TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

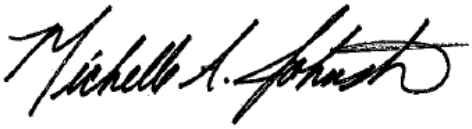
ANALYTICAL REPORT

Job Number: 280-67561-2

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 1:21 PM

Michelle A Johnston, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0110
michelle.johnston@testamericainc.com
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 NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

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

Table of Contents

Table of Contents

CASE NARRATIVE
Client: Sundance Consulting, Inc.
Project: Fort Wingate, New Mexico
Report Number: 280-67561-2

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 five water samples received April 9, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 1.3°C, 4.5°C, 3.5°C, 3.6°C, 1.4°C, 1.4°C, 1.6°C and 4.4°C.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67561-1).

No other anomalies were encountered during sample receipt.

GC/MS Semivolatiles - 8270D

Samples TMW14A042015 (280-67561-3), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9) and SMW01042015 (280-67561-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/10/2015 and analyzed on 04/14/2015.

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.

MS/MSD analyses for prep batch 280-272540 were not requested.

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.: 280-67561-2

SDG No.:

Instrument ID: SMS_B2 Analysis Batch Number: 266830

Lab Sample ID: STD020 280-266830/6 IC Client Sample ID:

Date Analyzed: 03/04/15 11:57 Lab File ID: B2-9366.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	21.06	Shouldering	kiekeld	03/05/15 13:03

Lab Sample ID: STD050 280-266830/7 IC Client Sample ID:

Date Analyzed: 03/04/15 12:26 Lab File ID: B2-9367.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	21.06	Shouldering	kiekeld	03/05/15 13:05

Lab Sample ID: STD120 280-266830/8 IC Client Sample ID:

Date Analyzed: 03/04/15 12:54 Lab File ID: B2-9368.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	6.40	Split Peak	kiekeld	03/05/15 13:10
Indeno[1,2,3-cd]pyrene	21.08	Shouldering	kiekeld	03/05/15 13:10

Lab Sample ID: STD160 280-266830/9 IC Client Sample ID:

Date Analyzed: 03/04/15 13:23 Lab File ID: B2-9369.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	kiekeld	03/05/15 13:12

Lab Sample ID: STD200 280-266830/10 IC Client Sample ID:

Date Analyzed: 03/04/15 13:51 Lab File ID: B2-9370.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	kiekeld	03/05/15 13:14
Indeno[1,2,3-cd]pyrene	21.09	Shouldering	kiekeld	03/05/15 13:14

SAMPLE SUMMARY

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-67561-3	TMW14A042015	Water	04/08/2015 1025	04/09/2015 0900
280-67561-7	TMW15042015	Water	04/08/2015 1250	04/09/2015 0900
280-67561-8	DTW15042015	Water	04/08/2015 1250	04/09/2015 0900
280-67561-9	TMW38042015	Water	04/08/2015 1032	04/09/2015 0900
280-67561-10	SMW01042015	Water	04/08/2015 1045	04/09/2015 0900

EXECUTIVE SUMMARY - Detections

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

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

No Detections

METHOD SUMMARY

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

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: 280-67561-2

Method	Analyst	Analyst ID
SW846 8270D	Kiekel, Daniel C	DCK

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Client Sample ID: **TMW14A042015**

Lab Sample ID: 280-67561-3
Client Matrix: Water

Date Sampled: 04/08/2015 1025
Date Received: 04/09/2015 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	280-272601	Instrument ID:	SMS_B2
Prep Method:	3520C	Prep Batch:	280-272540	Lab File ID:	B2-9976.D
Dilution:	1.0			Initial Weight/Volume:	962.2 mL
Analysis Date:	04/14/2015 1952			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1015			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Caprolactam	2.6	U	2.6	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	73		48 - 135
2-Fluorobiphenyl	75		48 - 135
2-Fluorophenol (Surr)	68		41 - 135
Nitrobenzene-d5 (Surr)	69		42 - 135
Phenol-d5 (Surr)	71		46 - 135
Terphenyl-d14 (Surr)	85		20 - 135

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Client Sample ID: **TMW15042015**

Lab Sample ID: 280-67561-7
Client Matrix: Water

Date Sampled: 04/08/2015 1250
Date Received: 04/09/2015 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	280-272601	Instrument ID:	SMS_B2
Prep Method:	3520C	Prep Batch:	280-272540	Lab File ID:	B2-9977.D
Dilution:	1.0			Initial Weight/Volume:	912 mL
Analysis Date:	04/14/2015 2020			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1015			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Caprolactam	2.7	U	2.7	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	80		48 - 135
2-Fluorobiphenyl	86		48 - 135
2-Fluorophenol (Surr)	88		41 - 135
Nitrobenzene-d5 (Surr)	86		42 - 135
Phenol-d5 (Surr)	90		46 - 135
Terphenyl-d14 (Surr)	89		20 - 135

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Client Sample ID: **DTW15042015**

Lab Sample ID: 280-67561-8
Client Matrix: Water

Date Sampled: 04/08/2015 1250
Date Received: 04/09/2015 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	280-272601	Instrument ID:	SMS_B2
Prep Method:	3520C	Prep Batch:	280-272540	Lab File ID:	B2-9978.D
Dilution:	1.0			Initial Weight/Volume:	949.7 mL
Analysis Date:	04/14/2015 2049			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1015			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Caprolactam	2.6	U	2.6	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	74		48 - 135
2-Fluorobiphenyl	80		48 - 135
2-Fluorophenol (Surr)	73		41 - 135
Nitrobenzene-d5 (Surr)	73		42 - 135
Phenol-d5 (Surr)	77		46 - 135
Terphenyl-d14 (Surr)	85		20 - 135

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Client Sample ID: **TMW38042015**

Lab Sample ID: 280-67561-9
Client Matrix: Water

Date Sampled: 04/08/2015 1032
Date Received: 04/09/2015 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	280-272601	Instrument ID:	SMS_B2
Prep Method:	3520C	Prep Batch:	280-272540	Lab File ID:	B2-9979.D
Dilution:	1.0			Initial Weight/Volume:	898.6 mL
Analysis Date:	04/14/2015 2117			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1015			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Caprolactam	2.8	U	2.8	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	78		48 - 135
2-Fluorobiphenyl	78		48 - 135
2-Fluorophenol (Surr)	74		41 - 135
Nitrobenzene-d5 (Surr)	73		42 - 135
Phenol-d5 (Surr)	76		46 - 135
Terphenyl-d14 (Surr)	75		20 - 135

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Client Sample ID: **SMW01042015**

Lab Sample ID: 280-67561-10
Client Matrix: Water

Date Sampled: 04/08/2015 1045
Date Received: 04/09/2015 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	280-272601	Instrument ID:	SMS_B2
Prep Method:	3520C	Prep Batch:	280-272540	Lab File ID:	B2-9980.D
Dilution:	1.0			Initial Weight/Volume:	982.8 mL
Analysis Date:	04/14/2015 2146			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1015			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Caprolactam	2.5	U	2.5	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	74		48 - 135
2-Fluorobiphenyl	82		48 - 135
2-Fluorophenol (Surr)	72		41 - 135
Nitrobenzene-d5 (Surr)	75		42 - 135
Phenol-d5 (Surr)	75		46 - 135
Terphenyl-d14 (Surr)	64		20 - 135

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

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
280-67561-3	TMW14A042015	68	71	69	75	73	85
280-67561-7	TMW15042015	88	90	86	86	80	89
280-67561-8	DTW15042015	73	77	73	80	74	85
280-67561-9	TMW38042015	74	76	73	78	78	75
280-67561-10	SMW01042015	72	75	75	82	74	64
MB 280-272540/1-A		82	84	83	82	77	87
LCS 280-272540/2-A		74	77	76	78	77	80

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

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Method Blank - Batch: 280-272540

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 280-272540/1-A	Analysis Batch:	280-272601	Instrument ID:	SMS_B2
Client Matrix:	Water	Prep Batch:	280-272540	Lab File ID:	B2-9962.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/14/2015 1311	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1015			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Caprolactam	2.5	U	2.5	5.0

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	77	48 - 135
2-Fluorobiphenyl	82	48 - 135
2-Fluorophenol (Surr)	82	41 - 135
Nitrobenzene-d5 (Surr)	83	42 - 135
Phenol-d5 (Surr)	84	46 - 135
Terphenyl-d14 (Surr)	87	20 - 135

Lab Control Sample - Batch: 280-272540

Method: 8270D
Preparation: 3520C

Lab Sample ID:	LCS 280-272540/2-A	Analysis Batch:	280-272601	Instrument ID:	SMS_B2
Client Matrix:	Water	Prep Batch:	280-272540	Lab File ID:	B2-9963.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/14/2015 1340	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1015			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Caprolactam	80.0	69.8	87	64 - 120	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	77	48 - 135
2-Fluorobiphenyl	78	48 - 135
2-Fluorophenol (Surr)	74	41 - 135
Nitrobenzene-d5 (Surr)	76	42 - 135
Phenol-d5 (Surr)	77	46 - 135
Terphenyl-d14 (Surr)	80	20 - 135

DATA REPORTING QUALIFIERS

Client: Sundance Consulting, Inc Job Number: 280-67561-2

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

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-272540					
LCS 280-272540/2-A	Lab Control Sample	T	Water	3520C	
MB 280-272540/1-A	Method Blank	T	Water	3520C	
280-67561-3	TMW14A042015	T	Water	3520C	
280-67561-7	TMW15042015	T	Water	3520C	
280-67561-8	DTW15042015	T	Water	3520C	
280-67561-9	TMW38042015	T	Water	3520C	
280-67561-10	SMW01042015	T	Water	3520C	
Analysis Batch:280-272601					
LCS 280-272540/2-A	Lab Control Sample	T	Water	8270D	280-272540
MB 280-272540/1-A	Method Blank	T	Water	8270D	280-272540
280-67561-3	TMW14A042015	T	Water	8270D	280-272540
280-67561-7	TMW15042015	T	Water	8270D	280-272540
280-67561-8	DTW15042015	T	Water	8270D	280-272540
280-67561-9	TMW38042015	T	Water	8270D	280-272540
280-67561-10	SMW01042015	T	Water	8270D	280-272540

Report Basis

T = Total

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Laboratory Chronicle

Lab ID: 280-67561-3 **Client ID:** TMW14A042015

Sample Date/Time: 04/08/2015 10:25 Received Date/Time: 04/09/2015 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67561-A-3-B		280-272601	280-272540	04/10/2015 10:15	1	TAL DEN	JRK
A:8270D	280-67561-A-3-B		280-272601	280-272540	04/14/2015 19:52	1	TAL DEN	DCK

Lab ID: 280-67561-7 **Client ID:** TMW15042015

Sample Date/Time: 04/08/2015 12:50 Received Date/Time: 04/09/2015 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67561-A-7-B		280-272601	280-272540	04/10/2015 10:15	1	TAL DEN	JRK
A:8270D	280-67561-A-7-B		280-272601	280-272540	04/14/2015 20:20	1	TAL DEN	DCK

Lab ID: 280-67561-8 **Client ID:** DTW15042015

Sample Date/Time: 04/08/2015 12:50 Received Date/Time: 04/09/2015 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67561-B-8-B		280-272601	280-272540	04/10/2015 10:15	1	TAL DEN	JRK
A:8270D	280-67561-B-8-B		280-272601	280-272540	04/14/2015 20:49	1	TAL DEN	DCK

Lab ID: 280-67561-9 **Client ID:** TMW38042015

Sample Date/Time: 04/08/2015 10:32 Received Date/Time: 04/09/2015 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67561-C-9-B		280-272601	280-272540	04/10/2015 10:15	1	TAL DEN	JRK
A:8270D	280-67561-C-9-B		280-272601	280-272540	04/14/2015 21:17	1	TAL DEN	DCK

Lab ID: 280-67561-10 **Client ID:** SMW01042015

Sample Date/Time: 04/08/2015 10:45 Received Date/Time: 04/09/2015 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-67561-A-10-B		280-272601	280-272540	04/10/2015 10:15	1	TAL DEN	JRK
A:8270D	280-67561-A-10-B		280-272601	280-272540	04/14/2015 21:46	1	TAL DEN	DCK

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 280-272540/1-A		280-272601	280-272540	04/10/2015 10:15	1	TAL DEN	JRK
A:8270D	MB 280-272540/1-A		280-272601	280-272540	04/14/2015 13:11	1	TAL DEN	DCK

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Laboratory Chronicle

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

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

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCS 280-272540/2-A		280-272601	280-272540	04/10/2015 10:15	1	TAL DEN	JRK
A:8270D	LCS 280-272540/2-A		280-272601	280-272540	04/14/2015 13:40	1	TAL DEN	DCK

Lab References:

TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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
							Indene	80.028 ug/mL
					MS-569731_00004	5 mL	Benzoic acid	80.116 ug/mL
							Indene	80.028 ug/mL
.MS-569729_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	1006.9 ug/mL
							Pyrene	999.1 ug/mL
							Pyridine	1001 ug/mL
.MS-569729_00008	05/31/16	Restek, Lot A0107399			(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
							1,3-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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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
							Indene	2001.4 ug/mL
.MS-569731_00004	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		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
							Benzidine	80.336 ug/mL
					MS-569732_00009	2 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 Denver Job No.: 280-67561-2

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.: 280-67561-2

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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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
							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
							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.: 280-67561-2

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.: 280-67561-2

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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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.: 280-67561-2

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
					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
							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 Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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.: 280-67561-2

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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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.: 280-67561-2

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.: 280-67561-2

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.: 280-67561-2

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 Denver Job No.: 280-67561-2

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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzoic acid	160 ug/mL
							Famphur	80 ug/mL
							N-Nitrosodiphenylamine	80 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
							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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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
							Caprolactam	200 ug/mL
					MS-567674_00038	2 mL	Benzoic acid	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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.: 280-67561-2

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
							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
							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.: 280-67561-2

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.: 280-67561-2

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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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 Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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		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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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.: 280-67561-2

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
							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-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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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.: 280-67561-2

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

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_00018	04/30/15	12/08/14	Methylene Chloride, Lot 71006	0.5 mL	MS-HSLB1_STK_00004	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_00004	02/28/15	05/02/14	Methylene Chloride, Lot 51144	10 mL	MS-567672SEC_00009	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_00009	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.: 280-67561-2

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_00019	05/16/15	02/13/15	Methylene Chloride, Lot 87836	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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8270_LCS_Main_00019

Reagent ID: 8270_LCS_Main_00019

Description:	USE IN CONJUCTION WITH 8270_LCS_S	Expiration Date:	02/12/2016
No. of Bottles:	2	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Scoles, Brittany M
Reagent Volume:	250.000 mL	Solvent:	P&T Methanol
Creation Date:	02/12/2015	Solvent Lot:	MethanolP&T_00107
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.

MeCl2 exchanged 2/12/15 BS

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

Report Date: 13-Feb-2015 14:46:51 Chrom Revision: 2.2 15-Jan-2015 13:05:58

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8270Surrogate_00078

Reagent ID: 8270Surrogate_00078

		Expiration Date:	04/07/2016
Description:	8270 Surrogate 100ug/ml	Laboratory:	TestAmerica Denver
No. of Bottles:	4	Prepared By:	Knaub, Gentry L
Storage Location:	North Prep	Solvent:	ACETONE
Reagent Volume:	1000.000 mL	Solvent Lot:	Acetone_000115
Creation Date:	04/07/2015		
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

Report Date: 09-Apr-2015 14:39:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

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

RESTEK

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

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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:

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

  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

RESTEK

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

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 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.

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	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)

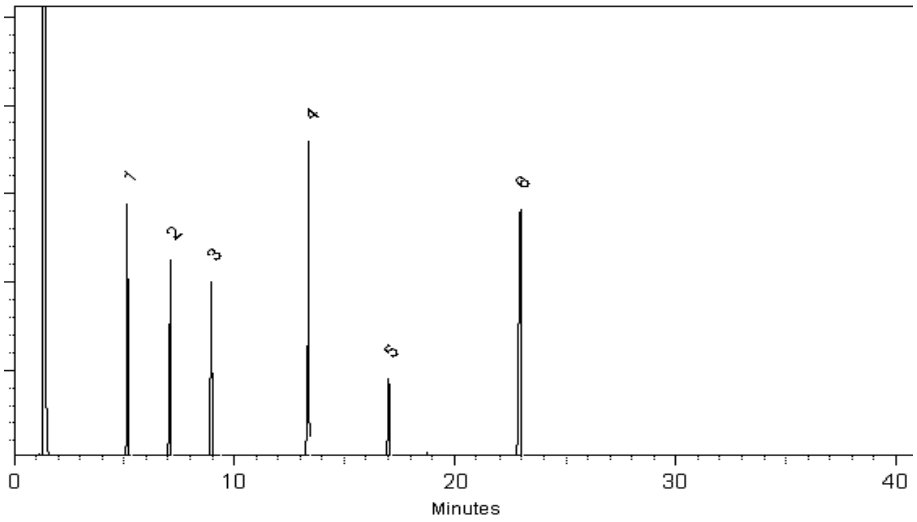
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 - 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:

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

  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.

RESTEK

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			

Compound	CAS	Storage Location	Lot #	Purity	Target Conc(ug/mL)	Target	Actual	Calc Conc(ug/mL)
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)

	Runs of Lot # A092712						Runs of Lot # A093638							
COMPONENT	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	%D MEAN	P/F
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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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:

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

  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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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:

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

  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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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:

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

  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.

Standard Verification Form

Verification (New vendor or problematic Standard)	☐	Re-Verification	☒
TALS Reagent Record — ampules were not used therefore original CDs are un-changed			
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	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb
X 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 MajorMax	
Verified by	M. Hoffman	Instrument ID	Y	
Verification Date	8/11/14	Method Reference	8270C	
Reference Standard ID	567672SEC	Batch # A094002	Analytical Batch	
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
See Attached Report.				All compounds Pass. pss 8/15/14
New Expiration Date:	5/2015	New TALS ID	★	

New expiration date can be no greater than ½ 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

1st Level Review MH Date: 8/14/14

2nd Level Review [signature] Date: 8/14/14

QA Review (Re-verification only)	[signature]	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. pss 8/15/14

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

RESTEK

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

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 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 **CAS #** 123-91-1 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Phenol **CAS #** 108-95-2 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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-chlorocthoxy)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	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 106-47-8			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
30	Hexachlorobutadiene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 87-68-3			+/-	8.7956	µg/mL	Unstressed
	Purity 97%			+/-	17.3886	µg/mL	Stressed
31	2-Methylnaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-57-6			+/-	8.7957	µg/mL	Unstressed
	Purity 96%			+/-	17.3887	µg/mL	Stressed
32	4-Chloro-3-methylphenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 59-50-7			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
33	1-Methylnaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 90-12-0			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-94-3			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
35	Hexachlorocyclopentadiene	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 77-47-4			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
36	2,4,6-Trichlorophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-06-2			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
37	2,4,5-Trichlorophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-95-4			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
38	2-Chloronaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-58-7			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
39	Biphenyl	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 92-52-4			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
40	2-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-74-4			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
41	Acenaphthylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 208-96-8			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
42	1,3-Dinitrobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 99-65-0			+/-	8.7956	µg/mL	Unstressed
	Purity 97%			+/-	17.3886	µg/mL	Stressed
43	Dimethylphthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 131-11-3			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
44	2,6-Dinitrotoluene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 606-20-2			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
45	Acenaphthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 83-32-9			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
46	3-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 99-09-2			+/-	8.7956	µg/mL	Unstressed
	Purity 97%			+/-	17.3886	µg/mL	Stressed
47	2,4-Dinitrophenol	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 51-28-5			+/-	17.5913	µg/mL	Unstressed
	Purity 99%			+/-	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	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 129-00-0			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
68	Benzyl butyl phthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 85-68-7			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
69	Benz(a)anthracene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 56-55-3			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
70	Chrysene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 218-01-9			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
71	Bis(2-ethylhexyl)phthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 117-81-7			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
72	Di-n-octyl phthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 117-84-0			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
73	Benzo(b)fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 205-99-2			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
74	Benzo(k)fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 207-08-9			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
75	Benzo(a)pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 50-32-8			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
76	Indeno(1,2,3-cd)pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 193-39-5			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
77	Dibenz(a,h)anthracene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 53-70-3			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
78	Benzo(g,h,i)perylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 191-24-2			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed

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

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

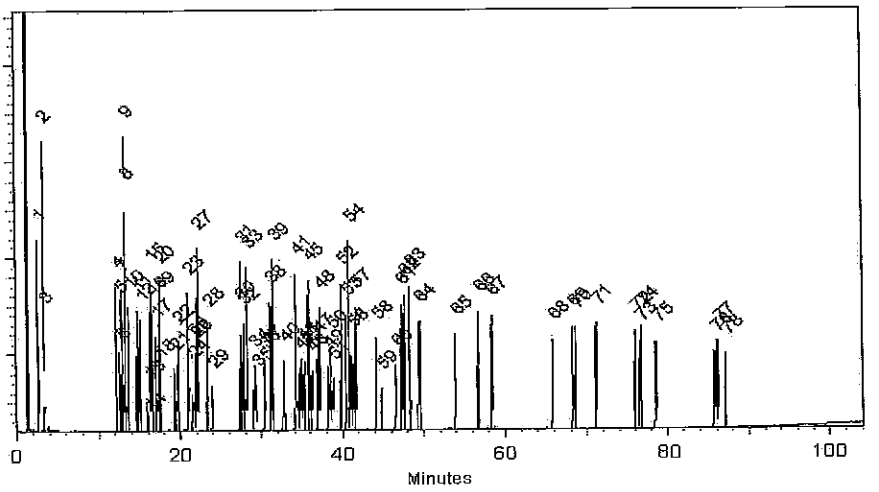
Carrier Gas:
hydrogen-constant pressure 10 psi

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



Jodi E. Breon - QA Analyst

Date Passed: 11-Mar-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:

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

  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.

RESTEK

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	10165155	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	130201JLM	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

Compound	CAS	Storage Location	Lot #	Purity	Target Conc(ug/mL)	Target	Actual	Calc Conc(ug/mL)
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	FGG01-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-cr	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 Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	Runs of Lot # A093709 Run #1	Run #2	Run #3	AVG	STD DEV	% RSD	%D MEAN	P/F
1,4-Dioxane	188646	192821	191880	191116	2190	1.15	192336	189509	189679	190508	1585	0.83	0.32	PASS
pyridine	415451	428642	427105	423733	7213	1.70	415345	408462	408591	410799	3937	0.96	3.05	PASS
n-nitrosodimethylamine	223317	225514	225683	224838	1320	0.59	230349	230199	229641	230063	373	0.16	-2.32	PASS
aniline	493725	503628	503624	500326	5716	1.14	500907	496113	495103	497374	3101	0.62	0.59	PASS
phenol	817868	839195	837639	831567	11889	1.43	835201	826269	822169	827880	6664	0.80	0.44	PASS
Bis(2-chlorotheyl) ether	149557	150074	151312	150314	902	0.60	151577	151758	151779	151705	111	0.07	-0.92	PASS
2-chlorophenol	555903	568972	568346	564407	7371	1.31	569567	561806	562793	564722	4225	0.75	-0.06	PASS
1,3-dichlorobenzene	315458	322043	321021	319507	3544	1.11	322065	319592	317894	319850	2097	0.66	-0.11	PASS
1,4-dichlorobenzene	330944	338234	337988	335722	4140	1.23	334527	331280	330934	332247	1982	0.60	1.04	PASS
1,2-dichlorobenzene	330894	338189	337997	335693	4157	1.24	336250	333171	332806	334076	1892	0.57	0.48	PASS
benzyl alcohol	495115	507587	507493	503398	7174	1.43	497826	493630	493743	495066	2391	0.48	1.66	PASS
bis(2-chloroisopropyl) ether	172397	176239	175001	174546	1961	1.12	234012	231770	230920	232234	1597	0.69	-33.05	PASSES per customer ap...
2-methylphenol	571992	584082	581689	579254	6402	1.11	508833	504219	502597	505216	3235	0.64	12.78	PASSES per customer ap...
Acetophenone & 'hexachloroethane	491568	505669	495927	497721	7220	1.45	493188	488122	492221	491177	2690	0.55	1.31	PASS
N-Nitroso-di-n-propylamine	361179	368406	366589	365391	3759	1.03	368628	365316	363726	365890	2501	0.68	-0.14	PASS
4 & 3-methylphenol	483616	493737	491316	489556	5285	1.08	486478	482308	480327	483038	3140	0.65	1.33	PASS
nitrobenzene	386839	393863	391993	390898	3638	0.93	390916	387583	385700	388066	2641	0.68	0.72	PASS
isophorone	480255	491568	489148	486990	5957	1.22	469615	467260	464590	467155	2514	0.54	4.07	PASS
2-nitrophenol	301545	309268	306582	305798	3921	1.28	307220	305842	303776	305613	1733	0.57	0.06	PASS
2,4-dimethylphenol	497531	508856	507673	504687	6225	1.23	508912	504842	502705	505486	3153	0.62	-0.16	PASS
bis(2-chloroethoxy) methane	155792	159441	158707	157980	1930	1.22	163541	162149	161852	162514	902	0.55	-2.87	PASS
2,4-dichlorophenol	272471	278784	279120	276792	3746	1.35	277729	275396	274832	275986	1536	0.56	0.29	PASS
1,2,4-trichlorobenzene	274752	280745	280628	278708	3427	1.23	275719	273362	271330	273470	2197	0.80	1.88	PASS
naphthalene	632713	647089	644183	641328	7601	1.19	645901	640789	638935	641875	3608	0.56	-0.09	PASS
4-chloroaniline	364745	372864	372918	370176	4703	1.27	378204	377330	375425	376986	1421	0.38	-1.84	PASS
hexachlorobutadiene	130937	133892	133787	132872	1677	1.26	134118	131409	131706	132411	1486	1.12	0.35	PASS
2-methylnaphthalene	627310	643366	643371	638016	9271	1.45	650934	645347	644288	646856	3571	0.55	-1.39	PASS
4-chloro-3-methylphenol	363509	372177	373094	369593	5289	1.43	370470	367322	366997	368263	1918	0.52	0.36	PASS
1-methylnaphthalene	605609	618871	620998	615159	8339	1.36	629048	623146	622223	624806	3703	0.59	-1.57	PASS
1,2,4,5-Tetrachlorobenzene	241238	245964	245232	244145	2544	1.04	243630	242510	241372	242504	1129	0.47	0.67	PASS
hexachlorocyclopentadiene	116601	120591	119462	118885	2057	1.73	116395	116227	115501	116041	475	0.41	2.39	PASS
2,4,6-trichlorophenol	234196	239699	239132	237676	3027	1.27	234520	233876	232573	233656	992	0.42	1.69	PASS
2,4,5-trichlorophenol	228868	234109	233717	232231	2919	1.26	232088	231980	230147	231405	1091	0.47	0.36	PASS
2-chloronaphthalene	512484	523485	523317	519762	6303	1.21	521500	518502	516177	518726	2669	0.51	0.20	PASS
Biphenyl	649641	663720	663441	658934	8049	1.22	660072	656120	653319	656504	3393	0.52	0.37	PASS
2-nitroaniline	340217	347361	346641	344740	3933	1.14	343896	340835	339983	341571	2058	0.60	0.92	PASS
1,4-dinitrobenzene	653793	665831	665803	661809	6942	1.05	654825	649138	646348	650104	4320	0.66	1.77	PASS
acenaphthylene	275967	282442	280456	279622	3317	1.19	291597	289220	288137	289651	1770	0.61	-3.59	PASS
1,3-dinitrobenzene	334868	340560	340949	338792	3404	1.00	342476	339715	337599	339930	2446	0.72	-0.34	PASS
dimethylphthalate	300923	306038	306893	304618	3228	1.06	306806	304219	302295	304440	2264	0.74	0.06	PASS
2,6-dinitrotoluene	665538	678708	677791	674012	7353	1.09	667927	662763	659031	663240	4467	0.67	1.60	PASS

acenaphthene	328807	335342	334538	332896	3564	1.07	343085	340825	338826	340912	2131	0.63	-2.41	PASS
3-nitroaniline	403212	420082	423890	415726	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	486929	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	458548	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	6947	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	414843	416638	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	638698	633711	638271	4362	0.68	4.25	PASS
bis(2-ethylhexyl) phthalate	463772	473038	471516	469442	4969	1.06	472680	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	585868	586461	8476	1.45	596894	596078	589414	594129	4103	0.69	-1.31	PASS
benzo(g,h,i) perylene	532334	548831	541334	540833	8260	1.53	543819	533453	532600	536624	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

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

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	≤ 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 SEC	Standard ID		
Verified by	M. Hoffman	Instrument ID	Y	
Verification Date	8/14/14	Method Reference	8270C	
Reference Standard ID	MS-567672	Batch #	A093709	
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
See attached report				All compounds pass.
	2/2015 (ER)	08/28/14		
New Expiration Date:	~~May 2015~~	New TALS ID	Same w/ new exp. date.	

