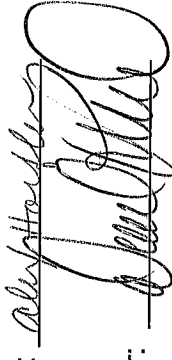
Daily Maintenance: Check box if maintenance was performed. No mark indicates the item was not changed.

Changed Septum ☒ Changed Liner ☒ Changed Seal ☒ Changed Ferrule ☒ Clipped Column ☐

0.676 m

Instrument ID and Date: **G6** **HSL-8270D** **022515**
Calibration Event 21947 Batch 272059Check Method Used: Analysis ☐ 625 ☒ 8270 ☐ Other SV _____

Review Items		Level 1		Level 2	Comments
Initial Calibration		Yes	No	N/A	
1. DFTPP meets criteria?		X			
2. ICAL date and instrument ID verified?		X			
3. Does the Form VI match the data in the CHROM source method?		X			
4. Sufficient number of calibration points used?		X			
5. Reasons for removal of points documented?		X			Some points < RL removed
6. %RSD or correlation coefficient within method limits?		X			
7. If RRF used for ICAL, were all compounds within 20% RSD?		X		X	List all exceptions below (cpd & RSD)
8. Response factors meet criteria?		X			
9. Isomeric pairs checked for correct peak assignment?		X			
10. Data checked for detector saturation?		X			
11. Standards traceability properly documented?		X			
12. Manual integrations documented and checked?		X			
13. 2 nd source ICV recovery 75-125% ($\pm 25\%$ drift) for DoD projects, 65-135% ($\pm 35\%$, or $\pm 55\%$ of expected for poor performers) for non-DoD? Exceptions noted in comment section.		X			

1st Level Reviewer:  Date: 04/10/152nd Level Reviewer:  Date: 04/10/15

Injection Log

Directory: C:\HPCHEM\1\DATA\G6\022515.B

Misc Info

SampleName

Multiplier

Vial FileName

Line

Injected

1	100	G6_16635.D	1.	RINSE	25 Feb 2015 11:18
2	1	G6_16636.D	1.	DFTPP	25 Feb 2015 11:44
3	2	G6_16637.D	1.	ICIS HSL	25 Feb 2015 11:53
4	3	G6_16638.D	1.	STD004 HSL	25 Feb 2015 12:19
5	4	G6_16639.D	1.	STD010 HSL	25 Feb 2015 12:46
6	5	G6_16640.D	1.	STD020 HSL	25 Feb 2015 13:12
7	6	G6_16641.D	1.	STD050 HSL	25 Feb 2015 13:39
8	7	G6_16642.D	1.	STD120 HSL	25 Feb 2015 14:06
9	8	G6_16643.D	1.	STD160 HSL	25 Feb 2015 14:32
10	9	G6_16644.D	1.	STD200 HSL	25 Feb 2015 14:59
11	10	G6_16645.D	1.	ICV HSL 1	25 Feb 2015 15:26
12	11	G6_16646.D	1.	ICV HSL 2	25 Feb 2015 15:52
13	12	G6_16647.D	1.	ICV FAM	25 Feb 2015 16:19
14	13	G6_16648.D	1.	8270Surrogate_00077	25 Feb 2015 16:45
15	14	G6_16649.D	1.	LB3280-265126_1-B	25 Feb 2015 17:07
16	15	G6_16650.D	1.	LC280-265126_2-B	25 Feb 2015 17:30
17	16	G6_16651.D	1.	LB280-265170_1-D	25 Feb 2015 17:52
18	17	G6_16652.D	1.	LC280-265170_2-D	25 Feb 2015 18:14
19	18	G6_16653.D	1.	250-24545-B-2-B	25 Feb 2015 18:36
20	19	G6_16654.D	1.	250-24545-B-2-CMS	25 Feb 2015 18:58
21	20	G6_16655.D	1.	250-24545-B-2-DMSD	25 Feb 2015 19:20
22	21	G6_16656.D	1.	280-65511-D-1-H	25 Feb 2015 19:43
23	22	G6_16657.D	1.	280-65511-D-1-IMS	25 Feb 2015 20:05
24	23	G6_16658.D	1.	280-65511-D-1-JMSD	25 Feb 2015 20:27
25	98	G6_16659.D	1.	RINSE	25 Feb 2015 20:49
26	99	G6_16660.D	1.	RINSE	25 Feb 2015 21:16
27	100	G6_16661.D	1.	RINSE	25 Feb 2015 21:42
28	98	G6_16662.D	1.	RINSE	25 Feb 2015 22:09
29	99	G6_16663.D	1.	RINSE	25 Feb 2015 22:36
30	100	G6_16664.D	1.	RINSE	25 Feb 2015 23:02

Good

Dilution Solvent Lot #: W1A Pipette ID: SU-12/14-23 Method(s) Performed: 8270C

Daily Maintenance: Check box if maintenance was performed. No mark indicates the item was not changed.