New expiration date can be no greater than ½ the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.

Comment:	

1st Level Review: MH Date: 8/28/14

2nd Level Review: (ER) Date: 08/28/14

QA Review (Re-verification only)		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.

RESTEK

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

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3282.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3282.02

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 CAS # 123-91-1.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Pyridine CAS # 110-86-1.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine CAS # 62-75-9.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Aniline CAS # 62-53-3.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Phenol CAS # 108-95-2.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether CAS # 111-44-4.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2-Chlorophenol CAS # 95-57-8.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

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

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

Review Flags
M - Manually Integrated

Reagents:

MS-HSLB1B3SSV_00011 Amount Added: 200.00 Units: uL

RESTEK®

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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	2,010.0 µg/mL	+/- 11.7958	µg/mL	Gravimetric
	CAS # 105-60-2.SEC (Lot BLJTB)		+/- 22.0652	µg/mL	Unstressed
	Purity 99%		+/- 37.3617	µg/mL	Stressed
2	Atrazine	2,009.3 µg/mL	+/- 11.7919	µg/mL	Gravimetric
	CAS # 1912-24-9.SEC (Lot 1132400)		+/- 22.0579	µg/mL	Unstressed
	Purity 99%		+/- 37.3493	µg/mL	Stressed
3	Benzidine	2,018.0 µg/mL	+/- 11.8428	µg/mL	Gravimetric
	CAS # 92-87-5.SEC (Lot 1301900)		+/- 22.1530	µg/mL	Unstressed
	Purity 99%		+/- 37.5104	µg/mL	Stressed
4	3,3'-Dichlorobenzidine	2,016.7 µg/mL	+/- 11.8349	µg/mL	Gravimetric
	CAS # 91-94-1.SEC (Lot 2010900)		+/- 22.1384	µg/mL	Unstressed
	Purity 99%		+/- 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)

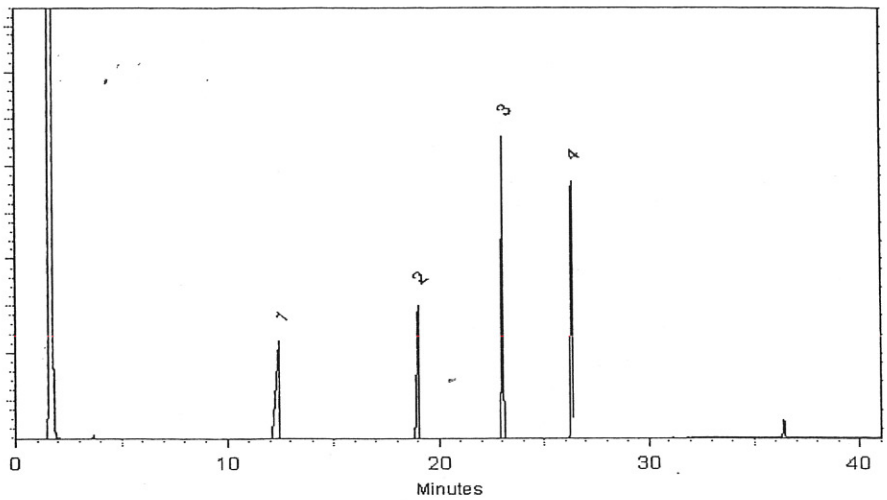
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 - Mix Technician

Date Mixed: 30-Jan-2014 **Balance:** B345965662

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/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:

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

  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

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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)

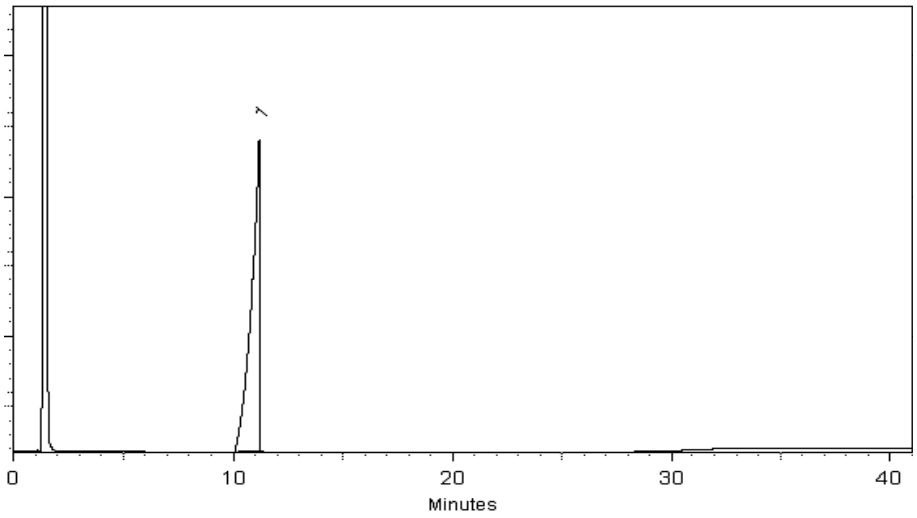
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 - 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:

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

  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.

RESTEK

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 12:34:09PI	
Packaged by: Alexandria Pavkovich / Alexandria Pavkov	**Date:** 2/21/2013 8:30:06AI	**No. Units:** 161	**Pkg Size:** 5 mL
Balance Used: BEDEARMBALPC2 XP205	**Serial #:** 1128353505		

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

RESTEK

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

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 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)

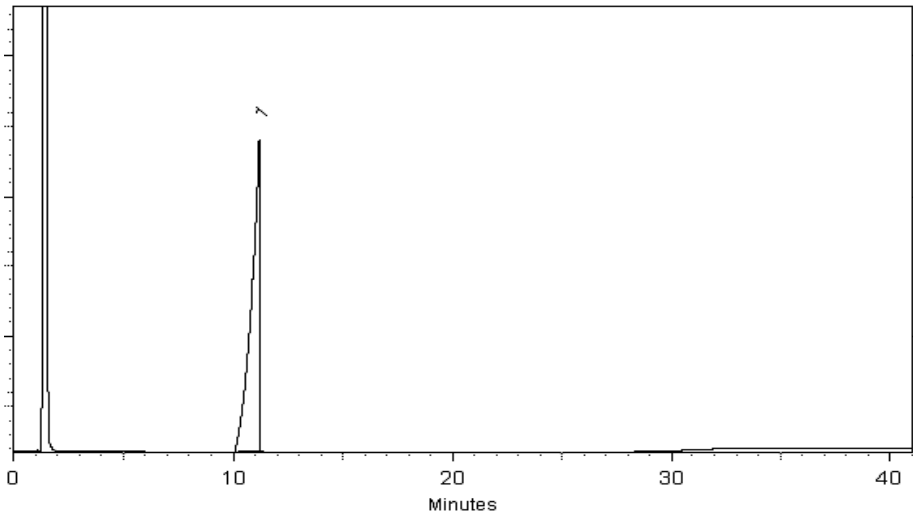
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 - 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:

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

  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.

RESTEK

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		

Compound	CAS	Storage Location	Lot #	Purity	Target Conc(ug/mL)	Target	Actual	Calc Conc(ug/mL)
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)

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Gravimetric Certificate

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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	2,011.6 µg/mL	+/- 20.2643	µg/mL	Gravimetric
	CAS # 52-85-7 (Lot 1269600)		+/- 74.2962	µg/mL	Unstressed
	Purity 94%		+/- 74.2987	µg/mL	Stressed

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

Michael J Maye

Date Mixed: 06-Feb-2014 **Balance:** 1128353505

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

RESTEK® CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Gravimetric Certificate

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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. : 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	1,712.0 µg/mL	+/- 17.2462	µg/mL	Gravimetric
	CAS # 122-39-4 (Lot 07525MF)		+/- 23.4457	µg/mL	Unstressed
	Purity 99%		+/- 34.7730	µg/mL	Stressed

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

Michael J Maye

Date Mixed: 06-Feb-2014 **Balance:** 1128353505

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

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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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

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

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

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

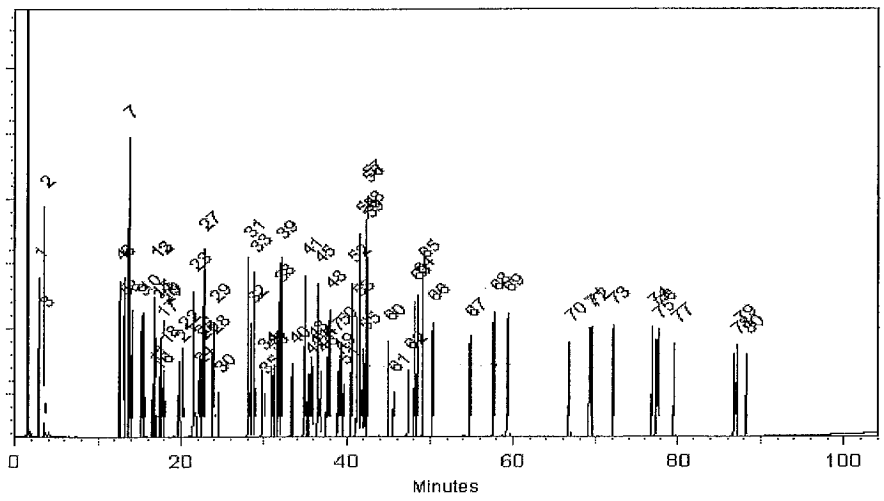
Carrier Gas:
hydrogen-constant pressure 10 psi

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/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:

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

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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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

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

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

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

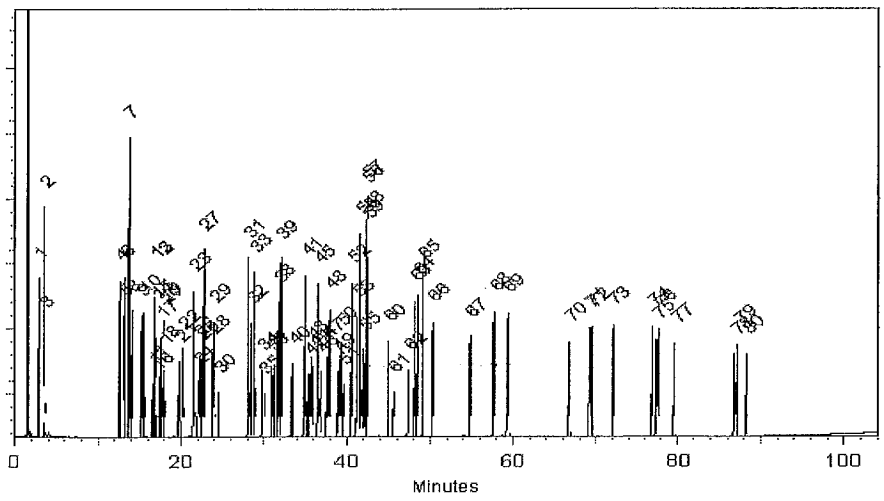
Carrier Gas:
hydrogen-constant pressure 10 psi

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/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:

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

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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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

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

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

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

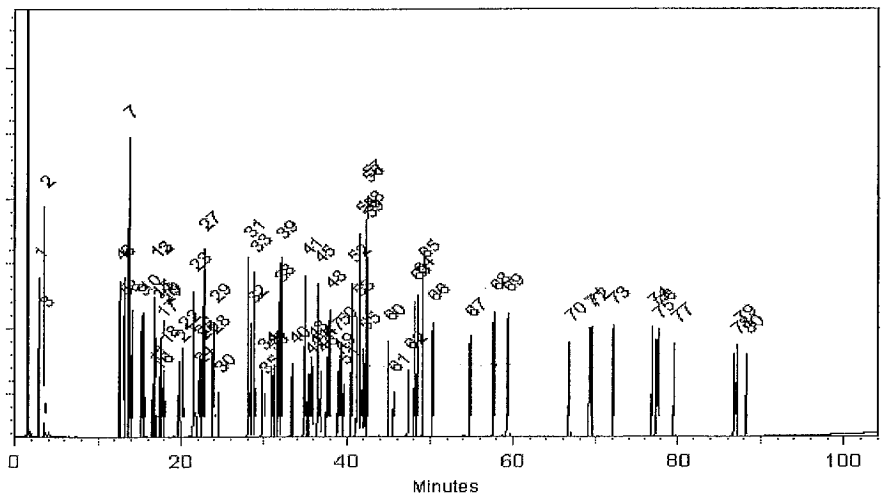
Carrier Gas:
hydrogen-constant pressure 10 psi

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/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:

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

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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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

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

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

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

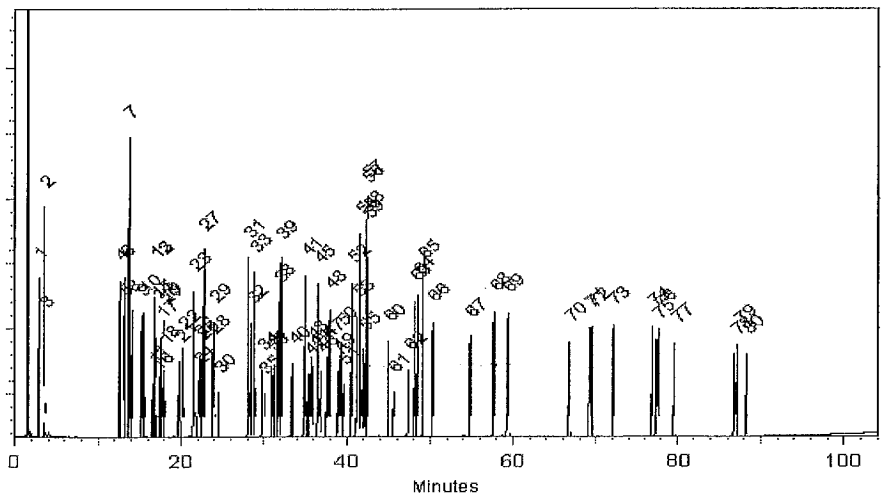
Carrier Gas:
hydrogen-constant pressure 10 psi

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/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:

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

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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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	2,008.4 µg/mL	+/- 11.6770	µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 141208JLM)		+/- 21.9894	µg/mL	Unstressed
	Purity 99%		+/- 37.2976	µg/mL	Stressed
2	3,3'-Dichlorobenzidine	2,003.0 µg/mL	+/- 11.6456	µg/mL	Gravimetric
	CAS # 91-94-1 (Lot 141205JLM)		+/- 21.9302	µg/mL	Unstressed
	Purity 99%		+/- 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)

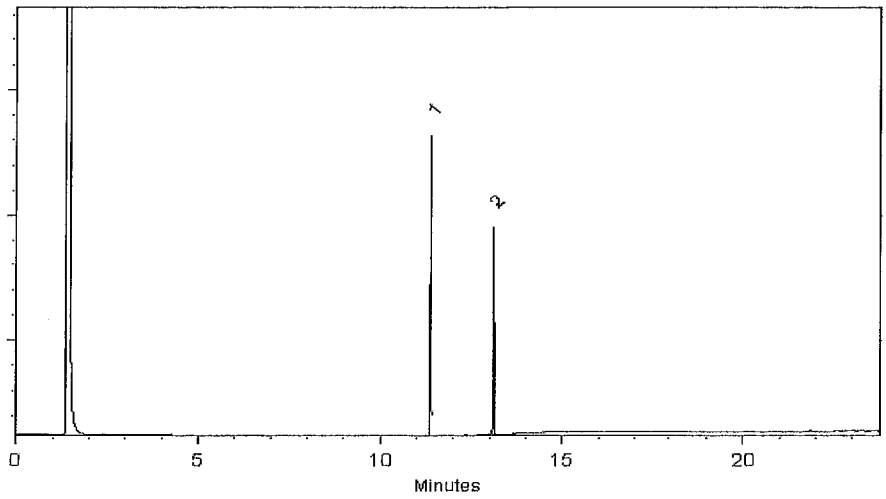
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 Sauver

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:

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

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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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)

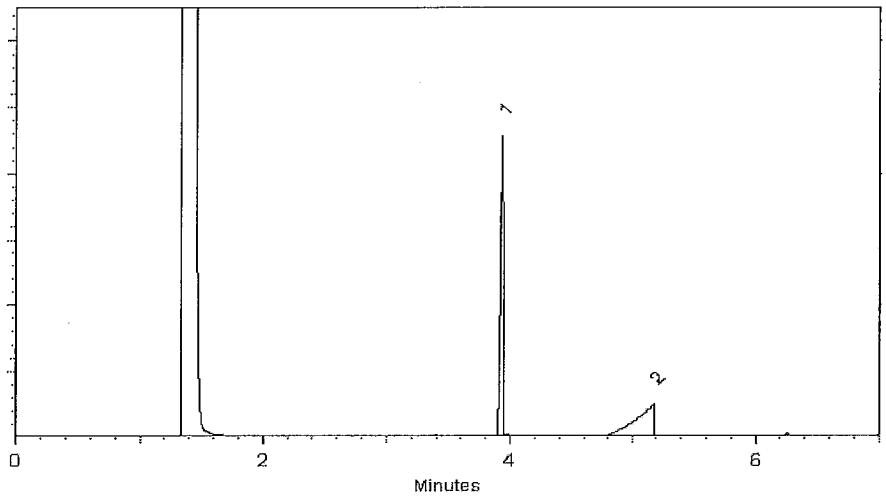
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 Fallon - 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:

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

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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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)

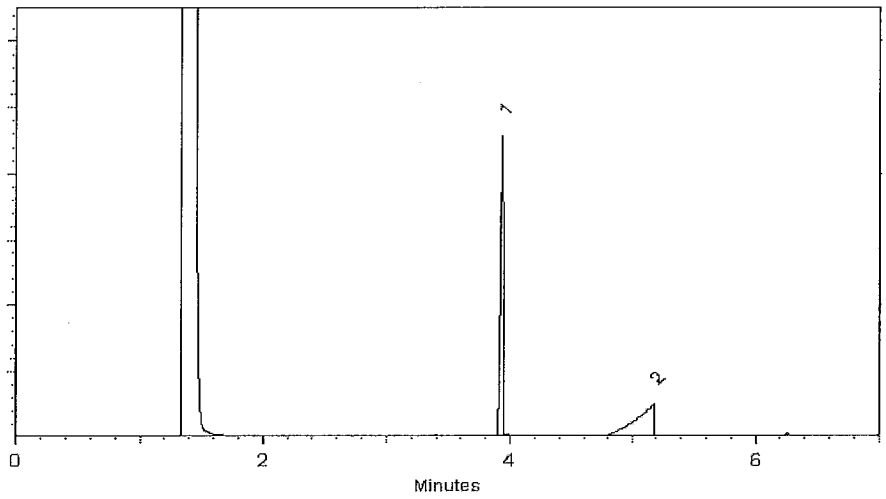
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 Fallon - 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:

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

  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.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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	2,000.6 µg/mL	+/- 11.6317	µg/mL	Gravimetric
	CAS # 100-52-7 (Lot SHBD3510V)		+/- 64.1305	µg/mL	Unstressed
	Purity 99%		+/- 74.5493	µg/mL	Stressed
2	epsilon-Caprolactam	2,001.2 µg/mL	+/- 11.6351	µg/mL	Gravimetric
	CAS # 105-60-2 (Lot I16X016)		+/- 64.1498	µg/mL	Unstressed
	Purity 99%		+/- 74.5716	µg/mL	Stressed
3	Atrazine	2,004.3 µg/mL	+/- 11.6532	µg/mL	Gravimetric
	CAS # 1912-24-9 (Lot TZ8ED)		+/- 64.2490	µg/mL	Unstressed
	Purity 98%		+/- 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)

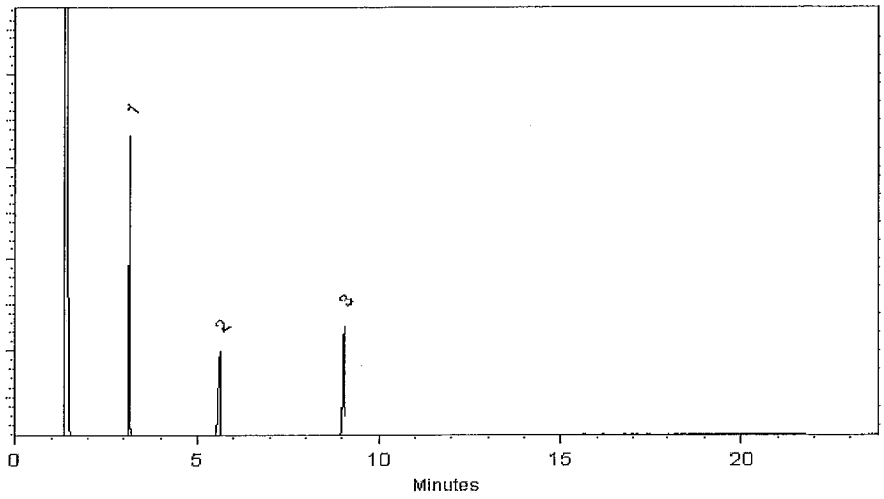
Carrier Gas:
hydrogen-constant pressure 10 psi.

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:

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

  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: 280-67561-2

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.: 280-67561-2

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 #
TMW14A042015	280-67561-3	68	71	69	75	73	85
TMW15042015	280-67561-7	88	90	86	86	80	89
DTW15042015	280-67561-8	73	77	73	80	74	85
TMW38042015	280-67561-9	74	76	73	78	78	75
SMW01042015	280-67561-10	72	75	75	82	74	64
	MB 280-272540/1-A	82	84	83	82	77	87
	LCS 280-272540/2-A	74	77	76	78	77	80

	QC 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

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Matrix: Water Level: Low Lab File ID: B2-9963.D

Lab ID: LCS 280-272540/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Caprolactam	80.0	69.8	87	64-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Lab File ID: B2-9962.D Lab Sample ID: MB 280-272540/1-A

Matrix: Water Date Extracted: 04/10/2015 10:15

Instrument ID: SMS_B2 Date Analyzed: 04/14/2015 13:11

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-272540/2-A	B2-9963.D	04/14/2015 13:40
TMW14A042015	280-67561-3	B2-9976.D	04/14/2015 19:52
TMW15042015	280-67561-7	B2-9977.D	04/14/2015 20:20
DTW15042015	280-67561-8	B2-9978.D	04/14/2015 20:49
TMW38042015	280-67561-9	B2-9979.D	04/14/2015 21:17
SMW01042015	280-67561-10	B2-9980.D	04/14/2015 21:46

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Lab File ID: B2-9362.D DFTPP Injection Date: 03/04/2015

Instrument ID: SMS_B2 DFTPP Injection Time: 10:19

Analysis Batch No.: 266830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	39.0	
68	Less than 2% of mass 69	0.0	(0.0)1
69	Mass 69 Relative abundance	41.7	
70	Less than 2% of mass 69	0.2	(0.6)1
127	10-80% of Base Peak	47.5	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.8	
275	10-60% of Base Peak	24.2	
365	Greater than 1% of mass 198	2.1	
441	present but less than 24% of mass 442	10.1	(16.5)2
442	Greater than 50% of mass 198	61.0	
443	15-24% of mass 442	11.7	(19.1)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 280-266830/3	B2-9363.D	03/04/2015	10:31
	STD004 280-266830/4	B2-9364.D	03/04/2015	11:00
	STD010 280-266830/5	B2-9365.D	03/04/2015	11:29
	STD020 280-266830/6	B2-9366.D	03/04/2015	11:57
	STD050 280-266830/7	B2-9367.D	03/04/2015	12:26
	STD120 280-266830/8	B2-9368.D	03/04/2015	12:54
	STD160 280-266830/9	B2-9369.D	03/04/2015	13:23
	STD200 280-266830/10	B2-9370.D	03/04/2015	13:51
	ICV 280-266830/11	B2-9371.D	03/04/2015	14:20
	ICV 280-266830/12	B2-9372.D	03/04/2015	14:49
	ICV 280-266830/13	B2-9373.D	03/04/2015	15:17

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Lab File ID: B2-9957.D DFTPP Injection Date: 04/14/2015

Instrument ID: SMS_B2 DFTPP Injection Time: 11:14

Analysis Batch No.: 272601

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	38.0	
68	Less than 2% of mass 69	0.2	(0.5)1
69	Mass 69 Relative abundance	39.7	
70	Less than 2% of mass 69	0.2	(0.6)1
127	10-80% of Base Peak	49.2	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.4	
275	10-60% of Base Peak	25.8	
365	Greater than 1% of mass 198	2.5	
441	present but less than 24% of mass 442	10.8	(16.6)2
442	Greater than 50% of mass 198	65.0	
443	15-24% of mass 442	12.0	(18.4)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 280-272601/3	B2-9958.D	04/14/2015	11:27
	MB 280-272540/1-A	B2-9962.D	04/14/2015	13:11
	LCS 280-272540/2-A	B2-9963.D	04/14/2015	13:40
TMW14A042015	280-67561-3	B2-9976.D	04/14/2015	19:52
TMW15042015	280-67561-7	B2-9977.D	04/14/2015	20:20
DTW15042015	280-67561-8	B2-9978.D	04/14/2015	20:49
TMW38042015	280-67561-9	B2-9979.D	04/14/2015	21:17
SMW01042015	280-67561-10	B2-9980.D	04/14/2015	21:46

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Sample No.: ICIS 280-266830/3 Date Analyzed: 03/04/2015 10:31

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.25) ID: 0.25(mm)

Lab File ID (Standard): B2-9363.D Heated Purge: (Y/N) N

Calibration ID: 21518

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		333477	4.73	1263561	5.99	786895	7.75
UPPER LIMIT		666954	5.23	2527122	6.49	1573790	8.25
LOWER LIMIT		166739	4.23	631781	5.49	393448	7.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-266830/11		298236	4.74	1003822	5.98	607665	7.75
ICV 280-266830/12		302000	4.74	1170527	5.98	747292	7.75
ICV 280-266830/13		459966	4.73	1762464	5.99	1103928	7.75
CCV 280-272601/3		386881	4.74	1546422	5.99	933451	7.75
MB 280-272540/1-A		279647	4.74	1096229	5.98	666149	7.75
LCS 280-272540/2-A		288448	4.73	1161105	5.99	704797	7.75
280-67561-3	TMW14A042015	290181	4.74	1149958	5.98	694899	7.75
280-67561-7	TMW15042015	291737	4.73	1193941	5.99	720914	7.75
280-67561-8	DTW15042015	292424	4.73	1186539	5.99	715001	7.75
280-67561-9	TMW38042015	299716	4.73	1196811	5.98	720239	7.75
280-67561-10	SMW01042015	299405	4.74	1196501	5.98	721430	7.75

DCB = 1,4-Dichlorobenzene-d4 (IS)
NPT = Naphthalene-d8 (IS)
ANT = Acenaphthene-d10 (IS)

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

Column used to flag values outside QC limits

FORM VIII 8270D

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

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Sample No.: ICIS 280-266830/3 Date Analyzed: 03/04/2015 10:31

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.25) ID: 0.25(mm)

Lab File ID (Standard): B2-9363.D Heated Purge: (Y/N) N

Calibration ID: 21518

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1285027	9.26	1406858	13.68	1108190	17.86
UPPER LIMIT		2570054	9.76	2813716	14.18	2216380	18.36
LOWER LIMIT		642514	8.76	703429	13.18	554095	17.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-266830/11		1045266	9.26	1161849	13.67	1051770	17.85
ICV 280-266830/12		1222750	9.26	1359402	13.67	1206297	17.84
ICV 280-266830/13		1946875	9.26	2178891	13.66	2022989	17.85
CCV 280-272601/3		1585264	9.26	1723095	13.67	1577146	17.86
MB 280-272540/1-A		1158704	9.26	1264596	13.66	1153748	17.85
LCS 280-272540/2-A		1195366	9.26	1311120	13.67	1190186	17.85
280-67561-3	TMW14A042015	1187837	9.26	1243248	13.66	1097405	17.85
280-67561-7	TMW15042015	1254826	9.26	1304971	13.66	1148436	17.85
280-67561-8	DTW15042015	1230010	9.26	1280075	13.66	1113821	17.85
280-67561-9	TMW38042015	1231024	9.26	1290944	13.66	1129162	17.85
280-67561-10	SMW01042015	1233987	9.26	1285408	13.66	1113440	17.85

PHN = Phenanthrene-d10 (IS)
CRY = Chrysene-d12 (IS)
PRY = Perylene-d12 (IS)

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

Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-67561-2

SDG No.:

Client Sample ID: TMW14A042015 | Lab Sample ID: 280-67561-3

Matrix: Water | Lab File ID: B2-9976.D

Analysis Method: 8270D | Date Collected: 04/08/2015 10:25

Extract. Method: 3520C | Date Extracted: 04/10/2015 10:15

Sample wt/vol: 962.2(mL) | Date Analyzed: 04/14/2015 19:52

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.: 272601 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.6	U	5.2	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	73		48-135
321-60-8	2-Fluorobiphenyl	75		48-135
367-12-4	2-Fluorophenol (Surr)	68		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	69		42-135
4165-62-2	Phenol-d5 (Surr)	71		46-135
1718-51-0	Terphenyl-d14 (Surr)	85		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9976.D
Lims ID: 280-67561-A-3-B Lab Sample ID: 280-67561-3
Client ID: TMW14A042015
Sample Type: Client
Inject. Date: 14-Apr-2015 19:52:30 ALS Bottle#: 20 Worklist Smp#: 24
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: 280-67561-A-3-A
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 15-Apr-2015 10:09:32

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
*	1 1,4-Dichlorobenzene-d4	152	4.737	4.737	0.000	95	290181	40.0	
*	2 Naphthalene-d8	136	5.983	5.988	-0.005	99	1149958	40.0	
*	3 Acenaphthene-d10	164	7.751	7.751	0.000	92	694899	40.0	
*	4 Phenanthrene-d10	188	9.255	9.261	-0.006	97	1187837	40.0	
*	5 Chrysene-d12	240	13.662	13.668	-0.006	98	1243248	40.0	
*	6 Perylene-d12	264	17.851	17.857	-0.006	97	1097405	40.0	
$	7 2-Fluorophenol	112	3.527	3.532	-0.005	93	704215	68.0	
$	8 Phenol-d5	99	4.379	4.384	-0.005	94	941666	71.1	
$	9 Nitrobenzene-d5	82	5.272	5.277	-0.005	88	776018	69.3	
$	10 2-Fluorobiphenyl	172	7.046	7.046	0.000	100	1691720	74.5	
$	11 2,4,6-Tribromophenol	330	8.556	8.556	0.000	93	232744	72.5	
$	12 Terphenyl-d14	244	11.335	11.341	-0.006	99	2190935	85.3	
	29 2-Chlorophenol	128		4.549				ND	
	31 1,4-Dichlorobenzene	146		4.754				ND	
	34 2-Methylphenol	108		4.966				ND	
	41 N-Nitrosodi-n-propylamine	70		5.095				ND	
	60 1,2,4-Trichlorobenzene	180		5.924				ND	
	67 Caprolactam	55		6.405				ND	
	69 4-Chloro-3-methylphenol	107		6.535				ND	
	71 2-Methylnaphthalene	142		6.693				ND	
	76 2,4,6-Trichlorophenol	196		6.981				ND	
	90 Acenaphthene	153		7.786				ND	
	92 4-Nitrophenol	109		7.898				ND	
	94 2,4-Dinitrotoluene	165		7.933				ND	
	120 Pentachlorophenol	266		9.067				ND	
	126 Anthracene	178		9.337				ND	
	136 Pyrene	202		11.129				ND	

Reagents:

MS-IS_00007 Amount Added: 20.00 Units: uL Run Reagent

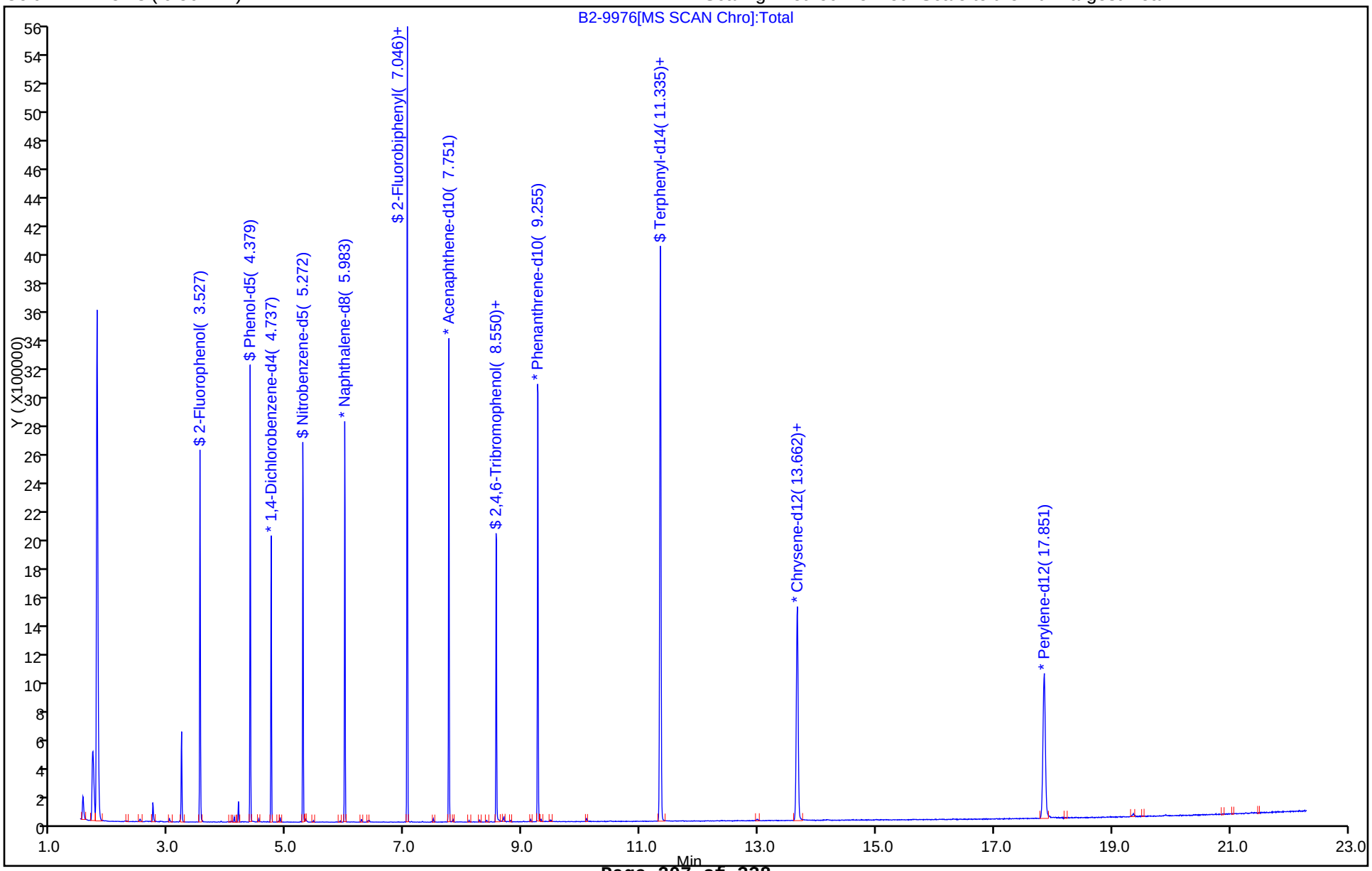
Report Date: 15-Apr-2015 10:10:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9976.D

Injection Date:	14-Apr-2015 19:52:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	280-67561-A-3-B	Lab Sample ID:	280-67561-3	Worklist Smp#:	24
Client ID:	TMW14A042015				
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SMS_B2_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.: 280-67561-2

SDG No.:

Client Sample ID: TMW15042015 | Lab Sample ID: 280-67561-7

Matrix: Water | Lab File ID: B2-9977.D

Analysis Method: 8270D | Date Collected: 04/08/2015 12:50

Extract. Method: 3520C | Date Extracted: 04/10/2015 10:15

Sample wt/vol: 912(mL) | Date Analyzed: 04/14/2015 20:20

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.: 272601 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.7	U	5.5	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	80		48-135
321-60-8	2-Fluorobiphenyl	86		48-135
367-12-4	2-Fluorophenol (Surr)	88		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	86		42-135
4165-62-2	Phenol-d5 (Surr)	90		46-135
1718-51-0	Terphenyl-d14 (Surr)	89		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9977.D
Lims ID: 280-67561-A-7-B Lab Sample ID: 280-67561-7
Client ID: TMW15042015
Sample Type: Client
Inject. Date: 14-Apr-2015 20:20:30 ALS Bottle#: 21 Worklist Smp#: 25
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: 280-67561-A-7-A
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 15-Apr-2015 10:09:44

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
*	1 1,4-Dichlorobenzene-d4	152	4.734	4.737	-0.003	96	291737	40.0	
*	2 Naphthalene-d8	136	5.986	5.988	-0.002	99	1193941	40.0	
*	3 Acenaphthene-d10	164	7.748	7.751	-0.003	92	720914	40.0	
*	4 Phenanthrene-d10	188	9.258	9.261	-0.003	97	1254826	40.0	
*	5 Chrysene-d12	240	13.659	13.668	-0.009	97	1304971	40.0	
*	6 Perylene-d12	264	17.848	17.857	-0.009	98	1148436	40.0	
$	7 2-Fluorophenol	112	3.530	3.532	-0.002	92	911173	87.6	
$	8 Phenol-d5	99	4.382	4.384	-0.002	94	1201369	90.2	
$	9 Nitrobenzene-d5	82	5.275	5.277	-0.002	87	1004417	86.4	
$	10 2-Fluorobiphenyl	172	7.043	7.046	-0.003	100	2023187	85.9	
$	11 2,4,6-Tribromophenol	330	8.553	8.556	-0.003	94	265324	79.7	
$	12 Terphenyl-d14	244	11.338	11.341	-0.003	99	2414082	89.5	
	29 2-Chlorophenol	128		4.549				ND	
	31 1,4-Dichlorobenzene	146		4.754				ND	
	34 2-Methylphenol	108		4.966				ND	
	41 N-Nitrosodi-n-propylamine	70		5.095				ND	
	60 1,2,4-Trichlorobenzene	180		5.924				ND	
	67 Caprolactam	55		6.405				ND	
	69 4-Chloro-3-methylphenol	107		6.535				ND	
	71 2-Methylnaphthalene	142		6.693				ND	
	76 2,4,6-Trichlorophenol	196		6.981				ND	
	90 Acenaphthene	153		7.786				ND	
	92 4-Nitrophenol	109		7.898				ND	
	94 2,4-Dinitrotoluene	165		7.933				ND	
	120 Pentachlorophenol	266		9.067				ND	
	126 Anthracene	178		9.337				ND	
	136 Pyrene	202		11.129				ND	

Reagents:

MS-IS_00007 Amount Added: 20.00 Units: uL Run Reagent

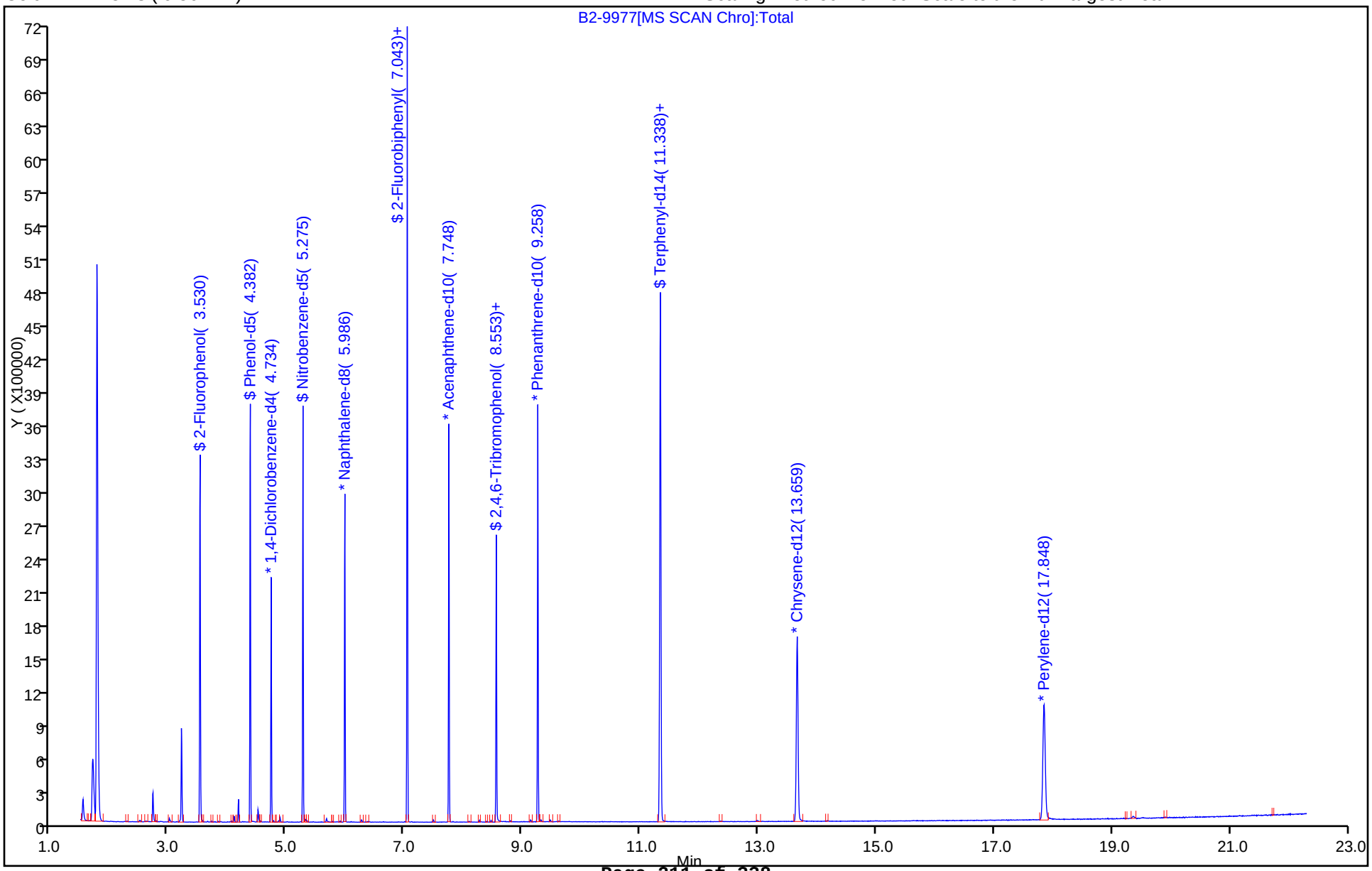
Report Date: 15-Apr-2015 10:10:39 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9977.D

Injection Date:	14-Apr-2015 20:20:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	280-67561-A-7-B	Lab Sample ID:	280-67561-7	Worklist Smp#:	25
Client ID:	TMW15042015				
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	SMS_B2_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.: 280-67561-2

SDG No.:

Client Sample ID: DTW15042015 | Lab Sample ID: 280-67561-8

Matrix: Water | Lab File ID: B2-9978.D

Analysis Method: 8270D | Date Collected: 04/08/2015 12:50

Extract. Method: 3520C | Date Extracted: 04/10/2015 10:15

Sample wt/vol: 949.7(mL) | Date Analyzed: 04/14/2015 20:49

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.: 272601 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.6	U	5.3	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	74		48-135
321-60-8	2-Fluorobiphenyl	80		48-135
367-12-4	2-Fluorophenol (Surr)	73		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	73		42-135
4165-62-2	Phenol-d5 (Surr)	77		46-135
1718-51-0	Terphenyl-d14 (Surr)	85		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9978.D
Lims ID: 280-67561-B-8-B Lab Sample ID: 280-67561-8
Client ID: DTW15042015
Sample Type: Client
Inject. Date: 14-Apr-2015 20:49:30 ALS Bottle#: 22 Worklist Smp#: 26
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: 280-67561-B-8-A
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 15-Apr-2015 10:09:58

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
*	1 1,4-Dichlorobenzene-d4	152	4.734	4.737	-0.003	96	292424	40.0	
*	2 Naphthalene-d8	136	5.985	5.988	-0.003	99	1186539	40.0	
*	3 Acenaphthene-d10	164	7.748	7.751	-0.003	92	715001	40.0	
*	4 Phenanthrene-d10	188	9.258	9.261	-0.003	97	1230010	40.0	
*	5 Chrysene-d12	240	13.659	13.668	-0.009	97	1280075	40.0	
*	6 Perylene-d12	264	17.848	17.857	-0.009	98	1113821	40.0	
$	7 2-Fluorophenol	112	3.529	3.532	-0.003	92	763105	73.2	
$	8 Phenol-d5	99	4.381	4.384	-0.003	94	1025745	76.9	
$	9 Nitrobenzene-d5	82	5.274	5.277	-0.003	87	847923	73.4	
$	10 2-Fluorobiphenyl	172	7.043	7.046	-0.003	100	1869435	80.1	
$	11 2,4,6-Tribromophenol	330	8.553	8.556	-0.003	94	243219	73.7	
$	12 Terphenyl-d14	244	11.338	11.341	-0.003	100	2247578	84.9	
	29 2-Chlorophenol	128		4.549				ND	
	31 1,4-Dichlorobenzene	146		4.754				ND	
	34 2-Methylphenol	108		4.966				ND	
	41 N-Nitrosodi-n-propylamine	70		5.095				ND	
	60 1,2,4-Trichlorobenzene	180		5.924				ND	
	67 Caprolactam	55		6.405				ND	
	69 4-Chloro-3-methylphenol	107		6.535				ND	
	71 2-Methylnaphthalene	142		6.693				ND	
	76 2,4,6-Trichlorophenol	196		6.981				ND	
	90 Acenaphthene	153		7.786				ND	
	92 4-Nitrophenol	109		7.898				ND	
	94 2,4-Dinitrotoluene	165		7.933				ND	
	120 Pentachlorophenol	266		9.067				ND	
	126 Anthracene	178		9.337				ND	
	136 Pyrene	202		11.129				ND	

Reagents:

MS-IS_00007 Amount Added: 20.00 Units: uL Run Reagent

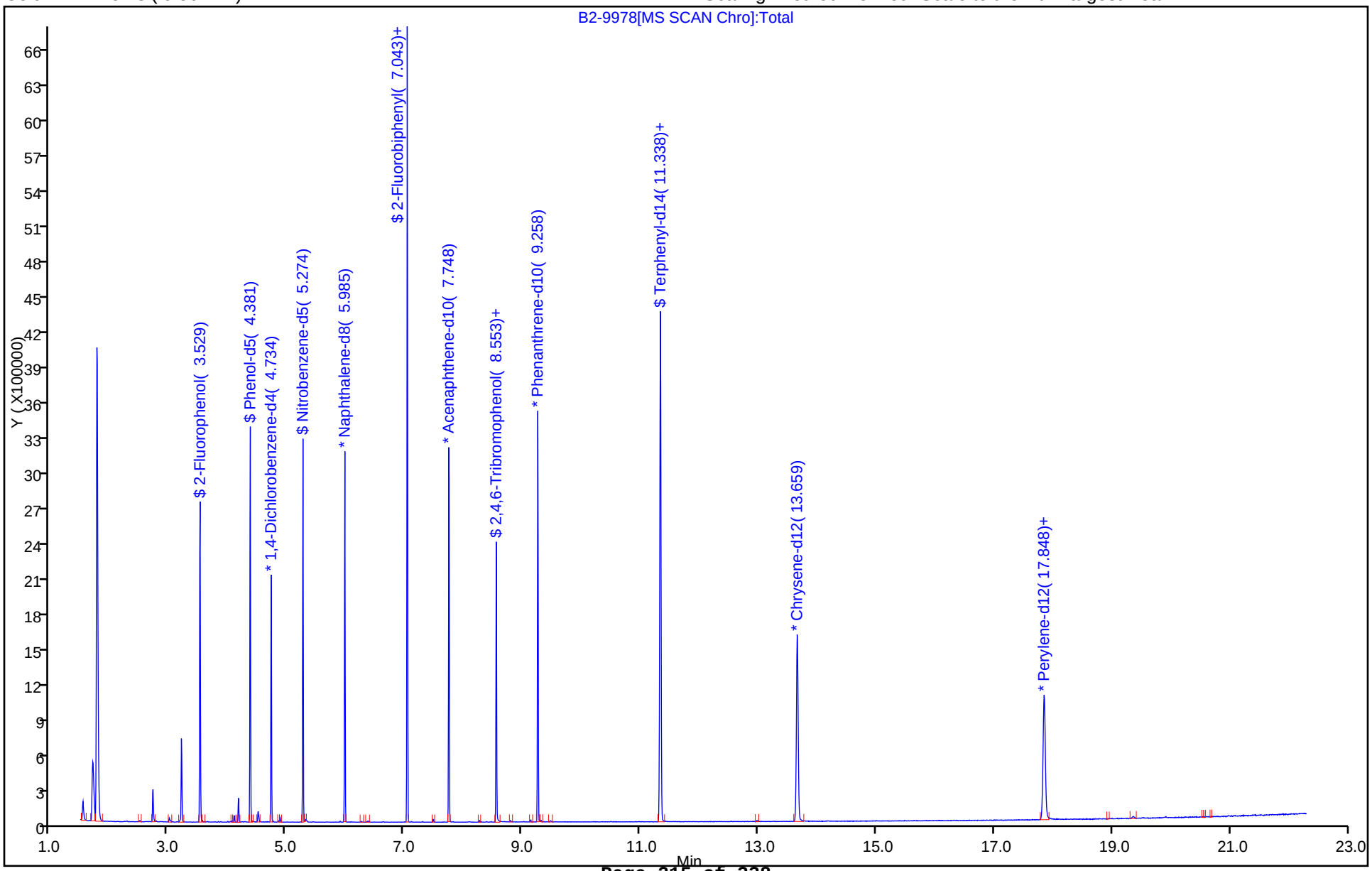
Report Date: 15-Apr-2015 10:10:39 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9978.D