Changed Septum ☒ Changed Liner ☒ Changed Seal ☐ Changed Ferrule ☐ Clipped Column ☒

New column 56

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Batch Number: 272762 Batch Start Date: 04/15/15 08:59 Batch Analyst: Knauf, James RBatch Method: 3520C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	GrossWeight	TareWeight	InitialAmount	FinalAmount	FirstAdjustpH
MB 280-272762/1		3520C, 8270D		7			1000 mL	1 mL	1-2
LCS 280-272762/2		3520C, 8270D		7			1000 mL	1 mL	1-2
280-67484-D-5	MW23042015	3520C, 8270D	T	7	1503.7 g	499.8 g	1003.9 mL	1 mL	1-2
280-67484-F-5 MS	MW23042015	3520C, 8270D	T	7	1498.7 g	500.2 g	998.5 mL	1 mL	1-2
280-67484-J-5 MSD	MW23042015	3520C, 8270D	T	7	1465.3 g	499.9 g	965.4 mL	1 mL	1-2
280-67484-C-6	DMW23042015	3520C, 8270D	T	7	1539.4 g	506.1 g	1033.3 mL	1 mL	1-2

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	8270_LCS_Main 00019	8270_LCS_Supp 00102	8270Surrogate 00078	AnalysisComment	
MB 280-272762/1		3520C, 8270D		11-12			1 mL	same as extracts in batch 271917	
LCS 280-272762/2		3520C, 8270D		11-12	1 mL	1 mL	1 mL	same as extracts in batch 271917	
280-67484-D-5	MW23042015	3520C, 8270D	T	11-12			1 mL	same as extracts in batch 271917	
280-67484-F-5 MS	MW23042015	3520C, 8270D	T	11-12	1 mL	1 mL	1 mL	same as extracts in batch 271917	
280-67484-J-5 MSD	MW23042015	3520C, 8270D	T	11-12	1 mL	1 mL	1 mL	same as extracts in batch 271917	
280-67484-C-6	DMW23042015	3520C, 8270D	T	11-12			1 mL	same as extracts in batch 271917	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D

Page 1 of 2

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-67484-2

SDG No.: _____

Batch Number: 272762 Batch Start Date: 04/15/15 08:59 Batch Analyst: Knauf, James RBatch Method: 3520C Batch End Date: _____

Batch Notes	
Acid used for pH adjustment	1:1 H2SO4
Acid used for pH adjust Lot #	1:1 H2SO4_00038
Balance ID	24350888
Base used for pH adjustment	10N_NaOH
Base used for pH adjust Lot #	10N_NaOH_00060
Batch Comment	DV OP 0008/0007 N. Elga Water NaCl: 145475
Person's name who did the concentration	WPS/AME
Time the first extraction ended 24hr	04/10/2015 @ 1330
Time the first extraction started 24 hr	04/09/2015 @ 1540
Na2SO4 Lot Number	145224_00001
Oven, Bath or Block Temperature 1	see above Celsius
Prep Solvent Lot #	MeCl2_Cycl_00208/210
Prep Solvent Name	MeCl2
Prep Solvent Volume Used	300 mL
Person's name who did the prep	Gentry Knaub Pipette: K
Person's name who witnessed reagent drop	Reviewer: JK
Time the second extraction ended 24hr	04/11/2015 @ 930
Time the second extraction started 24hr	04/10/2015 @ 1530
Sufficient volume for MS/MSD?	NO
Uncorrected Temperature	84 Celsius
Water Bath ID	A
Water Bath Temperature	84 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Denver
4955 Yarrow Street
Anvada, CO 80002
phone 303-736-0100 fax 303-431-7171

2.3.10.1.4.6.0.1,
3.3.1.1.1.0.8+0.2
1K-5 4/8/15-200

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280-67484 Chain of Custody

TestAmerica

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America Laboratories, Inc.

COC No: FWDAAPR15-045

1 of 2 COCs

Job No.