Injection Date:	14-Apr-2015 20:49:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	280-67561-B-8-B	Lab Sample ID:	280-67561-8	Worklist Smp#:	26
Client ID:	DTW15042015				
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	SMS_B2_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.: 280-67561-2

SDG No.:

Client Sample ID: TMW38042015 | Lab Sample ID: 280-67561-9

Matrix: Water | Lab File ID: B2-9979.D

Analysis Method: 8270D | Date Collected: 04/08/2015 10:32

Extract. Method: 3520C | Date Extracted: 04/10/2015 10:15

Sample wt/vol: 898.6(mL) | Date Analyzed: 04/14/2015 21:17

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.: 272601 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.8	U	5.6	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	78		48-135
321-60-8	2-Fluorobiphenyl	78		48-135
367-12-4	2-Fluorophenol (Surr)	74		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	73		42-135
4165-62-2	Phenol-d5 (Surr)	76		46-135
1718-51-0	Terphenyl-d14 (Surr)	75		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9979.D
Lims ID: 280-67561-C-9-B Lab Sample ID: 280-67561-9
Client ID: TMW38042015
Sample Type: Client
Inject. Date: 14-Apr-2015 21:17:30 ALS Bottle#: 23 Worklist Smp#: 27
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: 280-67561-C-9-A
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 15-Apr-2015 10:10:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
*	1 1,4-Dichlorobenzene-d4	152	4.731	4.737	-0.006	96	299716	40.0	
*	2 Naphthalene-d8	136	5.983	5.988	-0.005	99	1196811	40.0	
*	3 Acenaphthene-d10	164	7.751	7.751	0.000	92	720239	40.0	
*	4 Phenanthrene-d10	188	9.255	9.261	-0.006	97	1231024	40.0	
*	5 Chrysene-d12	240	13.656	13.668	-0.012	97	1290944	40.0	
*	6 Perylene-d12	264	17.845	17.857	-0.012	97	1129162	40.0	
$	7 2-Fluorophenol	112	3.527	3.532	-0.005	92	785991	73.5	
$	8 Phenol-d5	99	4.379	4.384	-0.005	94	1033415	75.6	
$	9 Nitrobenzene-d5	82	5.272	5.277	-0.005	88	850482	73.0	
$	10 2-Fluorobiphenyl	172	7.046	7.046	0.000	100	1833407	77.9	
$	11 2,4,6-Tribromophenol	330	8.556	8.556	0.000	94	259285	78.0	
$	12 Terphenyl-d14	244	11.335	11.341	-0.006	99	1989926	74.6	
	29 2-Chlorophenol	128		4.549				ND	
	31 1,4-Dichlorobenzene	146		4.754				ND	
	34 2-Methylphenol	108		4.966				ND	
	41 N-Nitrosodi-n-propylamine	70		5.095				ND	
	60 1,2,4-Trichlorobenzene	180		5.924				ND	
	67 Caprolactam	55		6.405				ND	
	69 4-Chloro-3-methylphenol	107		6.535				ND	
	71 2-Methylnaphthalene	142		6.693				ND	
	76 2,4,6-Trichlorophenol	196		6.981				ND	
	90 Acenaphthene	153		7.786				ND	
	92 4-Nitrophenol	109		7.898				ND	
	94 2,4-Dinitrotoluene	165		7.933				ND	
	120 Pentachlorophenol	266		9.067				ND	
	126 Anthracene	178		9.337				ND	
	136 Pyrene	202		11.129				ND	

Reagents:

MS-IS_00007 Amount Added: 20.00 Units: uL Run Reagent

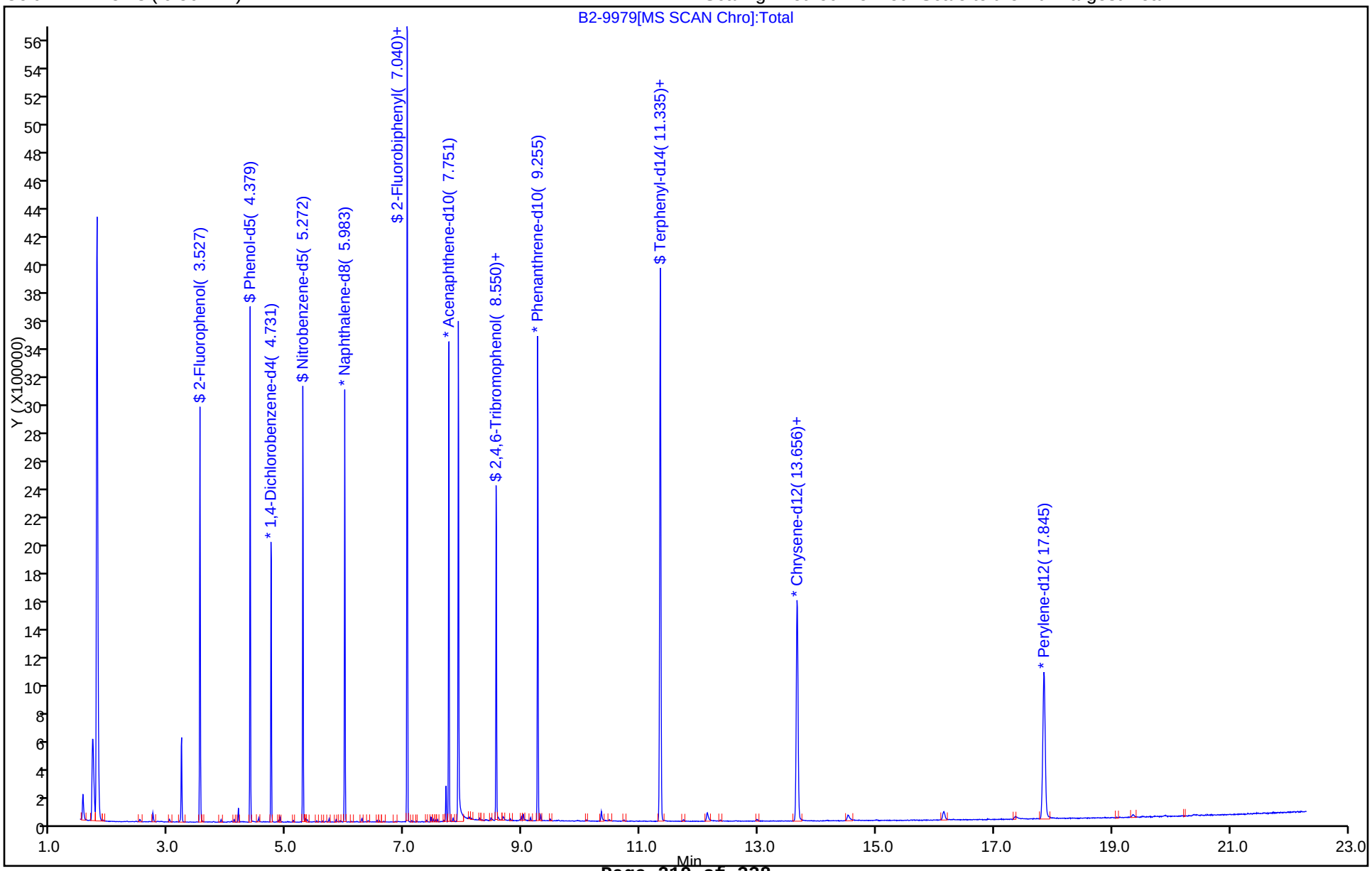
Report Date: 15-Apr-2015 10:10:40 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9979.D

Injection Date:	14-Apr-2015 21:17:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	280-67561-C-9-B	Lab Sample ID:	280-67561-9	Worklist Smp#:	27
Client ID:	TMW38042015				
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	SMS_B2_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.: 280-67561-2

SDG No.:

Client Sample ID: SMW01042015 | Lab Sample ID: 280-67561-10

Matrix: Water | Lab File ID: B2-9980.D

Analysis Method: 8270D | Date Collected: 04/08/2015 10:45

Extract. Method: 3520C | Date Extracted: 04/10/2015 10:15

Sample wt/vol: 982.8(mL) | Date Analyzed: 04/14/2015 21:46

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.: 272601 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	2.5	U	5.1	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	74		48-135
321-60-8	2-Fluorobiphenyl	82		48-135
367-12-4	2-Fluorophenol (Surr)	72		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	75		42-135
4165-62-2	Phenol-d5 (Surr)	75		46-135
1718-51-0	Terphenyl-d14 (Surr)	64		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9980.D
Lims ID: 280-67561-A-10-B Lab Sample ID: 280-67561-10
Client ID: SMW01042015
Sample Type: Client
Inject. Date: 14-Apr-2015 21:46:30 ALS Bottle#: 24 Worklist Smp#: 28
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: 280-67561-A-10-A
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 15-Apr-2015 10:10:21

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
*	1 1,4-Dichlorobenzene-d4	152	4.737	4.737	0.000	96	299405	40.0	
*	2 Naphthalene-d8	136	5.982	5.988	-0.006	99	1196501	40.0	
*	3 Acenaphthene-d10	164	7.751	7.751	0.000	92	721430	40.0	
*	4 Phenanthrene-d10	188	9.261	9.261	0.000	97	1233987	40.0	
*	5 Chrysene-d12	240	13.662	13.668	-0.006	97	1285408	40.0	
*	6 Perylene-d12	264	17.845	17.857	-0.012	97	1113440	40.0	
$	7 2-Fluorophenol	112	3.526	3.532	-0.006	95	764344	71.6	
$	8 Phenol-d5	99	4.378	4.384	-0.006	93	1027719	75.2	
$	9 Nitrobenzene-d5	82	5.271	5.277	-0.006	87	870534	74.7	
$	10 2-Fluorobiphenyl	172	7.046	7.046	0.000	100	1923959	81.7	
$	11 2,4,6-Tribromophenol	330	8.556	8.556	0.000	93	247777	74.4	
$	12 Terphenyl-d14	244	11.335	11.341	-0.006	99	1688431	63.5	
	29 2-Chlorophenol	128		4.549				ND	
	31 1,4-Dichlorobenzene	146		4.754				ND	
	34 2-Methylphenol	108		4.966				ND	
	41 N-Nitrosodi-n-propylamine	70		5.095				ND	
	60 1,2,4-Trichlorobenzene	180		5.924				ND	
	67 Caprolactam	55		6.405				ND	
	69 4-Chloro-3-methylphenol	107		6.535				ND	
	71 2-Methylnaphthalene	142		6.693				ND	
	76 2,4,6-Trichlorophenol	196		6.981				ND	
	90 Acenaphthene	153		7.786				ND	
	92 4-Nitrophenol	109		7.898				ND	
	94 2,4-Dinitrotoluene	165		7.933				ND	
	120 Pentachlorophenol	266		9.067				ND	
	126 Anthracene	178		9.337				ND	
	136 Pyrene	202		11.129				ND	

Reagents:

MS-IS_00007 Amount Added: 20.00 Units: uL Run Reagent

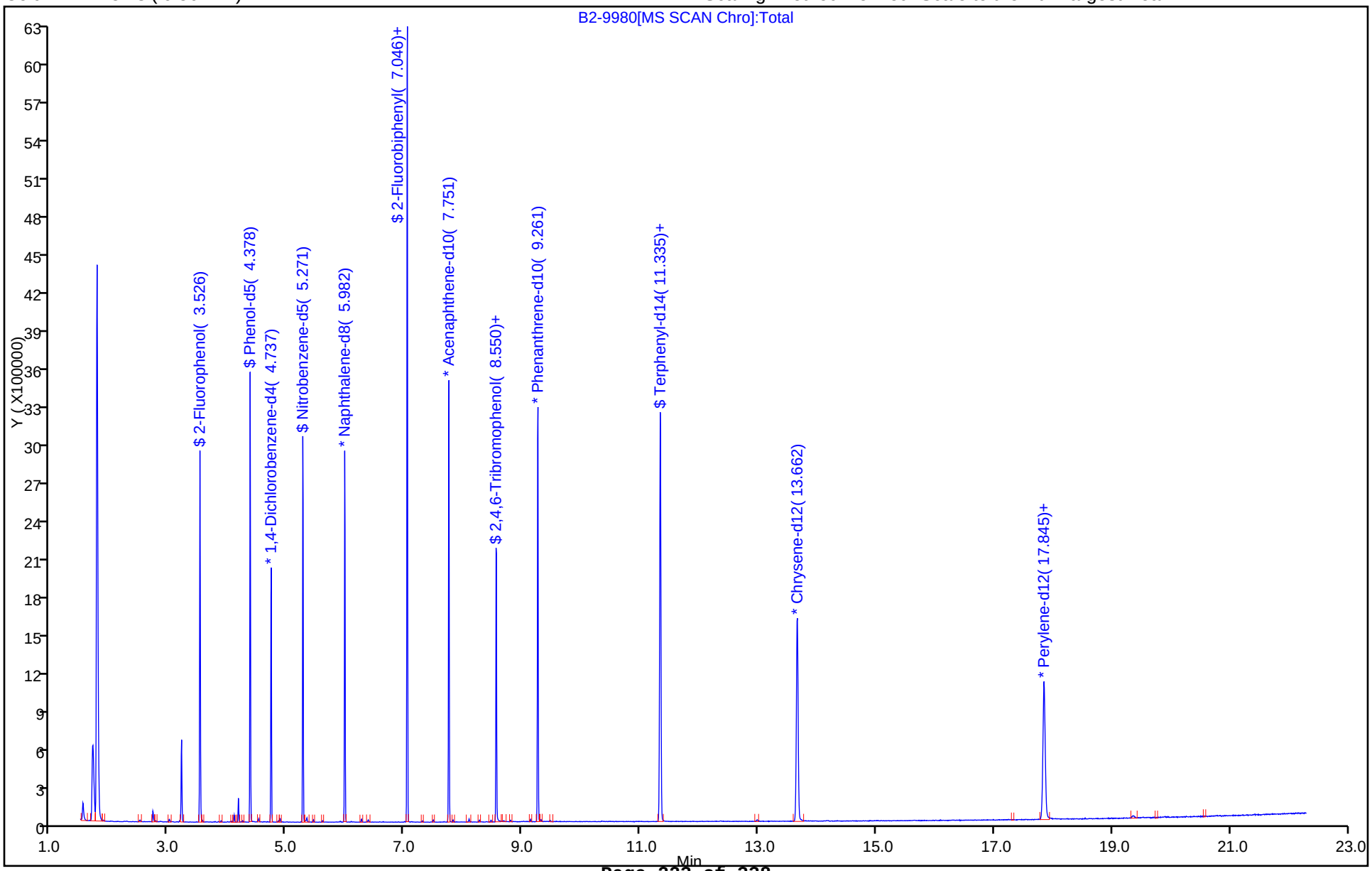
Report Date: 15-Apr-2015 10:10:40 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9980.D

Injection Date:	14-Apr-2015 21:46:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	280-67561-A-10-B	Lab Sample ID:	280-67561-10	Worklist Smp#:	28
Client ID:	SMW01042015				
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	SMS_B2_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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD004 280-266830/4	B2-9364.D
Level 2	STD010 280-266830/5	B2-9365.D
Level 3	STD020 280-266830/6	B2-9366.D
Level 4	STD050 280-266830/7	B2-9367.D
Level 5	ICIS 280-266830/3	B2-9363.D
Level 6	STD120 280-266830/8	B2-9368.D
Level 7	STD160 280-266830/9	B2-9369.D
Level 8	STD200 280-266830/10	B2-9370.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.6406 0.6285	0.6179 0.5762	0.6342 0.6381	0.6222	0.6217	Ave		0.6224				3.3		20.0			
N-Nitrosodimethylamine	0.9155 0.9536	0.9173 0.9263	0.9911 0.9592	0.9640	0.9283	Ave		0.9444				2.8		20.0			
Pyridine	1.7007 1.6956	1.6226 1.6284	1.6984 1.6616	1.6969	1.6523	Ave		1.6696				2.0		20.0			
Phenol	1.9657 1.8514	1.7992 1.7901	1.9720 1.7357	1.8307	1.7781	Ave		1.8404			0.8000	4.7		20.0			
Aniline	2.2404 2.2237	2.1452 2.1578	2.3370 2.1843	2.2655	2.1721	Ave		2.2157				2.9		20.0			
Bis(2-chloroethyl)ether	1.4023 1.3951	1.3461 1.3451	1.4572 1.3021	1.4080	1.3667	Ave		1.3778			0.7000	3.5		20.0			
2-Chlorophenol	1.4331 1.4343	1.4007 1.4085	1.4797 1.3665	1.4546	1.4378	Ave		1.4269			0.8000	2.4		20.0			
1,3-Dichlorobenzene	1.5284 1.5478	1.6125 1.5053	1.6027 1.5169	1.5412	1.5729	Ave		1.5535				2.5		20.0			
1,4-Dichlorobenzene	1.6403 1.5652	1.6403 1.4920	1.5923 1.5496	1.5589	1.5901	Ave		1.5786				3.1		20.0			
Benzyl alcohol	0.9521 0.9858	0.9685 0.9666	0.9586 0.9374	0.9587	0.9974	Ave		0.9656				2.0		20.0			
1,2-Dichlorobenzene	1.5566 1.5034	1.5575 1.4670	1.5281 1.4455	1.4764	1.5341	Ave		1.5086				2.8		20.0			
2-Methylphenol	1.4246 1.3845	1.3701 1.3437	1.3572 1.2973	1.3707	1.3899	Ave		1.3672			0.7000	2.7		20.0			
bis (2-chloroisopropyl) ether	1.6928 1.6744	1.7210 1.6154	1.6264 1.5117	1.7052	1.7417	Ave		1.6611			0.0100	4.5		20.0			
3 & 4 Methylphenol	1.3691 1.4255	1.3534 1.3756	1.4092 1.3613	1.4111	1.4473	Ave		1.3941				2.4		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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	1.3691 1.4255	1.3534 1.3756	1.4092 1.3613	1.4111	1.4473	Ave		1.3941				2.4		20.0			
4-Methylphenol	1.3691 1.4255	1.3534 1.3756	1.4092 1.3613	1.4111	1.4473	Ave		1.3941			0.6000	2.4		20.0			
N-Nitrosodi-n-propylamine	0.9756 0.9989	0.9405 0.9567	0.9657 0.9380	0.9655	1.0086	Ave		0.9687			0.5000	2.6		20.0			
Acetophenone	1.9085 1.9660	1.8808 1.9142	1.9760 1.8337	1.9162	1.9765	Ave		1.9215			0.0100	2.6		20.0			
Hexachloroethane	0.6112 0.6078	0.5775 0.5801	0.5865 0.6162	0.6072	0.5800	Ave		0.5958			0.3000	2.7		20.0			
Nitrobenzene	0.4290 0.3943	0.3817 0.3950	0.3993 0.3795	0.4175	0.3835	Ave		0.3975				4.4		20.0			
Isophorone	0.7039 0.6516	0.6366 0.6533	0.6618 0.5813	0.6820	0.6850	Ave		0.6569			0.4000	5.7		20.0			
2-Nitrophenol	0.1865 0.2029	0.1853 0.1992	0.1866 0.1888	0.1968	0.2085	Ave		0.1943			0.1000	4.5		20.0			
2,4-Dimethylphenol	0.3781 0.3568	0.3563 0.3538	0.3449 0.3214	0.3576	0.3781	Ave		0.3559			0.2000	5.1		20.0			
Bis(2-chloroethoxy)methane	0.4594 0.4245	0.4446 0.4254	0.4029 0.4137	0.4277	0.4452	Ave		0.4304			0.3000	4.3		20.0			
Benzoic acid	0.1414 0.2625	0.1592 0.2738	0.1760 0.2753	0.2239	0.2530	Lin1	-1.789	0.2712							0.9960		0.9900
2,4-Dichlorophenol	0.3075 0.3144	0.3058 0.3178	0.3047 0.3077	0.3301	0.3223	Ave		0.3138			0.2000	2.9		20.0			
1,2,4-Trichlorobenzene	0.3554 0.3515	0.3451 0.3576	0.3421 0.3419	0.3543	0.3489	Ave		0.3496				1.7		20.0			
Naphthalene	1.1656 0.9941	1.0557 0.9567	1.0311 0.9161	1.0941	1.0110	Ave		1.0281			0.7000	7.6		20.0			
4-Chloroaniline	0.4871 0.4616	0.4571 0.4622	0.4672 0.4456	0.4898	0.4682	Ave		0.4674			0.0100	3.2		20.0			
Hexachlorobutadiene	0.2006 0.1959	0.1932 0.1923	0.1976 0.1844	0.2040	0.1912	Ave		0.1949			0.0100	3.1		20.0			
Caprolactam	0.1478 0.1624	0.1500 0.1569	0.1612 0.1450	0.1565	0.1627	Ave		0.1553				4.4		20.0			
4-Chloro-3-methylphenol	0.2813 0.3095	0.2971 0.3164	0.3179 0.2803	0.3276	0.3111	Ave		0.3051			0.2000	5.7		20.0			
2-Methylnaphthalene	0.6732 0.6944	0.6949 0.6748	0.7269 0.6207	0.7107	0.7275	Ave		0.6904			0.4000	5.1		20.0			
1-Methylnaphthalene	0.6093 0.6434	0.6893 0.6536	0.6852 0.5728	0.6626	0.6759	Ave		0.6490				6.2		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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	0.2575 0.3382	0.2679 0.3284	0.2852 0.3556	0.3041	0.3335	Ave		0.3088			0.0500	12.0		20.0			
1,2,4,5-Tetrachlorobenzene	0.3118 0.3467	0.3469 0.3591	0.3559 0.3184	0.3480	0.3589	Ave		0.3432			0.0100	5.3		20.0			
2,4,6-Trichlorophenol	0.3646 0.3730	0.3644 0.3735	0.3595 0.3849	0.3623	0.3731	Ave		0.3694			0.2000	2.2		20.0			
2,4,5-Trichlorophenol	0.3520 0.4008	0.3895 0.4060	0.3958 0.4155	0.3793	0.4021	Ave		0.3926			0.2000	5.0		20.0			
1,1'-Biphenyl	1.4645 1.3950	1.5465 1.3622	1.4621 1.3888	1.3649	1.4157	Ave		1.4250				4.4		20.0			
2-Chloronaphthalene	1.1459 1.1109	1.2061 1.1019	1.1575 1.1289	1.1178	1.1229	Ave		1.1365			0.8000	2.9		20.0			
2-Nitroaniline	0.2877 0.3447	0.3143 0.3341	0.3245 0.3294	0.3493	0.3454	Ave		0.3287			0.0100	6.2		20.0			
Dimethyl phthalate	1.2638 1.2130	1.2515 1.1498	1.2433 1.2158	1.2585	1.1874	Ave		1.2229			0.0100	3.2		20.0			
1,3-Dinitrobenzene	0.1712 0.2287	0.1976 0.2190	0.1929 0.2338	0.2220	0.2214	Ave		0.2108				10.0		20.0			
2,6-Dinitrotoluene	0.2812 0.3036	0.3029 0.2968	0.2874 0.3022	0.3060	0.3018	Ave		0.2977			0.2000	3.0		20.0			
Acenaphthylene	1.6935 1.6215	1.8077 1.5873	1.6366 1.5976	1.7071	1.6064	Ave		1.6572			0.9000	4.5		20.0			
3-Nitroaniline	0.3380 0.3603	0.3541 0.3582	0.3427 0.3500	0.3544	0.3583	Ave		0.3520			0.0100	2.3		20.0			
Acenaphthene	1.1652 1.1018	1.1669 1.1001	1.1149 1.0745	1.1200	1.1204	Ave		1.1205			0.9000	2.8		20.0			
2,4-Dinitrophenol	0.0500 0.1874	0.0792 0.1989	0.1068 0.2067	0.1558	0.1765	Lin1	-1.916	0.1993			0.0100				0.9920		0.9900
4-Nitrophenol	0.1261 0.1636	0.1444 0.1661	0.1486 0.1545	0.1602	0.1654	Ave		0.1536			0.0100	8.9		20.0			
2,4-Dinitrotoluene	0.3615 0.4001	0.3730 0.4013	0.3734 0.3894	0.3823	0.4028	Ave		0.3855			0.2000	4.0		20.0			
Dibenzofuran	1.6365 1.5169	1.6587 1.5030	1.5603 1.4272	1.5427	1.5820	Ave		1.5534			0.8000	4.8		20.0			
2,3,4,6-Tetrachlorophenol	0.2619 0.3370	0.2889 0.3449	0.2902 0.3244	0.3069	0.3314	Ave		0.3107			0.0100	9.2		20.0			
Diethyl phthalate	1.2171 1.1434	1.2805 1.1402	1.1560 1.0980	1.1764	1.1700	Ave		1.1727			0.0100	4.7		20.0			
4-Chlorophenyl phenyl ether	0.6664 0.6393	0.6928 0.6419	0.6564 0.6132	0.6172	0.6451	Ave		0.6465			0.4000	4.0		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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	1.3303 1.2629	1.3506 1.2650	1.3313 1.2156	1.2374	1.2951	Ave		1.2860			0.9000	3.8		20.0			
4-Nitroaniline	0.3236 0.3529	0.3288 0.3520	0.3369 0.3264	0.3211	0.3517	Ave		0.3367			0.0100	4.1		20.0			
4,6-Dinitro-2-methylphenol	0.0738 0.1543	0.0942 0.1527	0.1216 0.1534	0.1349	0.1512	Lin2	-0.678	0.1487			0.0100				0.9930		0.9900
N-Nitrosodiphenylamine	0.5659 0.5535	0.5411 0.5436	0.5730 0.5317	0.5153	0.5768	Ave		0.5501			0.0100	3.9		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.2079 1.2636	1.3265 1.2509	1.3009 1.1227	1.1530	1.2340	Ave		1.2325				5.6		20.0			
Azobenzene	1.2212 1.2775	1.3411 1.2646	1.3152 1.1350	1.1657	1.2476	Ave		1.2460				5.6		20.0			
4-Bromophenyl phenyl ether	0.2185 0.2159	0.2092 0.2139	0.2175 0.2099	0.1979	0.2224	Ave		0.2132			0.1000	3.5		20.0			
Hexachlorobenzene	0.2456 0.2381	0.2291 0.2351	0.2329 0.2354	0.2220	0.2381	Ave		0.2345			0.1000	3.0		20.0			
Pentachlorophenol	0.0504 0.1394	0.0728 0.1454	0.0947 0.1492	0.1207	0.1371	Lin1	-1.156	0.1464			0.0500				0.9960		0.9900
Phenanthrene	1.1535 1.0723	1.1490 1.0299	1.1383 1.0081	1.0983	1.1482	Ave		1.0997			0.7000	5.2		20.0			
Anthracene	1.1456 1.1095	1.1476 1.0630	1.1385 1.0398	1.0879	1.1714	Ave		1.1129			0.7000	4.1		20.0			
Carbazole	1.0868 0.9960	1.0340 0.9994	1.0694 0.9725	1.0431	1.0587	Ave		1.0325			0.0100	3.9		20.0			
Di-n-butyl phthalate	1.1684 1.1542	1.1149 1.1125	1.1574 1.0781	1.1004	1.2335	Ave		1.1399			0.0100	4.3		20.0			
Fluoranthene	1.2562 1.1955	1.2585 1.2064	1.2143 1.1091	1.2537	1.3117	Ave		1.2257			0.6000	4.9		20.0			
Pyrene	1.1880 1.0681	1.2116 1.1295	1.0970 1.0916	1.1526	1.2292	Ave		1.1459			0.6000	5.2		20.0			
Famphur	0.3793 0.3794	0.3964 0.3545	0.3865 0.3310	0.3755	0.4031	Ave		0.3757				6.2		20.0			
Butyl benzyl phthalate	0.4432 0.4632	0.4480 0.4687	0.4428 0.4538	0.4442	0.4944	Ave		0.4573			0.0100	3.9		20.0			
3,3'-Dichlorobenzidine	0.3978 0.4146	0.3879 0.4086	0.3927 0.4104	0.4091	0.4277	Ave		0.4061			0.0100	3.2		20.0			
Benzo[a]anthracene	1.1005 1.0739	1.0953 1.0630	1.0648 1.0608	1.0798	1.0969	Ave		1.0794			0.8000	1.5		20.0			
Bis(2-ethylhexyl) phthalate	0.6037 0.6255	0.5852 0.6190	0.5821 0.6190	0.6116	0.6428	Ave		0.6111			0.0100	3.3		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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	0.9901 0.9770	0.9989 0.9916	0.9921 0.9815	0.9985	1.0168	Ave		0.9933			0.7000	1.2		20.0			
Di-n-octyl phthalate	0.8892 1.0096	0.8443 1.0275	0.8801 1.0399	0.8881	1.0687	Ave		0.9559			0.0100	9.3		20.0			
Benzo[b]fluoranthene	1.0345 1.1067	1.1154 1.1216	1.0361 1.1244	1.0857	1.1770	Ave		1.1002			0.7000	4.3		20.0			
Benzo[k]fluoranthene	1.1001 1.1511	1.1710 1.2035	1.1401 1.1491	1.1418	1.2319	Ave		1.1611			0.7000	3.5		20.0			
Benzo[a]pyrene	1.0060 1.0954	1.0438 1.1343	1.0433 1.1098	1.0679	1.1653	Ave		1.0832			0.7000	4.9		20.0			
Indeno[1,2,3-cd]pyrene	0.7584 0.8319	0.7701 0.8786	0.7851 0.8782	0.7968	0.7613	Ave		0.8075			0.5000	6.1		20.0			
Dibenz(a,h)anthracene	0.8473 1.0000	0.9042 0.9983	0.8409 1.0070	0.9463	0.9668	Ave		0.9389			0.4000	7.2		20.0			
Benzo[g,h,i]perylene	0.9523 1.0146	0.9944 1.0418	0.9658 1.0184	1.0168	0.9981	Ave		1.0003			0.5000	2.9		20.0			
2-Fluorophenol (Surr)	1.4734 1.4302	1.4246 1.3521	1.4260 1.4144	1.4481	1.4454	Ave		1.4268				2.5		20.0			
Phenol-d5 (Surr)	1.8779 1.8200	1.8001 1.7909	1.9434 1.7597	1.8019	1.8095	Ave		1.8254				3.2		20.0			
Nitrobenzene-d5 (Surr)	0.4285 0.3906	0.3769 0.3888	0.3590 0.3824	0.4088	0.3809	Ave		0.3895				5.4		20.0			
2-Fluorobiphenyl	1.3746 1.2898	1.3592 1.2517	1.3367 1.2715	1.2877	1.2796	Ave		1.3063				3.4		20.0			
2,4,6-Tribromophenol (Surr)	0.1728 0.1968	0.1778 0.1987	0.1733 0.1907	0.1769	0.1909	Ave		0.1847				5.8		20.0			
Terphenyl-d14 (Surr)	0.8231 0.8272	0.8446 0.8232	0.8163 0.8073	0.7960	0.8766	Ave		0.8268				3.0		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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD004 280-266830/4	B2-9364.D
Level 2	STD010 280-266830/5	B2-9365.D
Level 3	STD020 280-266830/6	B2-9366.D
Level 4	STD050 280-266830/7	B2-9367.D
Level 5	ICIS 280-266830/3	B2-9363.D
Level 6	STD120 280-266830/8	B2-9368.D
Level 7	STD160 280-266830/9	B2-9369.D
Level 8	STD200 280-266830/10	B2-9370.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	21442 636884	52192 772400	104465 1018679	267065	414655	4.00 120	10.0 160	20.0 200	50.0	80.0
N-Nitrosodimethylamine	DCB	Ave	30647 966369	77486 1241636	163249 1531212	413764	619141	4.00 120	10.0 160	20.0 200	50.0	80.0
Pyridine	DCB	Ave	56929 1718281	137064 2182822	279752 2652428	728341	1101996	4.00 120	10.0 160	20.0 200	50.0	80.0
Phenol	DCB	Ave	65801 1876187	151977 2399490	324817 2770724	785773	1185883	4.00 120	10.0 160	20.0 200	50.0	80.0
Aniline	DCB	Ave	74997 2253418	181209 2892424	384927 3486857	972392	1448676	4.00 120	10.0 160	20.0 200	50.0	80.0
Bis(2-chloroethyl)ether	DCB	Ave	46942 1413747	113702 1803043	240018 2078614	604327	911520	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Chlorophenol	DCB	Ave	47973 1453532	118319 1888037	243726 2181459	624344	958960	4.00 120	10.0 160	20.0 200	50.0	80.0
1,3-Dichlorobenzene	DCB	Ave	51161 1568514	136205 2017790	263982 2421525	661518	1049020	4.00 120	10.0 160	20.0 200	50.0	80.0
1,4-Dichlorobenzene	DCB	Ave	54908 1586166	138555 1999895	262265 2473682	669121	1060503	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzyl alcohol	DCB	Ave	31871 999009	81812 1295626	157899 1496405	411507	665204	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2-Dichlorobenzene	DCB	Ave	52106 1523472	131566 1966386	251701 2307470	633702	1023199	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Methylphenol	DCB	Ave	47687 1402981	115736 1801111	223543 2070974	588337	926992	4.00 120	10.0 160	20.0 200	50.0	80.0
bis (2-chloroisopropyl) ether	DCB	Ave	56664 1696847	145376 2165373	267888 2413235	731910	1161662	4.00 120	10.0 160	20.0 200	50.0	80.0
3 & 4 Methylphenol	DCB	Ave	45830 1444599	114323 1843919	232111 2173036	605657	965283	4.00 120	10.0 160	20.0 200	50.0	80.0
3-Methylphenol	DCB	Ave	45830 1444599	114323 1843919	232111 2173036	605657	965283	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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	45830 1444599	114323 1843919	232111 2173036	605657	965283	4.00 120	10.0 160	20.0 200	50.0	80.0
N-Nitrosodi-n-propylamine	DCB	Ave	32659 1012306	79448 1282470	159057 1497392	414427	672707	4.00 120	10.0 160	20.0 200	50.0	80.0
Acetophenone	DCB	Ave	63887 1992330	158871 2565889	325478 2927209	822463	1318263	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachloroethane	DCB	Ave	20458 615890	48778 777536	96602 983593	260631	386838	4.00 120	10.0 160	20.0 200	50.0	80.0
Nitrobenzene	NPT	Ave	52566 1557810	121515 1985598	255758 2427893	670282	969202	4.00 120	10.0 160	20.0 200	50.0	80.0
Isophorone	NPT	Ave	86249 2574245	202652 3283916	423856 3719096	1094936	1731031	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Nitrophenol	NPT	Ave	22857 801526	58974 1001157	119541 1207883	315942	526795	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4-Dimethylphenol	NPT	Ave	46326 1409458	113429 1778286	220910 2056184	574080	955523	4.00 120	10.0 160	20.0 200	50.0	80.0
Bis(2-chloroethoxy)methane	NPT	Ave	56290 1677228	141526 2138563	258022 2646629	686671	1125138	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzoic acid	NPT	Lin1	34657 2074266	101325 2752973	225473 3522423	719007	1278663	8.00 240	20.0 320	40.0 400	100	160
2,4-Dichlorophenol	NPT	Ave	37680 1242181	97346 1597358	195170 1968913	529916	814616	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2,4-Trichlorobenzene	NPT	Ave	43542 1388672	109861 1797707	219102 2187641	568827	881796	4.00 120	10.0 160	20.0 200	50.0	80.0
Naphthalene	NPT	Ave	142826 3927520	336058 4809148	660378 5861505	1756657	2554810	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Chloroaniline	NPT	Ave	59687 1823708	145502 2323242	299206 2851224	786459	1183322	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachlorobutadiene	NPT	Ave	24576 773956	61487 966837	126545 1179779	327565	483276	4.00 120	10.0 160	20.0 200	50.0	80.0
Caprolactam	NPT	Ave	18115 641520	47762 788872	103255 927646	251279	411092	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Chloro-3-methylphenol	NPT	Ave	34466 1222697	94565 1590399	203607 1793270	525912	786292	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Methylnaphthalene	NPT	Ave	82488 2743621	221216 3392160	465578 3971436	1141046	1838528	4.00 120	10.0 160	20.0 200	50.0	80.0
1-Methylnaphthalene	NPT	Ave	74664 2541782	219417 3285158	438871 3664946	1063786	1708203	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachlorocyclopentadiene	ANT	Ave	15825 810923	50105 1031760	113055 1222753	309099	524906	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2,4,5-Tetrachlorobenzene	NPT	Ave	38202 1369725	110422 1805178	227954 2037186	558723	907000	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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	22407 894280	68164 1173522	142508 1323705	368260	587243	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4,5-Trichlorophenol	ANT	Ave	21633 960936	72846 1275441	156900 1428818	385555	632838	4.00 120	10.0 160	20.0 200	50.0	80.0
1,1'-Biphenyl	ANT	Ave	90009 3344961	289251 4279926	579576 4775732	1387406	2227961	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Chloronaphthalene	ANT	Ave	70424 2663609	225592 3462117	458819 3881927	1136262	1767262	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Nitroaniline	ANT	Ave	17682 826412	58794 1049591	128641 1132572	355013	543556	4.00 120	10.0 160	20.0 200	50.0	80.0
Dimethyl phthalate	ANT	Ave	77674 2908537	234084 3612487	492834 4180811	1279262	1868760	4.00 120	10.0 160	20.0 200	50.0	80.0
1,3-Dinitrobenzene	ANT	Ave	10520 548369	36952 688118	76461 803853	225682	348475	4.00 120	10.0 160	20.0 200	50.0	80.0
2,6-Dinitrotoluene	ANT	Ave	17281 727912	56651 932633	113945 1039336	311045	474959	4.00 120	10.0 160	20.0 200	50.0	80.0
Acenaphthylene	ANT	Ave	104079 3887987	338105 4986939	648769 5493852	1735270	2528145	4.00 120	10.0 160	20.0 200	50.0	80.0
3-Nitroaniline	ANT	Ave	20776 864025	66226 1125287	135862 1203408	360259	563936	4.00 120	10.0 160	20.0 200	50.0	80.0
Acenaphthene	ANT	Ave	71612 2641774	218258 3456326	441949 3694962	1138490	1763235	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4-Dinitrophenol	ANT	Lin1	6149 898854	29638 1249955	84711 1421416	316781	555645	8.00 240	20.0 320	40.0 400	100	160
4-Nitrophenol	ANT	Ave	15505 784778	54020 1044003	117806 1062827	325767	520641	8.00 240	20.0 320	40.0 400	100	160
2,4-Dinitrotoluene	ANT	Ave	22217 959439	69763 1260837	148025 1339202	388641	633904	4.00 120	10.0 160	20.0 200	50.0	80.0
Dibenzofuran	ANT	Ave	100575 3637176	310243 4722114	618506 4907640	1568146	2489743	4.00 120	10.0 160	20.0 200	50.0	80.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	16095 807944	54031 1083668	115026 1115399	311954	521567	4.00 120	10.0 160	20.0 200	50.0	80.0
Diethyl phthalate	ANT	Ave	74801 2741612	239506 3582386	458233 3775849	1195774	1841271	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Chlorophenyl phenyl ether	ANT	Ave	40958 1532947	129586 2016663	260203 2108610	627339	1015226	4.00 120	10.0 160	20.0 200	50.0	80.0
Fluorene	ANT	Ave	81759 3028256	252608 3974455	527713 4180018	1257790	2038224	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Nitroaniline	ANT	Ave	19891 846077	61504 1106002	133536 1122290	326422	553447	4.00 120	10.0 160	20.0 200	50.0	80.0
4,6-Dinitro-2-methylphenol	PHN	Lin2	15591 1243451	63274 1646936	161636 1737547	466501	777057	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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	59744 2229988	181828 2930972	380829 3011253	890955	1482301	4.00 120	10.0 160	20.0 200	50.0	80.0
1,2-Diphenylhydrazine(as Azobenzene)	ANT	Ave	75054 3063102	250840 3973217	521359 3902900	1184886	1963443	4.04 121	10.1 162	20.2 202	50.5	80.9
Azobenzene	ANT	Ave	75054 3063102	250840 3973217	521359 3902900	1184886	1963443	4.00 120	10.0 160	20.0 200	50.0	80.0
4-Bromophenyl phenyl ether	PHN	Ave	23069 870003	70280 1153451	144555 1188389	342231	571608	4.00 120	10.0 160	20.0 200	50.0	80.0
Hexachlorobenzene	PHN	Ave	25924 959337	76980 1267566	154775 1333275	383861	612046	4.00 120	10.0 160	20.0 200	50.0	80.0
Pentachlorophenol	PHN	Lin1	10652 1123608	48950 1567591	125879 1689606	417580	704507	8.00 240	20.0 320	40.0 400	100	160
Phenanthrene	PHN	Ave	121775 4320392	386084 5552408	756481 5709097	1899106	2950839	4.00 120	10.0 160	20.0 200	50.0	80.0
Anthracene	PHN	Ave	120938 4470017	385599 5731134	756639 5888370	1881122	3010469	4.00 120	10.0 160	20.0 200	50.0	80.0
Carbazole	PHN	Ave	114732 4012977	347427 5388304	710711 5507251	1803674	2720997	4.00 120	10.0 160	20.0 200	50.0	80.0
Di-n-butyl phthalate	PHN	Ave	123346 4650014	374631 5997760	769199 6105329	1902705	3170114	4.00 120	10.0 160	20.0 200	50.0	80.0
Fluoranthene	PHN	Ave	132617 4816522	422865 6504098	807015 6281057	2167877	3371228	4.00 120	10.0 160	20.0 200	50.0	80.0
Pyrene	CRY	Ave	137769 4818131	437313 6742536	843954 6333320	2254832	3458568	4.00 120	10.0 160	20.0 200	50.0	80.0
Famphur	CRY	Ave	43986 1711280	143081 2115921	297367 1920233	734640	1134224	4.00 120	10.0 160	20.0 200	50.0	80.0
Butyl benzyl phthalate	CRY	Ave	51401 2089458	161705 2797880	340621 2632802	869020	1391165	4.00 120	10.0 160	20.0 200	50.0	80.0
3,3'-Dichlorobenzidine	CRY	Ave	46128 1870249	140028 2438843	302150 2381051	800281	1203366	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[a]anthracene	CRY	Ave	127620 4844550	395358 6345465	819213 6154853	2112455	3086376	4.00 120	10.0 160	20.0 200	50.0	80.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	70016 2821666	211236 3695228	447792 3591612	1196546	1808681	4.00 120	10.0 160	20.0 200	50.0	80.0
Chrysene	CRY	Ave	114817 4407028	360562 5919508	763241 5694945	1953335	2860927	4.00 120	10.0 160	20.0 200	50.0	80.0
Di-n-octyl phthalate	CRY	Ave	103116 4554399	304751 6133648	677069 6033531	1737284	3007152	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[b]fluoranthene	PRY	Ave	111782 4514679	356820 5881236	720955 5873680	1884717	2608638	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[k]fluoranthene	PRY	Ave	118868 4695778	374586 6310769	793348 6002905	1982015	2730460	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.: 280-67561-2 Analy Batch No.: 266830

SDG No.:

Instrument ID: SMS_B2 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2015 10:31 Calibration End Date: 03/04/2015 13:51 Calibration ID: 21518

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	108702 4468652	333892 5947890	725966 5797832	1853854	2582814	4.00 120	10.0 160	20.0 200	50.0	80.0
Indeno[1,2,3-cd]pyrene	CRY	Ave	87951 3752487	277954 5244572	603973 5095318	1558797	2142084	4.00 120	10.0 160	20.0 200	50.0	80.0
Dibenz(a,h)anthracene	PRY	Ave	91553 4079505	289246 5234609	585142 5260536	1642754	2142871	4.00 120	10.0 160	20.0 200	50.0	80.0
Benzo[g,h,i]perylene	PRY	Ave	102895 4138999	318105 5462823	672066 5320382	1765125	2212061	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Fluorophenol (Surr)	DCB	Ave	49320 1449300	120338 1812469	234874 2257908	621568	964030	4.00 120	10.0 160	20.0 200	50.0	80.0
Phenol-d5 (Surr)	DCB	Ave	62860 1844389	152052 2400600	320099 2809080	773428	1206856	4.00 120	10.0 160	20.0 200	50.0	80.0
Nitrobenzene-d5 (Surr)	NPT	Ave	52501 1543224	119984 1954269	229899 2446679	656405	962553	4.00 120	10.0 160	20.0 200	50.0	80.0
2-Fluorobiphenyl	ANT	Ave	84482 3092522	254218 3932587	529889 4372248	1308983	2013817	4.00 120	10.0 160	20.0 200	50.0	80.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	10620 471918	33247 624312	68680 655632	179776	300427	4.00 120	10.0 160	20.0 200	50.0	80.0
Terphenyl-d14 (Surr)	CRY	Ave	95458 3731634	304858 4913876	627984 4683771	1557242	2466502	4.00 120	10.0 160	20.0 200	50.0	80.0

Curve Type Legend:

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

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9363.D
Lims ID: ICIS HSL
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 04-Mar-2015 10:31:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:11 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 12:56:46

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	4.734	4.734	0.000	96	333477	40.0	40.0	
* 2 Naphthalene-d8	136	5.985	5.985	0.000	99	1263561	40.0	40.0	
* 3 Acenaphthene-d10	164	7.754	7.754	0.000	92	786895	40.0	40.0	
* 4 Phenanthrene-d10	188	9.264	9.264	0.000	97	1285027	40.0	40.0	
* 5 Chrysene-d12	240	13.676	13.676	0.000	96	1406858	40.0	40.0	
* 6 Perylene-d12	264	17.860	17.860	0.000	98	1108190	40.0	40.0	
$ 7 2-Fluorophenol	112	3.512	3.512	0.000	91	964030	80.0	81.0	
$ 8 Phenol-d5	99	4.358	4.358	0.000	91	1206856	80.0	79.3	
$ 9 Nitrobenzene-d5	82	5.275	5.275	0.000	88	962553	80.0	78.2	
$ 10 2-Fluorobiphenyl	172	7.049	7.049	0.000	99	2013817	80.0	78.4	
$ 11 2,4,6-Tribromophenol	330	8.559	8.559	0.000	92	300427	80.0	82.7	
$ 12 Terphenyl-d14	244	11.350	11.350	0.000	98	2466502	80.0	84.8	
15 1,4-Dioxane	88	2.061	2.061	0.000	92	414655	80.0	79.9	
16 N-Nitrosodimethylamine	74	2.325	2.325	0.000	93	619141	80.0	78.6	
17 Pyridine	79	2.366	2.366	0.000	99	1101996	80.0	79.2	
25 Phenol	94	4.370	4.370	0.000	98	1185883	80.0	77.3	
26 Aniline	93	4.423	4.423	0.000	98	1448676	80.0	78.4	
27 Bis(2-chloroethyl)ether	93	4.458	4.458	0.000	91	911520	80.0	79.4	
29 2-Chlorophenol	128	4.540	4.540	0.000	96	958960	80.0	80.6	
30 1,3-Dichlorobenzene	146	4.681	4.681	0.000	97	1049020	80.0	81.0	
31 1,4-Dichlorobenzene	146	4.752	4.752	0.000	93	1060503	80.0	80.6	
32 Benzyl alcohol	108	4.851	4.851	0.000	91	665204	80.0	82.6	
33 1,2-Dichlorobenzene	146	4.904	4.904	0.000	96	1023199	80.0	81.4	
34 2-Methylphenol	108	4.945	4.945	0.000	96	926992	80.0	81.3	
36 2,2'-oxybis[1-chloropropan	45	4.963	4.963	0.000	93	1161662	80.0	83.9	
38 4-Methylphenol	108	5.092	5.092	0.000	94	965283	80.0	83.1	
39 3-Methylphenol	108	5.092	5.092	0.000	88	965283	80.0	83.1	
40 3 & 4 Methylphenol	108	5.092	5.092	0.000	93	965283	80.0	83.1	
41 N-Nitrosodi-n-propylamine	70	5.092	5.092	0.000	78	672707	80.0	83.3	
43 Acetophenone	105	5.116	5.116	0.000	98	1318263	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
47 Hexachloroethane	117	5.228	5.228	0.000	92	386838	80.0	77.9	
48 Nitrobenzene	77	5.292	5.292	0.000	87	969202	80.0	77.2	
51 Isophorone	82	5.510	5.510	0.000	97	1731031	80.0	83.4	
52 2,4-Dimethylphenol	107	5.615	5.615	0.000	96	955523	80.0	85.0	
53 2-Nitrophenol	139	5.604	5.604	0.000	94	526795	80.0	85.8	
56 Benzoic acid	105	5.715	5.715	0.000	86	1278663	160.0	155.9	
57 Bis(2-chloroethoxy)methane	93	5.703	5.703	0.000	99	1125138	80.0	82.8	
59 2,4-Dichlorophenol	162	5.839	5.839	0.000	92	814616	80.0	82.2	
60 1,2,4-Trichlorobenzene	180	5.921	5.921	0.000	92	881796	80.0	79.8	
61 Naphthalene	128	6.009	6.009	0.000	97	2554810	80.0	78.7	
62 4-Chloroaniline	127	6.056	6.056	0.000	85	1183322	80.0	80.2	
65 Hexachlorobutadiene	225	6.103	6.103	0.000	94	483276	80.0	78.5	
67 Caprolactam	55	6.391	6.391	0.000	82	411092	80.0	83.8	
69 4-Chloro-3-methylphenol	107	6.520	6.520	0.000	96	786292	80.0	81.6	
71 2-Methylnaphthalene	142	6.691	6.691	0.000	85	1838528	80.0	84.3	
72 1-Methylnaphthalene	142	6.796	6.796	0.000	90	1708203	80.0	83.3	
73 Hexachlorocyclopentadiene	237	6.837	6.837	0.000	86	524906	80.0	86.4	
74 1,2,4,5-Tetrachlorobenzene	216	6.861	6.861	0.000	95	907000	80.0	83.7	
76 2,4,6-Trichlorophenol	196	6.973	6.973	0.000	91	587243	80.0	80.8	
77 2,4,5-Trichlorophenol	196	7.014	7.014	0.000	94	632838	80.0	81.9	
79 1,1'-Biphenyl	154	7.155	7.155	0.000	95	2227961	80.0	79.5	
80 2-Chloronaphthalene	162	7.190	7.190	0.000	96	1767262	80.0	79.0	
82 2-Nitroaniline	65	7.296	7.296	0.000	85	543556	80.0	84.1	
85 Dimethyl phthalate	163	7.443	7.443	0.000	99	1868760	80.0	77.7	
86 1,3-Dinitrobenzene	168	7.507	7.507	0.000	92	348475	80.0	84.0	
87 2,6-Dinitrotoluene	165	7.525	7.525	0.000	91	474959	80.0	81.1	
88 Acenaphthylene	152	7.619	7.619	0.000	96	2528145	80.0	77.5	
89 3-Nitroaniline	138	7.713	7.713	0.000	97	563936	80.0	81.4	
90 Acenaphthene	153	7.789	7.789	0.000	94	1763235	80.0	80.0	
91 2,4-Dinitrophenol	184	7.813	7.813	0.000	86	555645	160.0	151.3	
92 4-Nitrophenol	109	7.871	7.871	0.000	86	520641	160.0	172.3	
94 2,4-Dinitrotoluene	165	7.936	7.936	0.000	93	633904	80.0	83.6	
95 Dibenzofuran	168	7.960	7.960	0.000	89	2489743	80.0	81.5	
97 2,3,4,6-Tetrachlorophenol	232	8.077	8.077	0.000	70	521567	80.0	85.3	
99 Diethyl phthalate	149	8.142	8.142	0.000	98	1841271	80.0	79.8	
101 4-Chlorophenyl phenyl ethe	204	8.283	8.283	0.000	90	1015226	80.0	79.8	
102 Fluorene	166	8.306	8.306	0.000	83	2038224	80.0	80.6	
104 4-Nitroaniline	138	8.336	8.336	0.000	85	553447	80.0	83.6	
105 4,6-Dinitro-2-methylphenol	198	8.347	8.347	0.000	88	777057	160.0	167.2	
107 N-Nitrosodiphenylamine	169	8.406	8.406	0.000	61	1482301	80.0	83.9	
108 1,2-Diphenylhydrazine	77	8.447	8.447	0.000	97	1963443	80.9	81.0	
109 Azobenzene	77	8.447	8.447	0.000	98	1963443	80.0	80.1	
116 4-Bromophenyl phenyl ether	248	8.782	8.782	0.000	61	571608	80.0	83.5	
117 Hexachlorobenzene	284	8.864	8.864	0.000	91	612046	80.0	81.2	
120 Pentachlorophenol	266	9.064	9.064	0.000	90	704507	160.0	157.7	
125 Phenanthrene	178	9.287	9.287	0.000	98	2950839	80.0	83.5	
126 Anthracene	178	9.340	9.340	0.000	98	3010469	80.0	84.2	
127 Carbazole	167	9.505	9.505	0.000	82	2720997	80.0	82.0	
129 Di-n-butyl phthalate	149	9.810	9.810	0.000	100	3170114	80.0	86.6	
134 Fluoranthene	202	10.762	10.762	0.000	98	3371228	80.0	85.6	
136 Pyrene	202	11.138	11.138	0.000	95	3458568	80.0	85.8	
141 Butyl benzyl phthalate	149	12.284	12.284	0.000	97	1391165	80.0	86.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.618	13.618	0.000	69	1203366	80.0	84.3	
146 Benzo[a]anthracene	228	13.647	13.647	0.000	99	3086376	80.0	81.3	
147 Bis(2-ethylhexyl) phthalat	149	13.653	13.653	0.000	74	1808681	80.0	84.1	
148 Chrysene	228	13.747	13.747	0.000	95	2860927	80.0	81.9	
149 Di-n-octyl phthalate	149	15.557	15.557	0.000	99	3007152	80.0	89.4	
151 Benzo[b]fluoranthene	252	16.691	16.691	0.000	92	2608638	80.0	85.6	
152 Benzo[k]fluoranthene	252	16.779	16.779	0.000	95	2730460	80.0	84.9	
153 Benzo[a]pyrene	252	17.684	17.684	0.000	78	2582814	80.0	86.1	
156 Indeno[1,2,3-cd]pyrene	276	21.074	21.074	0.000	98	2142084	80.0	75.4	
157 Dibenz(a,h)anthracene	278	21.162	21.162	0.000	94	2142871	80.0	82.4	
158 Benzo[g,h,i]perylene	276	21.855	21.855	0.000	89	2212061	80.0	79.8	
163 Famphur	218	12.178	12.178	0.000	97	1134224	80.0	85.8	