SDG No.

Sample Specific Notes:

John Nance		Tel: 505 835 7660		Lab Contact: Michelle Johnston		Carrier: Federal Express		1__ of __ 2__ COCs	
6700 Jefferson Street NE Suite C3		Analysis Turnaround Time						Job No.	
Albuquerque, NM 87109		Calendar (C) or Work Days (W) W							
505 835 7660		TAT if different from Below 15						SDG No.	
		2 weeks							
		1 week							
		2 days							
		1 day							
Project Name: Fort Wingate		Sample Date		Sample Time		Sample Type		Matrix	
Site: Fort Wingate, New Mexico		Sample Date		Sample Time		Sample Type		Matrix	
P O #		Sample Date		Sample Time		Sample Type		Matrix	
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		Sample Date		Sample Time		Sample Type		Matrix	

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TestAmerica Laboratories, Inc.

Project Manager: John Nance		Site Contact: John Nance 505 321 7260		Date: 4/7/15		
Client Contact		Lab Contact: Michelle Johnston		Carrier: Federal Express		
John Nance		Tel: 505 835 7660		COC No: FWDAAPRI5-048		
6700 Jefferson Street NE Suite C3		Albuquerque, NM 87109		I of 1 COCs		
505 835 7660 PHONE		Analysis Turnaround Time		Job No.		
Project Name: Fort Wingate		Calendar (C) or Work Days (W) 15 W		SDG No.		
Site: Fort Wingate, New Mexico		TAT if different from Below 15		Sample Specific Notes:		
P O #		2 weeks				
		1 week				
		2 days				
		1 day				
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.
MW23042015	4/7/2015	0940	grab	GW	2	
MW23042015MS	4/7/2015	0940	grab	GW	2	
MW23042015MSD	4/7/2015	0940	grab	GW	2	
DMW23042015	4/7/2015	0940	grab	GW	2	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other						
Possible Hazard Identification						
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown						
Special Instructions/QC Requirements & Comments:						
Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☒ Archive For 60 days after invoice						
Relinquished by: Todd Arrowood						
Date/Time: 4/7/15 1500						
Company: Sundance						
Relinquished by:						
Date/Time:						
Company:						
Relinquished by:						
Date/Time:						
Company:						

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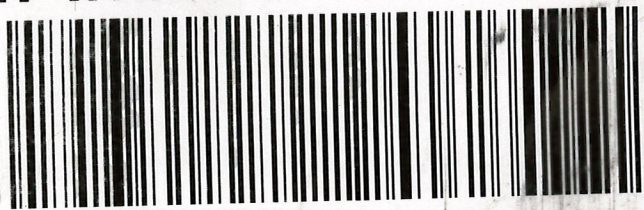
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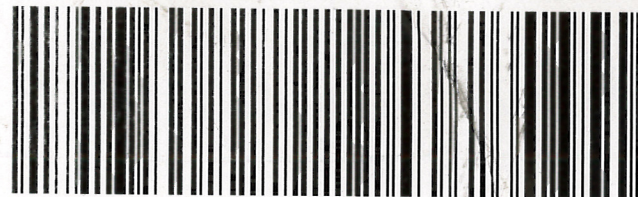
FedEx

TRK#
0667 8073 6476 8089

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PRIORITY OVERNIGHT

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FID 789935 07APR15 GUPA 522C2/8FC5/65DD

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TRK#
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Base Charges

Other

Total Charges

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Please see the back of the receipt for important terms and conditions.

SATURDAY DELIVERY

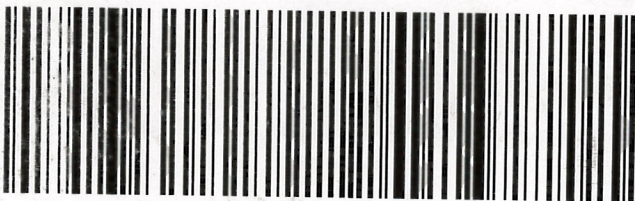
**WED - 08 APR 10:30A
PRIORITY OVERNIGHT**

FedEx

TRK#
0667 8054 3297 0608

XH WHHA

**80002
CO-US
DEN**



FID 789935 07APR15 GUPA 522C2/8FC5/65DD

Login Sample Receipt Checklist

Client: Sundance Consulting, Inc

Job Number: 280-67484-2

Login Number: 67484

List Source: TestAmerica Denver

List Number: 1

Creator: Orfield, Tayler C

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	