Reagents:

MS-HSLA080_00015 Amount Added: 200.00 Units: uL

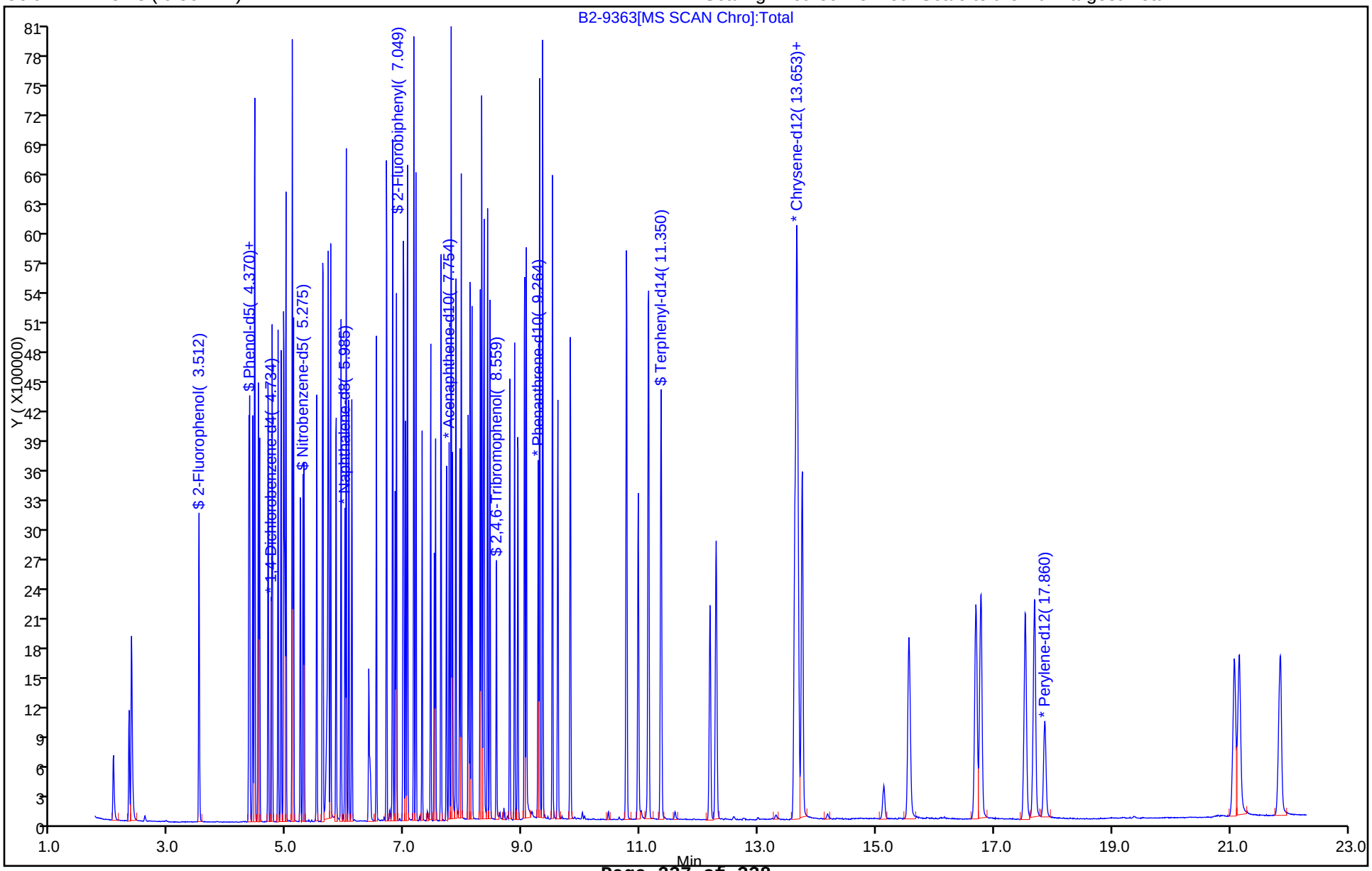
Report Date: 05-Mar-2015 13:29:12 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9363.D

Injection Date:	04-Mar-2015 10:31:30	Instrument ID:	SMS_B2	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_B2_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_B2\20150305-32595.b\B2-9364.D
Lims ID: STD004 HSL
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Mar-2015 11:00:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:13 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:00:04

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	4.735	4.734	0.001	95	334742	40.0	40.0	
* 2 Naphthalene-d8	136	5.980	5.985	-0.005	99	1225322	40.0	40.0	
* 3 Acenaphthene-d10	164	7.749	7.754	-0.005	92	614592	40.0	40.0	
* 4 Phenanthrene-d10	188	9.265	9.264	0.001	97	1055702	40.0	40.0	
* 5 Chrysene-d12	240	13.665	13.676	-0.011	97	1159704	40.0	40.0	
* 6 Perylene-d12	264	17.855	17.860	-0.005	98	1080500	40.0	40.0	
$ 7 2-Fluorophenol	112	3.507	3.512	-0.005	90	49320	4.00	4.13	
$ 8 Phenol-d5	99	4.353	4.358	-0.005	93	62860	4.00	4.11	
$ 9 Nitrobenzene-d5	82	5.269	5.275	-0.006	88	52501	4.00	4.40	
$ 10 2-Fluorobiphenyl	172	7.044	7.049	-0.005	99	84482	4.00	4.21	
$ 11 2,4,6-Tribromophenol	330	8.554	8.559	-0.005	93	10620	4.00	3.74	
$ 12 Terphenyl-d14	244	11.345	11.350	-0.005	99	95458	4.00	3.98	
15 1,4-Dioxane	88	2.056	2.061	-0.005	92	21442	4.00	4.12	
16 N-Nitrosodimethylamine	74	2.320	2.325	-0.005	95	30647	4.00	3.88	
17 Pyridine	79	2.367	2.366	0.001	98	56929	4.00	4.07	
25 Phenol	94	4.365	4.370	-0.005	98	65801	4.00	4.27	
26 Aniline	93	4.417	4.423	-0.006	98	74997	4.00	4.04	
27 Bis(2-chloroethyl)ether	93	4.453	4.458	-0.005	98	46942	4.00	4.07	
29 2-Chlorophenol	128	4.535	4.540	-0.005	96	47973	4.00	4.02	
30 1,3-Dichlorobenzene	146	4.682	4.681	0.001	97	51161	4.00	3.94	
31 1,4-Dichlorobenzene	146	4.752	4.752	0.000	94	54908	4.00	4.16	
32 Benzyl alcohol	108	4.846	4.851	-0.005	93	31871	4.00	3.94	
33 1,2-Dichlorobenzene	146	4.899	4.904	-0.005	96	52106	4.00	4.13	
34 2-Methylphenol	108	4.940	4.945	-0.005	95	47687	4.00	4.17	
36 2,2'-oxybis[1-chloropropan	45	4.958	4.963	-0.005	95	56664	4.00	4.08	
38 4-Methylphenol	108	5.087	5.092	-0.005	97	45830	4.00	3.93	
39 3-Methylphenol	108	5.087	5.092	-0.005	89	45830	4.00	3.93	
40 3 & 4 Methylphenol	108	5.087	5.092	-0.005	92	45830	4.00	3.93	
41 N-Nitrosodi-n-propylamine	70	5.087	5.092	-0.005	79	32659	4.00	4.03	
43 Acetophenone	105	5.111	5.116	-0.005	98	63887	4.00	3.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.228	5.228	0.000	94	20458	4.00	4.10	
48 Nitrobenzene	77	5.287	5.292	-0.005	87	52566	4.00	4.32	
51 Isophorone	82	5.504	5.510	-0.006	99	86249	4.00	4.29	
52 2,4-Dimethylphenol	107	5.610	5.615	-0.005	96	46326	4.00	4.25	
53 2-Nitrophenol	139	5.598	5.604	-0.006	96	22857	4.00	3.84	
56 Benzoic acid	105	5.651	5.715	-0.064	86	34657	8.00	10.8	
57 Bis(2-chloroethoxy)methane	93	5.698	5.703	-0.005	98	56290	4.00	4.27	
59 2,4-Dichlorophenol	162	5.833	5.839	-0.006	93	37680	4.00	3.92	
60 1,2,4-Trichlorobenzene	180	5.916	5.921	-0.005	94	43542	4.00	4.07	
61 Naphthalene	128	6.004	6.009	-0.005	97	142826	4.00	4.54	
62 4-Chloroaniline	127	6.051	6.056	-0.005	97	59687	4.00	4.17	
65 Hexachlorobutadiene	225	6.104	6.103	0.001	94	24576	4.00	4.12	
67 Caprolactam	55	6.362	6.391	-0.029	83	18115	4.00	3.81	
69 4-Chloro-3-methylphenol	107	6.515	6.520	-0.005	96	34466	4.00	3.69	
71 2-Methylnaphthalene	142	6.691	6.691	0.001	92	82488	4.00	3.90	
72 1-Methylnaphthalene	142	6.791	6.796	-0.005	94	74664	4.00	3.76	
73 Hexachlorocyclopentadiene	237	6.838	6.837	0.001	92	15825	4.00	3.34	
74 1,2,4,5-Tetrachlorobenzene	216	6.856	6.861	-0.005	96	38202	4.00	3.63	
76 2,4,6-Trichlorophenol	196	6.967	6.973	-0.006	91	22407	4.00	3.95	
77 2,4,5-Trichlorophenol	196	7.014	7.014	0.000	95	21633	4.00	3.59	
79 1,1'-Biphenyl	154	7.150	7.155	-0.005	95	90009	4.00	4.11	
80 2-Chloronaphthalene	162	7.185	7.190	-0.005	95	70424	4.00	4.03	
82 2-Nitroaniline	65	7.291	7.296	-0.005	87	17682	4.00	3.50	
85 Dimethyl phthalate	163	7.437	7.443	-0.006	100	77674	4.00	4.13	
86 1,3-Dinitrobenzene	168	7.496	7.507	-0.011	87	10520	4.00	3.25	
87 2,6-Dinitrotoluene	165	7.520	7.525	-0.005	93	17281	4.00	3.78	
88 Acenaphthylene	152	7.614	7.619	-0.005	98	104079	4.00	4.09	
89 3-Nitroaniline	138	7.702	7.713	-0.011	95	20776	4.00	3.84	
90 Acenaphthene	153	7.784	7.789	-0.005	94	71612	4.00	4.16	
91 2,4-Dinitrophenol	184	7.808	7.813	-0.005	74	6149	8.00	11.6	
92 4-Nitrophenol	109	7.860	7.871	-0.011	90	15505	8.00	6.57	
94 2,4-Dinitrotoluene	165	7.931	7.936	-0.005	95	22217	4.00	3.75	
95 Dibenzofuran	168	7.954	7.960	-0.006	97	100575	4.00	4.21	
97 2,3,4,6-Tetrachlorophenol	232	8.078	8.077	0.001	70	16095	4.00	3.37	
99 Diethyl phthalate	149	8.137	8.142	-0.005	99	74801	4.00	4.15	
101 4-Chlorophenyl phenyl ethe	204	8.278	8.283	-0.005	88	40958	4.00	4.12	
102 Fluorene	166	8.301	8.306	-0.005	92	81759	4.00	4.14	
104 4-Nitroaniline	138	8.325	8.336	-0.011	91	19891	4.00	3.85	
105 4,6-Dinitro-2-methylphenol	198	8.342	8.347	-0.005	92	15591	8.00	8.53	
107 N-Nitrosodiphenylamine	169	8.401	8.406	-0.005	61	59744	4.00	4.11	
108 1,2-Diphenylhydrazine	77	8.442	8.447	-0.005	97	75054	4.04	3.96	
109 Azobenzene	77	8.442	8.447	-0.005	97	75054	4.00	3.92	
116 4-Bromophenyl phenyl ether	248	8.777	8.782	-0.005	63	23069	4.00	4.10	
117 Hexachlorobenzene	284	8.859	8.864	-0.005	96	25924	4.00	4.19	
120 Pentachlorophenol	266	9.059	9.064	-0.005	95	10652	8.00	10.7	
125 Phenanthrene	178	9.288	9.287	0.001	97	121775	4.00	4.20	
126 Anthracene	178	9.335	9.340	-0.005	98	120938	4.00	4.12	
127 Carbazole	167	9.506	9.505	0.001	95	114732	4.00	4.21	
129 Di-n-butyl phthalate	149	9.805	9.810	-0.005	100	123346	4.00	4.10	
134 Fluoranthene	202	10.757	10.762	-0.005	98	132617	4.00	4.10	
136 Pyrene	202	11.127	11.138	-0.011	97	137769	4.00	4.15	
141 Butyl benzyl phthalate	149	12.279	12.284	-0.005	97	51401	4.00	3.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.607	13.618	-0.011	72	46128	4.00	3.92	
146 Benzo[a]anthracene	228	13.636	13.647	-0.011	99	127620	4.00	4.08	
147 Bis(2-ethylhexyl) phthalat	149	13.648	13.653	-0.005	79	70016	4.00	3.95	
148 Chrysene	228	13.730	13.747	-0.017	97	114817	4.00	3.99	
149 Di-n-octyl phthalate	149	15.546	15.557	-0.011	99	103116	4.00	3.72	
151 Benzo[b]fluoranthene	252	16.674	16.691	-0.017	98	111782	4.00	3.76	
152 Benzo[k]fluoranthene	252	16.756	16.779	-0.023	99	118868	4.00	3.79	
153 Benzo[a]pyrene	252	17.661	17.684	-0.023	78	108702	4.00	3.71	
156 Indeno[1,2,3-cd]pyrene	276	21.051	21.074	-0.023	98	87951	4.00	3.76	
157 Dibenz(a,h)anthracene	278	21.139	21.162	-0.023	92	91553	4.00	3.61	
158 Benzo[g,h,i]perylene	276	21.821	21.855	-0.034	96	102895	4.00	3.81	
163 Famphur	218	12.167	12.178	-0.011	98	43986	4.00	4.04	

Reagents:

MS-HSLA004_00015 Amount Added: 200.00 Units: uL

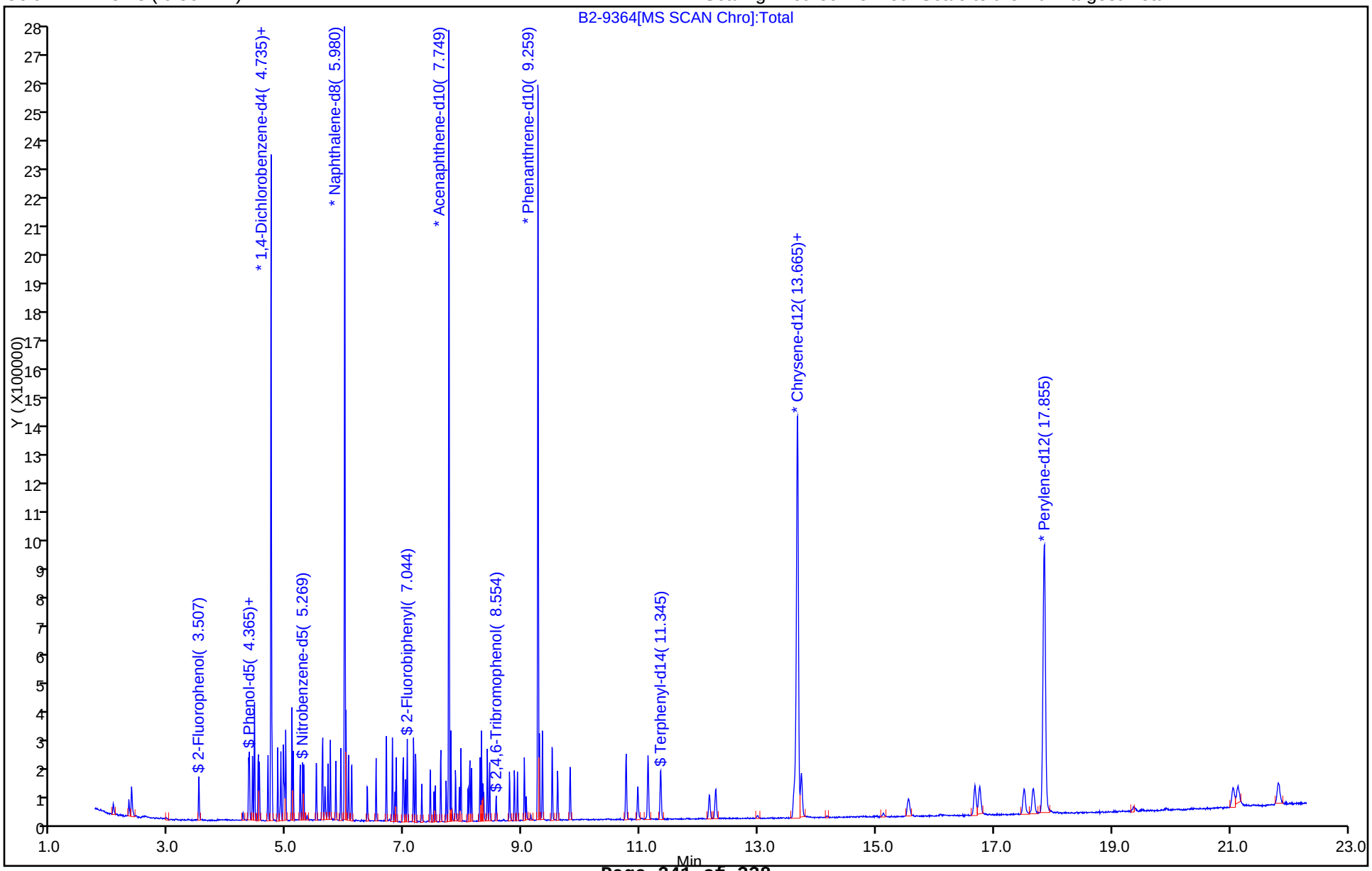
Report Date: 05-Mar-2015 13:29:14 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9364.D

Injection Date:	04-Mar-2015 11:00:30	Instrument ID:	SMS_B2	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_B2_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_B2\20150305-32595.b\B2-9365.D
Lims ID: STD010 HSL
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Mar-2015 11:29:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:15 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:01:23

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	4.730	4.734	-0.004	97	337880	40.0	40.0	
* 2 Naphthalene-d8	136	5.982	5.985	-0.003	99	1273301	40.0	40.0	
* 3 Acenaphthene-d10	164	7.750	7.754	-0.004	92	748162	40.0	40.0	
* 4 Phenanthrene-d10	188	9.260	9.264	-0.004	97	1344032	40.0	40.0	
* 5 Chrysene-d12	240	13.667	13.676	-0.009	97	1443809	40.0	40.0	
* 6 Perylene-d12	264	17.850	17.860	-0.010	97	1279556	40.0	40.0	
$ 7 2-Fluorophenol	112	3.508	3.512	-0.004	91	120338	10.0	9.98	
$ 8 Phenol-d5	99	4.354	4.358	-0.004	90	152052	10.0	9.86	
$ 9 Nitrobenzene-d5	82	5.271	5.275	-0.004	87	119984	10.0	9.68	
$ 10 2-Fluorobiphenyl	172	7.045	7.049	-0.004	100	254218	10.0	10.4	
$ 11 2,4,6-Tribromophenol	330	8.555	8.559	-0.004	92	33247	10.0	9.62	
$ 12 Terphenyl-d14	244	11.340	11.350	-0.010	98	304858	10.0	10.2	
15 1,4-Dioxane	88	2.057	2.061	-0.004	92	52192	10.0	9.93	
16 N-Nitrosodimethylamine	74	2.321	2.325	-0.004	93	77486	10.0	9.71	
17 Pyridine	79	2.362	2.366	-0.004	97	137064	10.0	9.72	
25 Phenol	94	4.366	4.370	-0.004	98	151977	10.0	9.78	
26 Aniline	93	4.419	4.423	-0.004	98	181209	10.0	9.68	
27 Bis(2-chloroethyl)ether	93	4.454	4.458	-0.004	90	113702	10.0	9.77	
29 2-Chlorophenol	128	4.536	4.540	-0.004	96	118319	10.0	9.82	
30 1,3-Dichlorobenzene	146	4.683	4.681	0.002	98	136205	10.0	10.4	
31 1,4-Dichlorobenzene	146	4.748	4.752	-0.004	92	138555	10.0	10.4	
32 Benzyl alcohol	108	4.848	4.851	-0.003	92	81812	10.0	10.0	
33 1,2-Dichlorobenzene	146	4.901	4.904	-0.003	96	131566	10.0	10.3	
34 2-Methylphenol	108	4.942	4.945	-0.003	96	115736	10.0	10.0	
36 2,2'-oxybis[1-chloropropan	45	4.959	4.963	-0.004	93	145376	10.0	10.4	
38 4-Methylphenol	108	5.089	5.092	-0.003	93	114323	10.0	9.71	
39 3-Methylphenol	108	5.089	5.092	-0.003	89	114323	10.0	9.71	
40 3 & 4 Methylphenol	108	5.089	5.092	-0.003	94	114323	10.0	9.71	
41 N-Nitrosodi-n-propylamine	70	5.089	5.092	-0.003	79	79448	10.0	9.71	
43 Acetophenone	105	5.106	5.116	-0.010	96	158871	10.0	9.79	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.224	5.228	-0.004	92	48778	10.0	9.69	
48 Nitrobenzene	77	5.288	5.292	-0.004	87	121515	10.0	9.60	
51 Isophorone	82	5.500	5.510	-0.010	97	202652	10.0	9.69	
52 2,4-Dimethylphenol	107	5.612	5.615	-0.003	95	113429	10.0	10.0	
53 2-Nitrophenol	139	5.600	5.604	-0.004	92	58974	10.0	9.53	
56 Benzoic acid	105	5.659	5.715	-0.056	86	101325	20.0	18.3	
57 Bis(2-chloroethoxy)methane	93	5.700	5.703	-0.003	99	141526	10.0	10.3	
59 2,4-Dichlorophenol	162	5.835	5.839	-0.004	91	97346	10.0	9.75	
60 1,2,4-Trichlorobenzene	180	5.917	5.921	-0.004	92	109861	10.0	9.87	
61 Naphthalene	128	6.005	6.009	-0.004	97	336058	10.0	10.3	
62 4-Chloroaniline	127	6.046	6.056	-0.010	84	145502	10.0	9.78	
65 Hexachlorobutadiene	225	6.099	6.103	-0.004	94	61487	10.0	9.91	
67 Caprolactam	55	6.369	6.391	-0.022	80	47762	10.0	9.66	
69 4-Chloro-3-methylphenol	107	6.516	6.520	-0.004	94	94565	10.0	9.74	
71 2-Methylnaphthalene	142	6.687	6.691	-0.003	82	221216	10.0	10.1	
72 1-Methylnaphthalene	142	6.792	6.796	-0.004	90	219417	10.0	10.6	
73 Hexachlorocyclopentadiene	237	6.834	6.837	-0.003	87	50105	10.0	8.68	
74 1,2,4,5-Tetrachlorobenzene	216	6.857	6.861	-0.004	94	110422	10.0	10.1	
76 2,4,6-Trichlorophenol	196	6.969	6.973	-0.004	92	68164	10.0	9.87	
77 2,4,5-Trichlorophenol	196	7.010	7.014	-0.004	95	72846	10.0	9.92	
79 1,1'-Biphenyl	154	7.151	7.155	-0.004	95	289251	10.0	10.9	
80 2-Chloronaphthalene	162	7.186	7.190	-0.004	95	225592	10.0	10.6	
82 2-Nitroaniline	65	7.292	7.296	-0.004	88	58794	10.0	9.56	
85 Dimethyl phthalate	163	7.433	7.443	-0.010	99	234084	10.0	10.2	
86 1,3-Dinitrobenzene	168	7.498	7.507	-0.009	86	36952	10.0	9.37	
87 2,6-Dinitrotoluene	165	7.521	7.525	-0.004	94	56651	10.0	10.2	
88 Acenaphthylene	152	7.609	7.619	-0.010	92	338105	10.0	10.9	
89 3-Nitroaniline	138	7.703	7.713	-0.010	95	66226	10.0	10.1	
90 Acenaphthene	153	7.785	7.789	-0.004	93	218258	10.0	10.4	
91 2,4-Dinitrophenol	184	7.803	7.813	-0.010	82	29638	20.0	17.6	
92 4-Nitrophenol	109	7.862	7.871	-0.009	89	54020	20.0	18.8	
94 2,4-Dinitrotoluene	165	7.926	7.936	-0.010	85	69763	10.0	9.68	
95 Dibenzofuran	168	7.956	7.960	-0.004	90	310243	10.0	10.7	
97 2,3,4,6-Tetrachlorophenol	232	8.073	8.077	-0.004	72	54031	10.0	9.30	
99 Diethyl phthalate	149	8.132	8.142	-0.010	97	239506	10.0	10.9	
101 4-Chlorophenyl phenyl ethe	204	8.279	8.283	-0.004	90	129586	10.0	10.7	
102 Fluorene	166	8.302	8.306	-0.004	83	252608	10.0	10.5	
104 4-Nitroaniline	138	8.326	8.336	-0.010	88	61504	10.0	9.77	
105 4,6-Dinitro-2-methylphenol	198	8.338	8.347	-0.009	85	63274	20.0	17.2	
107 N-Nitrosodiphenylamine	169	8.402	8.406	-0.004	61	181828	10.0	9.84	
108 1,2-Diphenylhydrazine	77	8.444	8.447	-0.003	97	250840	10.1	10.9	
109 Azobenzene	77	8.444	8.447	-0.003	98	250840	10.0	10.8	
116 4-Bromophenyl phenyl ether	248	8.778	8.782	-0.004	61	70280	10.0	9.81	
117 Hexachlorobenzene	284	8.861	8.864	-0.003	91	76980	10.0	9.77	
120 Pentachlorophenol	266	9.060	9.064	-0.004	91	48950	20.0	17.8	
125 Phenanthrene	178	9.284	9.287	-0.003	98	386084	10.0	10.4	
126 Anthracene	178	9.337	9.340	-0.003	97	385599	10.0	10.3	
127 Carbazole	167	9.501	9.505	-0.004	82	347427	10.0	10.0	
129 Di-n-butyl phthalate	149	9.807	9.810	-0.003	100	374631	10.0	9.78	
134 Fluoranthene	202	10.758	10.762	-0.004	98	422865	10.0	10.3	
136 Pyrene	202	11.129	11.138	-0.009	95	437313	10.0	10.6	
141 Butyl benzyl phthalate	149	12.274	12.284	-0.010	97	161705	10.0	9.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.602	13.618	-0.016	67	140028	10.0	9.55	
146 Benzo[a]anthracene	228	13.637	13.647	-0.010	99	395358	10.0	10.1	
147 Bis(2-ethylhexyl) phthalat	149	13.643	13.653	-0.010	62	211236	10.0	9.58	
148 Chrysene	228	13.731	13.747	-0.016	94	360562	10.0	10.1	
149 Di-n-octyl phthalate	149	15.547	15.557	-0.010	100	304751	10.0	8.83	
151 Benzo[b]fluoranthene	252	16.675	16.691	-0.016	93	356820	10.0	10.1	
152 Benzo[k]fluoranthene	252	16.757	16.779	-0.022	95	374586	10.0	10.1	
153 Benzo[a]pyrene	252	17.662	17.684	-0.022	78	333892	10.0	9.64	
156 Indeno[1,2,3-cd]pyrene	276	21.052	21.074	-0.022	94	277954	10.0	9.54	
157 Dibenz(a,h)anthracene	278	21.140	21.162	-0.022	93	289246	10.0	9.63	
158 Benzo[g,h,i]perylene	276	21.822	21.855	-0.033	89	318105	10.0	9.94	
163 Famphur	218	12.169	12.178	-0.009	97	143081	10.0	10.6	

Reagents:

MS-HSLA010_00015 Amount Added: 200.00 Units: uL

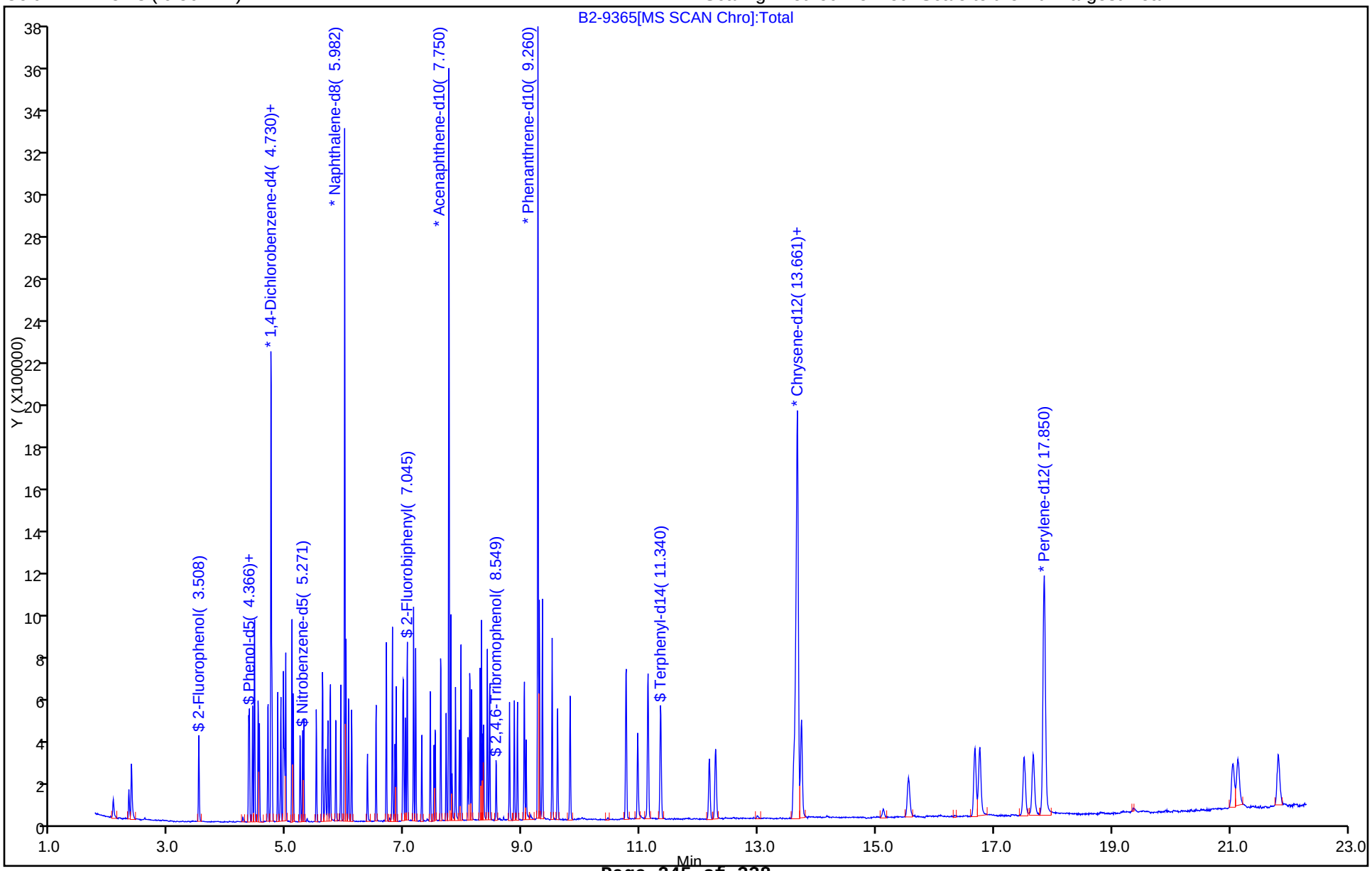
Report Date: 05-Mar-2015 13:29:15 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9365.D

Injection Date:	04-Mar-2015 11:29:30	Instrument ID:	SMS_B2	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_B2_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_B2\20150305-32595.b\B2-9366.D
Lims ID: STD020 HSL
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Mar-2015 11:57:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:16 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:03:08

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	4.735	4.734	0.000	95	329424	40.0	40.0	
* 2 Naphthalene-d8	136	5.980	5.985	-0.005	99	1280945	40.0	40.0	
* 3 Acenaphthene-d10	164	7.749	7.754	-0.005	92	792805	40.0	40.0	
* 4 Phenanthrene-d10	188	9.259	9.264	-0.005	97	1329149	40.0	40.0	
* 5 Chrysene-d12	240	13.665	13.676	-0.011	97	1538647	40.0	40.0	
* 6 Perylene-d12	264	17.849	17.860	-0.011	97	1391660	40.0	40.0	
$ 7 2-Fluorophenol	112	3.507	3.512	-0.005	91	234874	20.0	20.0	
$ 8 Phenol-d5	99	4.353	4.358	-0.005	90	320099	20.0	21.3	
$ 9 Nitrobenzene-d5	82	5.269	5.275	-0.006	88	229899	20.0	18.4	
$ 10 2-Fluorobiphenyl	172	7.044	7.049	-0.005	99	529889	20.0	20.5	
$ 11 2,4,6-Tribromophenol	330	8.554	8.559	-0.005	93	68680	20.0	18.8	
$ 12 Terphenyl-d14	244	11.344	11.350	-0.006	98	627984	20.0	19.7	
15 1,4-Dioxane	88	2.055	2.061	-0.006	93	104465	20.0	20.4	
16 N-Nitrosodimethylamine	74	2.320	2.325	-0.005	93	163249	20.0	21.0	
17 Pyridine	79	2.367	2.366	0.001	98	279752	20.0	20.3	
25 Phenol	94	4.364	4.370	-0.006	98	324817	20.0	21.4	
26 Aniline	93	4.417	4.423	-0.006	98	384927	20.0	21.1	
27 Bis(2-chloroethyl)ether	93	4.452	4.458	-0.006	90	240018	20.0	21.2	
29 2-Chlorophenol	128	4.535	4.540	-0.005	97	243726	20.0	20.7	
30 1,3-Dichlorobenzene	146	4.682	4.681	0.001	98	263982	20.0	20.6	
31 1,4-Dichlorobenzene	146	4.752	4.752	0.000	94	262265	20.0	20.2	
32 Benzyl alcohol	108	4.846	4.851	-0.005	92	157899	20.0	19.9	
33 1,2-Dichlorobenzene	146	4.899	4.904	-0.005	96	251701	20.0	20.3	
34 2-Methylphenol	108	4.940	4.945	-0.005	95	223543	20.0	19.9	
36 2,2'-oxybis[1-chloropropan	45	4.958	4.963	-0.005	92	267888	20.0	19.6	
38 4-Methylphenol	108	5.087	5.092	-0.005	94	232111	20.0	20.2	
39 3-Methylphenol	108	5.087	5.092	-0.005	88	232111	20.0	20.2	
40 3 & 4 Methylphenol	108	5.087	5.092	-0.005	92	232111	20.0	20.2	
41 N-Nitrosodi-n-propylamine	70	5.087	5.092	-0.005	79	159057	20.0	19.9	
43 Acetophenone	105	5.111	5.116	-0.005	96	325478	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.228	5.228	0.000	89	96602	20.0	19.7	
48 Nitrobenzene	77	5.287	5.292	-0.005	88	255758	20.0	20.1	
51 Isophorone	82	5.504	5.510	-0.006	97	423856	20.0	20.1	
52 2,4-Dimethylphenol	107	5.610	5.615	-0.005	95	220910	20.0	19.4	
53 2-Nitrophenol	139	5.598	5.604	-0.006	93	119541	20.0	19.2	
56 Benzoic acid	105	5.669	5.715	-0.046	86	225473	40.0	32.6	
57 Bis(2-chloroethoxy)methane	93	5.698	5.703	-0.005	99	258022	20.0	18.7	
59 2,4-Dichlorophenol	162	5.833	5.839	-0.006	92	195170	20.0	19.4	
60 1,2,4-Trichlorobenzene	180	5.915	5.921	-0.006	89	219102	20.0	19.6	
61 Naphthalene	128	6.004	6.009	-0.005	97	660378	20.0	20.1	
62 4-Chloroaniline	127	6.051	6.056	-0.005	85	299206	20.0	20.0	
65 Hexachlorobutadiene	225	6.103	6.103	0.000	91	126545	20.0	20.3	
67 Caprolactam	55	6.374	6.391	-0.017	83	103255	20.0	20.8	
69 4-Chloro-3-methylphenol	107	6.515	6.520	-0.005	96	203607	20.0	20.8	
71 2-Methylnaphthalene	142	6.691	6.691	0.001	87	465578	20.0	21.1	
72 1-Methylnaphthalene	142	6.791	6.796	-0.005	92	438871	20.0	21.1	
73 Hexachlorocyclopentadiene	237	6.838	6.837	0.001	84	113055	20.0	18.5	
74 1,2,4,5-Tetrachlorobenzene	216	6.856	6.861	-0.005	97	227954	20.0	20.7	
76 2,4,6-Trichlorophenol	196	6.967	6.973	-0.006	92	142508	20.0	19.5	
77 2,4,5-Trichlorophenol	196	7.014	7.014	0.000	95	156900	20.0	20.2	
79 1,1'-Biphenyl	154	7.149	7.155	-0.006	95	579576	20.0	20.5	
80 2-Chloronaphthalene	162	7.185	7.190	-0.005	96	458819	20.0	20.4	
82 2-Nitroaniline	65	7.290	7.296	-0.006	86	128641	20.0	19.7	
85 Dimethyl phthalate	163	7.437	7.443	-0.006	99	492834	20.0	20.3	
86 1,3-Dinitrobenzene	168	7.496	7.507	-0.011	86	76461	20.0	18.3	
87 2,6-Dinitrotoluene	165	7.519	7.525	-0.006	90	113945	20.0	19.3	
88 Acenaphthylene	152	7.613	7.619	-0.006	92	648769	20.0	19.8	
89 3-Nitroaniline	138	7.702	7.713	-0.011	94	135862	20.0	19.5	
90 Acenaphthene	153	7.784	7.789	-0.005	94	441949	20.0	19.9	
91 2,4-Dinitrophenol	184	7.807	7.813	-0.006	84	84711	40.0	31.1	
92 4-Nitrophenol	109	7.860	7.871	-0.011	90	117806	40.0	38.7	
94 2,4-Dinitrotoluene	165	7.931	7.936	-0.005	89	148025	20.0	19.4	
95 Dibenzofuran	168	7.954	7.960	-0.006	90	618506	20.0	20.1	
97 2,3,4,6-Tetrachlorophenol	232	8.078	8.077	0.001	67	115026	20.0	18.7	
99 Diethyl phthalate	149	8.136	8.142	-0.006	98	458233	20.0	19.7	
101 4-Chlorophenyl phenyl ethe	204	8.277	8.283	-0.006	91	260203	20.0	20.3	
102 Fluorene	166	8.301	8.306	-0.005	83	527713	20.0	20.7	
104 4-Nitroaniline	138	8.324	8.336	-0.012	85	133536	20.0	20.0	
105 4,6-Dinitro-2-methylphenol	198	8.342	8.347	-0.005	91	161636	40.0	37.3	
107 N-Nitrosodiphenylamine	169	8.401	8.406	-0.005	61	380829	20.0	20.8	
108 1,2-Diphenylhydrazine	77	8.442	8.447	-0.005	97	521359	20.2	21.3	
109 Azobenzene	77	8.442	8.447	-0.005	98	521359	20.0	21.1	
116 4-Bromophenyl phenyl ether	248	8.777	8.782	-0.005	62	144555	20.0	20.4	
117 Hexachlorobenzene	284	8.859	8.864	-0.005	91	154775	20.0	19.9	
120 Pentachlorophenol	266	9.059	9.064	-0.005	92	125879	40.0	33.8	
125 Phenanthrene	178	9.282	9.287	-0.005	98	756481	20.0	20.7	
126 Anthracene	178	9.335	9.340	-0.005	98	756639	20.0	20.5	
127 Carbazole	167	9.500	9.505	-0.005	82	710711	20.0	20.7	
129 Di-n-butyl phthalate	149	9.805	9.810	-0.005	100	769199	20.0	20.3	
134 Fluoranthene	202	10.757	10.762	-0.005	98	807015	20.0	19.8	
136 Pyrene	202	11.127	11.138	-0.011	95	843954	20.0	19.1	
141 Butyl benzyl phthalate	149	12.279	12.284	-0.005	97	340621	20.0	19.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.606	13.618	-0.012	67	302150	20.0	19.3	
146 Benzo[a]anthracene	228	13.636	13.647	-0.011	99	819213	20.0	19.7	
147 Bis(2-ethylhexyl) phthalat	149	13.642	13.653	-0.011	71	447792	20.0	19.0	
148 Chrysene	228	13.730	13.747	-0.017	95	763241	20.0	20.0	
149 Di-n-octyl phthalate	149	15.545	15.557	-0.012	99	677069	20.0	18.4	
151 Benzo[b]fluoranthene	252	16.673	16.691	-0.018	95	720955	20.0	18.8	
152 Benzo[k]fluoranthene	252	16.756	16.779	-0.023	99	793348	20.0	19.6	
153 Benzo[a]pyrene	252	17.666	17.684	-0.018	78	725966	20.0	19.3	
156 Indeno[1,2,3-cd]pyrene	276	21.057	21.074	-0.017	97	603973	20.0	19.4	M
157 Dibenz(a,h)anthracene	278	21.145	21.162	-0.017	92	585142	20.0	17.9	
158 Benzo[g,h,i]perylene	276	21.820	21.855	-0.035	90	672066	20.0	19.3	
163 Famphur	218	12.173	12.178	-0.005	97	297367	20.0	20.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA020_00015 Amount Added: 200.00 Units: uL

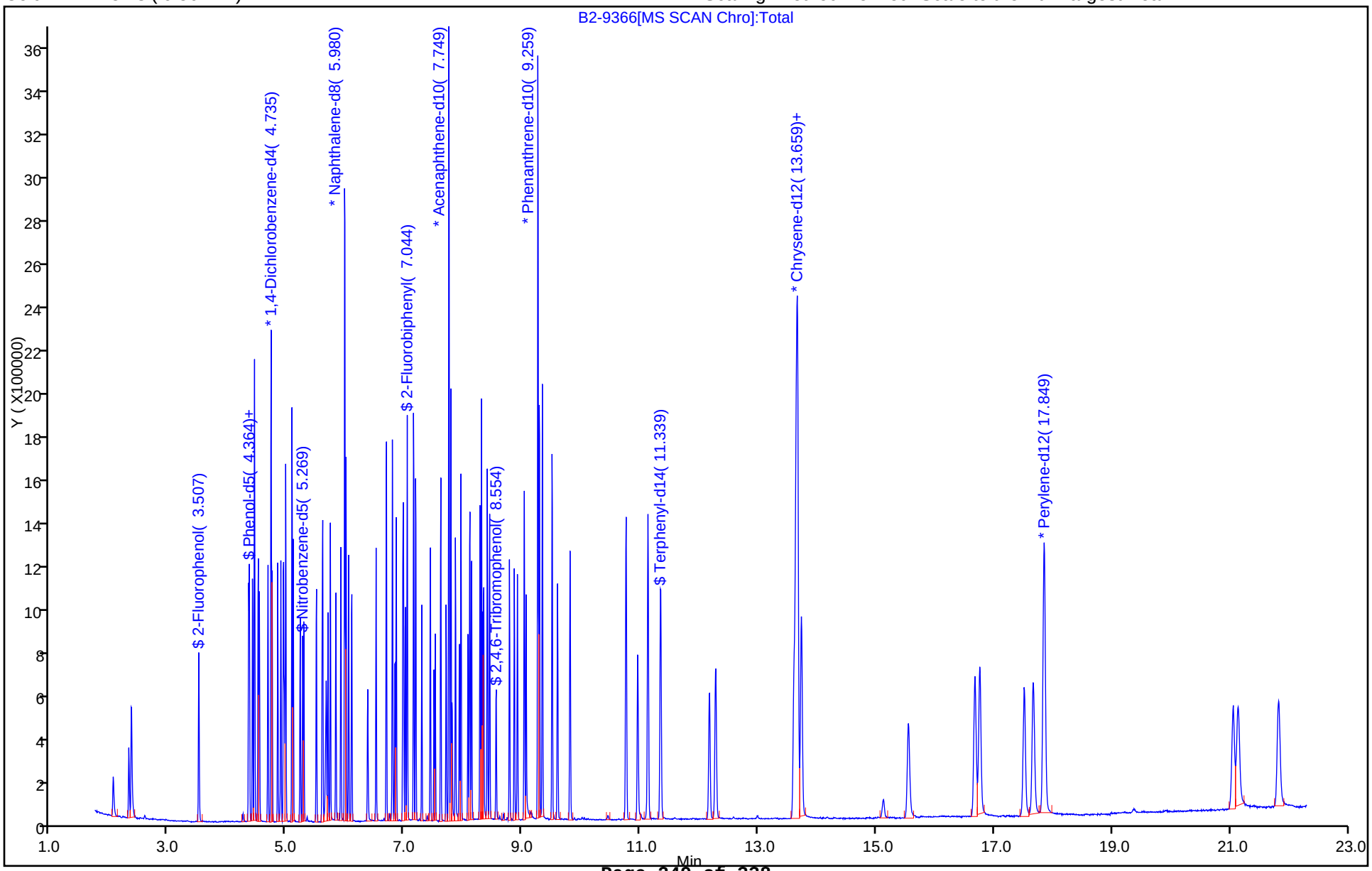
Report Date: 05-Mar-2015 13:29:17 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9366.D

Injection Date:	04-Mar-2015 11:57:30	Instrument ID:	SMS_B2	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_B2_8270D	Limit Group:	MSSV - 8270D		

Column: VF-5ms (0.50 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

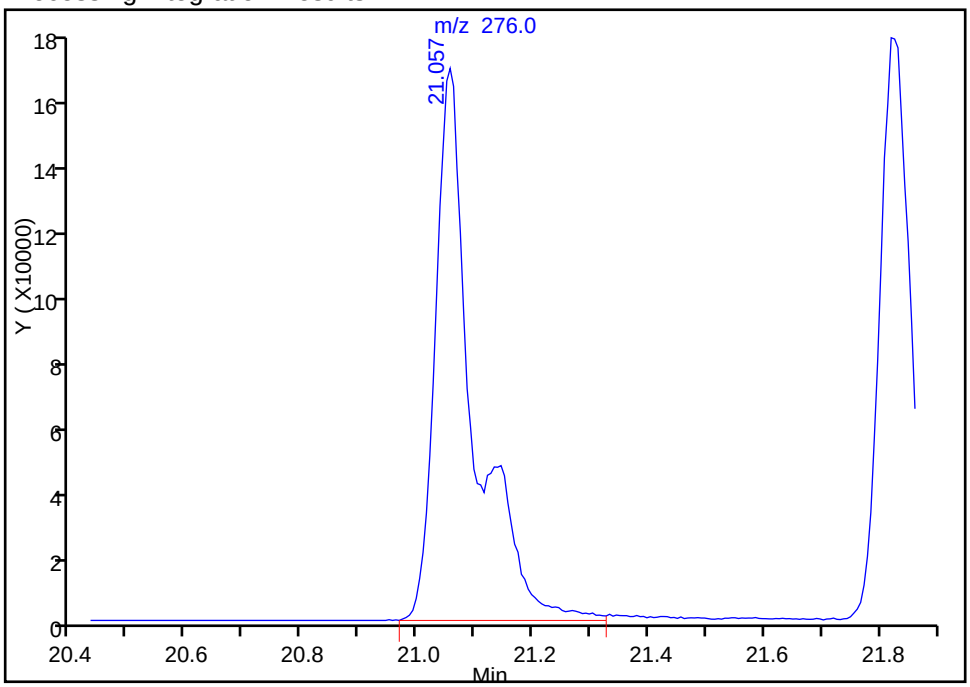
TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9366.D
Injection Date: 04-Mar-2015 11:57:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

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

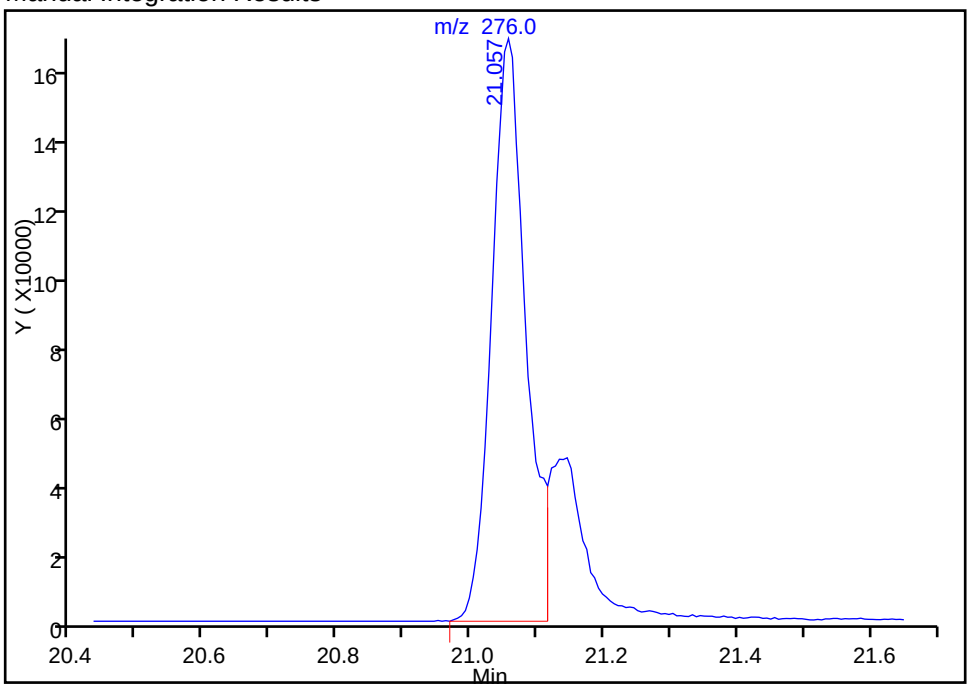
Processing Integration Results

RT: 21.06
Area: 779107
Amount: 21.970527
Amount Units: ug/ml



Manual Integration Results

RT: 21.06
Area: 603973
Amount: 19.443677
Amount Units: ug/ml



Reviewer: kiekeld, 05-Mar-2015 13:03:08
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

Report Date: 05-Mar-2015 13:29:18 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9367.D
Lims ID: STD050 HSL
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Mar-2015 12:26:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:18 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:05:17

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	4.734	4.734	0.000	95	343376	40.0	40.0	
* 2 Naphthalene-d8	136	5.986	5.985	0.001	99	1284449	40.0	40.0	
* 3 Acenaphthene-d10	164	7.754	7.754	0.000	92	813200	40.0	40.0	
* 4 Phenanthrene-d10	188	9.264	9.264	0.000	97	1383294	40.0	40.0	
* 5 Chrysene-d12	240	13.665	13.676	-0.011	97	1565029	40.0	40.0	
* 6 Perylene-d12	264	17.848	17.860	-0.012	97	1388727	40.0	40.0	
$ 7 2-Fluorophenol	112	3.506	3.512	-0.006	92	621568	50.0	50.7	
$ 8 Phenol-d5	99	4.353	4.358	-0.005	90	773428	50.0	49.4	
$ 9 Nitrobenzene-d5	82	5.269	5.275	-0.006	88	656405	50.0	52.5	
$ 10 2-Fluorobiphenyl	172	7.043	7.049	-0.006	99	1308983	50.0	49.3	
$ 11 2,4,6-Tribromophenol	330	8.553	8.559	-0.006	93	179776	50.0	47.9	
$ 12 Terphenyl-d14	244	11.344	11.350	-0.006	99	1557242	50.0	48.1	
15 1,4-Dioxane	88	2.055	2.061	-0.006	93	267065	50.0	50.0	
16 N-Nitrosodimethylamine	74	2.320	2.325	-0.005	93	413764	50.0	51.0	
17 Pyridine	79	2.361	2.366	-0.005	96	728341	50.0	50.8	
25 Phenol	94	4.364	4.370	-0.006	98	785773	50.0	49.7	
26 Aniline	93	4.423	4.423	0.000	98	972392	50.0	51.1	
27 Bis(2-chloroethyl)ether	93	4.458	4.458	0.000	95	604327	50.0	51.1	
29 2-Chlorophenol	128	4.535	4.540	-0.005	97	624344	50.0	51.0	
30 1,3-Dichlorobenzene	146	4.682	4.681	0.001	97	661518	50.0	49.6	
31 1,4-Dichlorobenzene	146	4.752	4.752	0.000	94	669121	50.0	49.4	
32 Benzyl alcohol	108	4.846	4.851	-0.005	91	411507	50.0	49.6	
33 1,2-Dichlorobenzene	146	4.899	4.904	-0.005	96	633702	50.0	48.9	
34 2-Methylphenol	108	4.946	4.945	0.001	95	588337	50.0	50.1	
36 2,2'-oxybis[1-chloropropan	45	4.958	4.963	-0.005	93	731910	50.0	51.3	
38 4-Methylphenol	108	5.087	5.092	-0.005	94	605657	50.0	50.6	
39 3-Methylphenol	108	5.087	5.092	-0.005	88	605657	50.0	50.6	
40 3 & 4 Methylphenol	108	5.087	5.092	-0.005	93	605657	50.0	50.6	
41 N-Nitrosodi-n-propylamine	70	5.087	5.092	-0.005	76	414427	50.0	49.8	
43 Acetophenone	105	5.110	5.116	-0.006	98	822463	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.228	5.228	0.000	89	260631	50.0	51.0	
48 Nitrobenzene	77	5.293	5.292	0.001	86	670282	50.0	52.5	
51 Isophorone	82	5.504	5.510	-0.006	97	1094936	50.0	51.9	
52 2,4-Dimethylphenol	107	5.610	5.615	-0.005	96	574080	50.0	50.2	
53 2-Nitrophenol	139	5.598	5.604	-0.006	95	315942	50.0	50.6	
56 Benzoic acid	105	5.692	5.715	-0.023	85	719007	100.0	89.2	
57 Bis(2-chloroethoxy)methane	93	5.698	5.703	-0.005	99	686671	50.0	49.7	
59 2,4-Dichlorophenol	162	5.833	5.839	-0.006	92	529916	50.0	52.6	
60 1,2,4-Trichlorobenzene	180	5.915	5.921	-0.006	92	568827	50.0	50.7	
61 Naphthalene	128	6.004	6.009	-0.005	98	1756657	50.0	53.2	
62 4-Chloroaniline	127	6.051	6.056	-0.005	85	786459	50.0	52.4	
65 Hexachlorobutadiene	225	6.103	6.103	0.000	92	327565	50.0	52.3	
67 Caprolactam	55	6.380	6.391	-0.011	82	251279	50.0	50.4	
69 4-Chloro-3-methylphenol	107	6.515	6.520	-0.005	96	525912	50.0	53.7	
71 2-Methylnaphthalene	142	6.691	6.691	0.001	89	1141046	50.0	51.5	
72 1-Methylnaphthalene	142	6.791	6.796	-0.005	90	1063786	50.0	51.0	
73 Hexachlorocyclopentadiene	237	6.838	6.837	0.001	86	309099	50.0	49.2	
74 1,2,4,5-Tetrachlorobenzene	216	6.855	6.861	-0.006	95	558723	50.0	50.7	
76 2,4,6-Trichlorophenol	196	6.973	6.973	0.000	88	368260	50.0	49.0	
77 2,4,5-Trichlorophenol	196	7.014	7.014	0.000	95	385555	50.0	48.3	
79 1,1'-Biphenyl	154	7.155	7.155	0.000	94	1387406	50.0	47.9	
80 2-Chloronaphthalene	162	7.190	7.190	0.000	95	1136262	50.0	49.2	
82 2-Nitroaniline	65	7.290	7.296	-0.006	83	355013	50.0	53.1	
85 Dimethyl phthalate	163	7.437	7.443	-0.006	99	1279262	50.0	51.5	
86 1,3-Dinitrobenzene	168	7.502	7.507	-0.005	89	225682	50.0	52.7	
87 2,6-Dinitrotoluene	165	7.519	7.525	-0.006	90	311045	50.0	51.4	
88 Acenaphthylene	152	7.613	7.619	-0.006	93	1735270	50.0	51.5	
89 3-Nitroaniline	138	7.707	7.713	-0.006	96	360259	50.0	50.3	
90 Acenaphthene	153	7.784	7.789	-0.005	95	1138490	50.0	50.0	
91 2,4-Dinitrophenol	184	7.807	7.813	-0.006	85	316781	100.0	87.8	
92 4-Nitrophenol	109	7.866	7.871	-0.005	87	325767	100.0	104.3	
94 2,4-Dinitrotoluene	165	7.931	7.936	-0.005	93	388641	50.0	49.6	
95 Dibenzofuran	168	7.954	7.960	-0.006	91	1568146	50.0	49.7	
97 2,3,4,6-Tetrachlorophenol	232	8.078	8.077	0.001	69	311954	50.0	49.4	
99 Diethyl phthalate	149	8.136	8.142	-0.006	98	1195774	50.0	50.2	
101 4-Chlorophenyl phenyl ethe	204	8.283	8.283	0.000	86	627339	50.0	47.7	
102 Fluorene	166	8.307	8.306	0.001	83	1257790	50.0	48.1	
104 4-Nitroaniline	138	8.330	8.336	-0.006	86	326422	50.0	47.7	
105 4,6-Dinitro-2-methylphenol	198	8.342	8.347	-0.005	86	466501	100.0	95.3	
107 N-Nitrosodiphenylamine	169	8.407	8.406	0.001	60	890955	50.0	46.8	
108 1,2-Diphenylhydrazine	77	8.442	8.447	-0.005	97	1184886	50.5	47.3	
109 Azobenzene	77	8.442	8.447	-0.005	98	1184886	50.0	46.8	
116 4-Bromophenyl phenyl ether	248	8.783	8.782	0.001	57	342231	50.0	46.4	
117 Hexachlorobenzene	284	8.859	8.864	-0.005	91	383861	50.0	47.3	
120 Pentachlorophenol	266	9.059	9.064	-0.005	92	417580	100.0	90.4	
125 Phenanthrene	178	9.288	9.287	0.001	97	1899106	50.0	49.9	
126 Anthracene	178	9.341	9.340	0.001	97	1881122	50.0	48.9	
127 Carbazole	167	9.505	9.505	0.000	82	1803674	50.0	50.5	
129 Di-n-butyl phthalate	149	9.805	9.810	-0.005	100	1902705	50.0	48.3	
134 Fluoranthene	202	10.757	10.762	-0.005	98	2167877	50.0	51.1	
136 Pyrene	202	11.127	11.138	-0.011	95	2254832	50.0	50.3	
141 Butyl benzyl phthalate	149	12.279	12.284	-0.005	96	869020	50.0	48.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.606	13.618	-0.012	66	800281	50.0	50.4	
146 Benzo[a]anthracene	228	13.636	13.647	-0.011	99	2112455	50.0	50.0	
147 Bis(2-ethylhexyl) phthalat	149	13.648	13.653	-0.005	77	1196546	50.0	50.0	
148 Chrysene	228	13.736	13.747	-0.011	95	1953335	50.0	50.3	
149 Di-n-octyl phthalate	149	15.545	15.557	-0.012	99	1737284	50.0	46.5	
151 Benzo[b]fluoranthene	252	16.679	16.691	-0.012	92	1884717	50.0	49.3	
152 Benzo[k]fluoranthene	252	16.762	16.779	-0.017	95	1982015	50.0	49.2	
153 Benzo[a]pyrene	252	17.666	17.684	-0.018	76	1853854	50.0	49.3	
156 Indeno[1,2,3-cd]pyrene	276	21.062	21.074	-0.012	95	1558797	50.0	49.3	M
157 Dibenz(a,h)anthracene	278	21.145	21.162	-0.017	95	1642754	50.0	50.4	
158 Benzo[g,h,i]perylene	276	21.832	21.855	-0.023	92	1765125	50.0	50.8	
163 Famphur	218	12.173	12.178	-0.005	97	734640	50.0	50.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA050_00015 Amount Added: 200.00 Units: uL

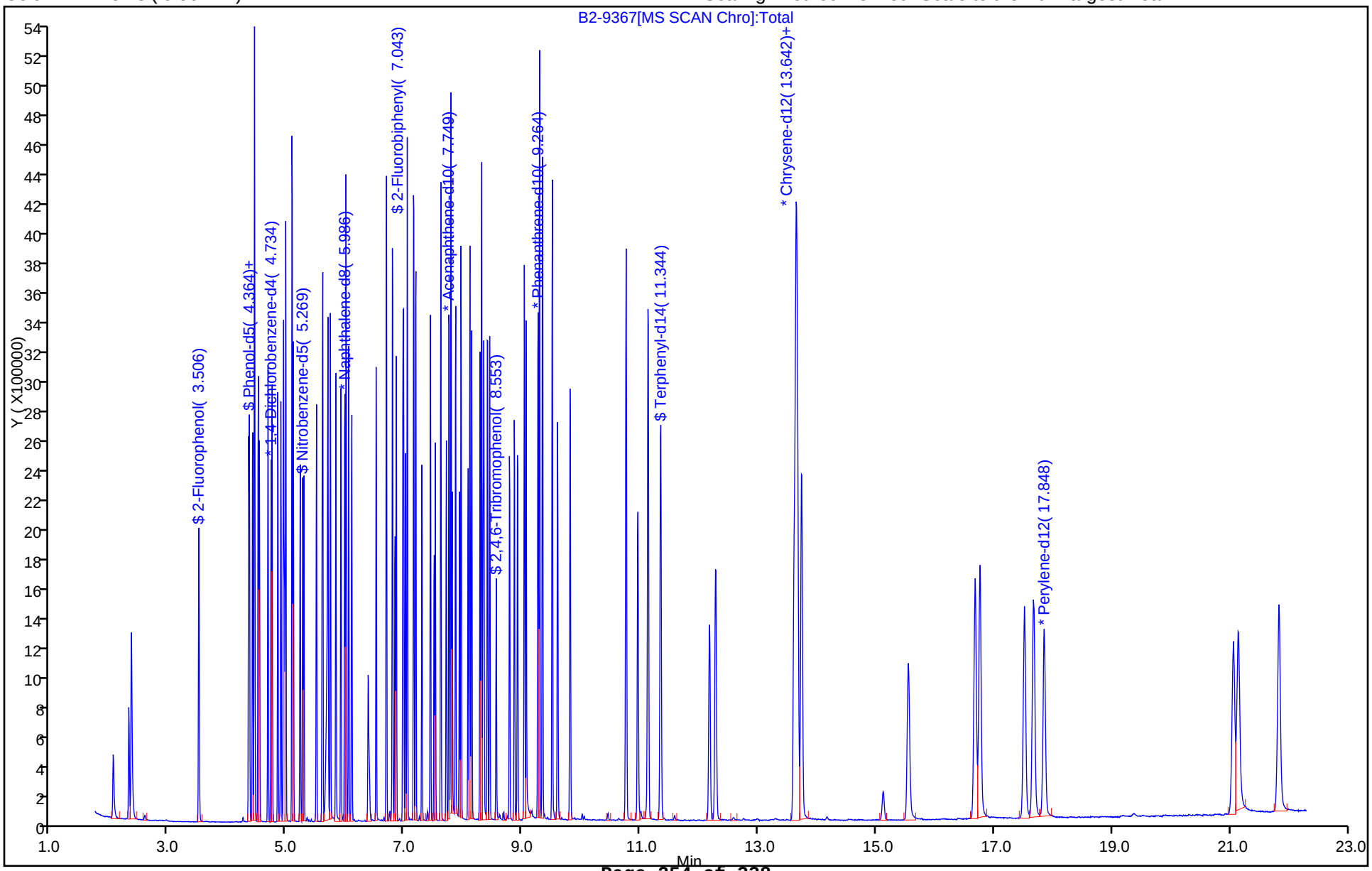
Report Date: 05-Mar-2015 13:29:18 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9367.D

Injection Date:	04-Mar-2015 12:26:30	Instrument ID:	SMS_B2	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_B2_8270D	Limit Group:	MSSV - 8270D		

Column: VF-5ms (0.50 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

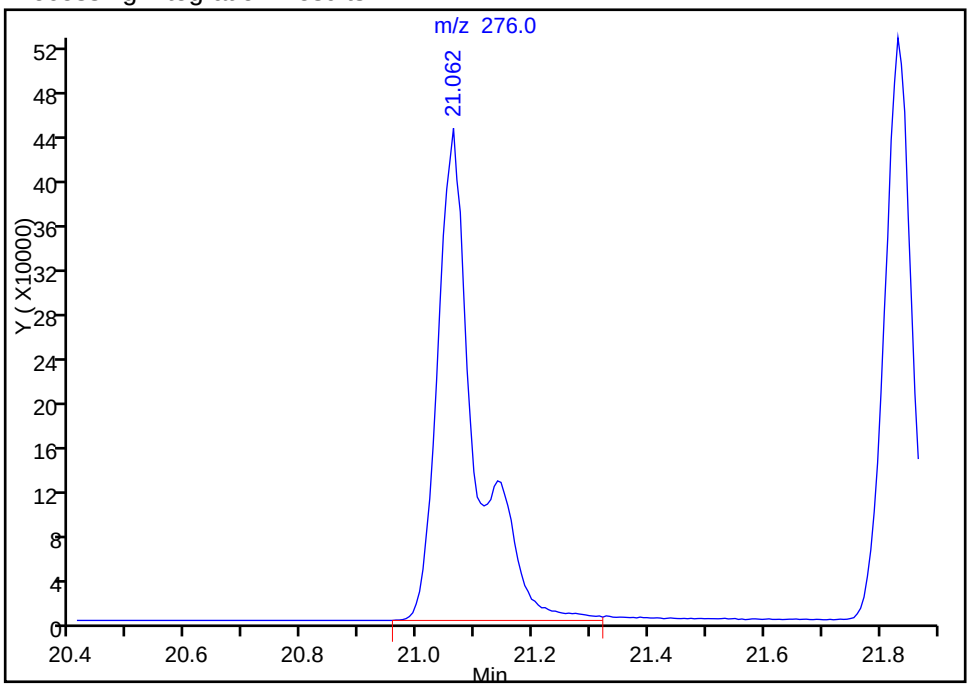
TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9367.D
Injection Date: 04-Mar-2015 12:26:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

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

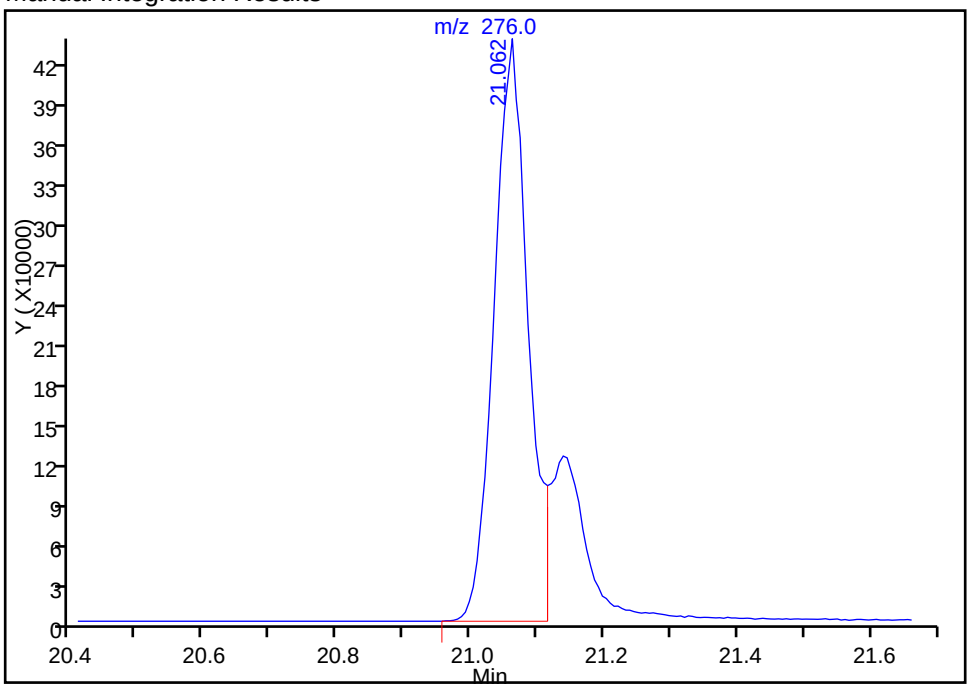
Processing Integration Results

RT: 21.06
Area: 2010245
Amount: 57.507643
Amount Units: ug/ml



Manual Integration Results

RT: 21.06
Area: 1558797
Amount: 49.336353
Amount Units: ug/ml



Reviewer: kiekeld, 05-Mar-2015 13:05:17
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

Report Date: 05-Mar-2015 13:29:20 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9368.D
Lims ID: STD120 HSL
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Mar-2015 12:54:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:19 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:10:17

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	4.734	4.734	0.000	95	337793	40.0	40.0	
* 2 Naphthalene-d8	136	5.986	5.985	0.001	99	1316930	40.0	40.0	
* 3 Acenaphthene-d10	164	7.754	7.754	0.000	92	799255	40.0	40.0	
* 4 Phenanthrene-d10	188	9.264	9.264	0.000	97	1342983	40.0	40.0	
* 5 Chrysene-d12	240	13.671	13.676	-0.005	96	1503667	40.0	40.0	
* 6 Perylene-d12	264	17.854	17.860	-0.006	97	1359789	40.0	40.0	
$ 7 2-Fluorophenol	112	3.506	3.512	-0.006	92	1449300	120.0	120.3	
$ 8 Phenol-d5	99	4.352	4.358	-0.006	91	1844389	120.0	119.6	
$ 9 Nitrobenzene-d5	82	5.275	5.275	0.000	87	1543224	120.0	120.3	
$ 10 2-Fluorobiphenyl	172	7.043	7.049	-0.006	99	3092522	120.0	118.5	
$ 11 2,4,6-Tribromophenol	330	8.553	8.559	-0.006	93	471918	120.0	127.9	
$ 12 Terphenyl-d14	244	11.344	11.350	-0.006	98	3731634	120.0	120.1	
15 1,4-Dioxane	88	2.055	2.061	-0.006	93	636884	120.0	121.2	
16 N-Nitrosodimethylamine	74	2.325	2.325	0.000	93	966369	120.0	121.2	
17 Pyridine	79	2.367	2.366	0.000	97	1718281	120.0	121.9	
25 Phenol	94	4.370	4.370	0.000	97	1876187	120.0	120.7	
26 Aniline	93	4.423	4.423	0.000	98	2253418	120.0	120.4	
27 Bis(2-chloroethyl)ether	93	4.458	4.458	0.000	93	1413747	120.0	121.5	
29 2-Chlorophenol	128	4.535	4.540	-0.005	97	1453532	120.0	120.6	
30 1,3-Dichlorobenzene	146	4.681	4.681	0.000	97	1568514	120.0	119.6	
31 1,4-Dichlorobenzene	146	4.752	4.752	0.000	94	1586166	120.0	119.0	
32 Benzyl alcohol	108	4.852	4.851	0.001	92	999009	120.0	122.5	
33 1,2-Dichlorobenzene	146	4.899	4.904	-0.005	95	1523472	120.0	119.6	
34 2-Methylphenol	108	4.946	4.945	0.001	95	1402981	120.0	121.5	
36 2,2'-oxybis[1-chloropropan	45	4.963	4.963	0.000	93	1696847	120.0	121.0	
38 4-Methylphenol	108	5.093	5.092	0.001	93	1444599	120.0	122.7	
39 3-Methylphenol	108	5.093	5.092	0.001	89	1444599	120.0	122.7	
40 3 & 4 Methylphenol	108	5.093	5.092	0.001	94	1444599	120.0	122.7	
41 N-Nitrosodi-n-propylamine	70	5.093	5.092	0.001	74	1012306	120.0	123.7	
43 Acetophenone	105	5.116	5.116	0.000	98	1992330	120.0	122.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.228	5.228	0.000	90	615890	120.0	122.4	
48 Nitrobenzene	77	5.292	5.292	0.000	87	1557810	120.0	119.0	
51 Isophorone	82	5.504	5.510	-0.006	97	2574245	120.0	119.0	
52 2,4-Dimethylphenol	107	5.610	5.615	-0.005	96	1409458	120.0	120.3	
53 2-Nitrophenol	139	5.604	5.604	0.000	92	801526	120.0	125.3	
56 Benzoic acid	105	5.727	5.715	0.012	87	2074266	240.0	238.9	
57 Bis(2-chloroethoxy)methane	93	5.704	5.703	0.001	99	1677228	120.0	118.4	
59 2,4-Dichlorophenol	162	5.833	5.839	-0.006	93	1242181	120.0	120.2	
60 1,2,4-Trichlorobenzene	180	5.921	5.921	0.000	92	1388672	120.0	120.6	
61 Naphthalene	128	6.009	6.009	0.000	97	3927520	120.0	116.0	
62 4-Chloroaniline	127	6.050	6.056	-0.006	84	1823708	120.0	118.5	
65 Hexachlorobutadiene	225	6.103	6.103	0.000	92	773956	120.0	120.6	
67 Caprolactam	55	6.397	6.391	0.006	80	641520	120.0	125.5	M
69 4-Chloro-3-methylphenol	107	6.520	6.520	0.000	95	1222697	120.0	121.7	
71 2-Methylnaphthalene	142	6.691	6.691	0.001	89	2743621	120.0	120.7	
72 1-Methylnaphthalene	142	6.797	6.796	0.001	90	2541782	120.0	119.0	
73 Hexachlorocyclopentadiene	237	6.838	6.837	0.001	85	810923	120.0	131.4	
74 1,2,4,5-Tetrachlorobenzene	216	6.861	6.861	0.000	93	1369725	120.0	121.2	
76 2,4,6-Trichlorophenol	196	6.973	6.973	0.000	89	894280	120.0	121.2	
77 2,4,5-Trichlorophenol	196	7.014	7.014	0.000	95	960936	120.0	122.5	
79 1,1'-Biphenyl	154	7.155	7.155	0.000	95	3344961	120.0	117.5	
80 2-Chloronaphthalene	162	7.190	7.190	0.000	95	2663609	120.0	117.3	
82 2-Nitroaniline	65	7.296	7.296	0.000	86	826412	120.0	125.8	
85 Dimethyl phthalate	163	7.443	7.443	0.000	99	2908537	120.0	119.0	
86 1,3-Dinitrobenzene	168	7.502	7.507	-0.005	87	548369	120.0	130.2	
87 2,6-Dinitrotoluene	165	7.525	7.525	0.000	91	727912	120.0	122.4	
88 Acenaphthylene	152	7.613	7.619	-0.006	96	3887987	120.0	117.4	
89 3-Nitroaniline	138	7.713	7.713	0.000	96	864025	120.0	122.8	
90 Acenaphthene	153	7.784	7.789	-0.005	95	2641774	120.0	118.0	
91 2,4-Dinitrophenol	184	7.813	7.813	0.000	85	898854	240.0	235.3	
92 4-Nitrophenol	109	7.872	7.871	0.001	86	784778	240.0	255.6	
94 2,4-Dinitrotoluene	165	7.936	7.936	0.000	94	959439	120.0	124.6	
95 Dibenzofuran	168	7.960	7.960	0.000	91	3637176	120.0	117.2	
97 2,3,4,6-Tetrachlorophenol	232	8.077	8.077	0.000	69	807944	120.0	130.1	
99 Diethyl phthalate	149	8.142	8.142	0.000	99	2741612	120.0	117.0	
101 4-Chlorophenyl phenyl ethe	204	8.283	8.283	0.000	87	1532947	120.0	118.7	
102 Fluorene	166	8.307	8.306	0.001	83	3028256	120.0	117.8	
104 4-Nitroaniline	138	8.336	8.336	0.000	84	846077	120.0	125.8	
105 4,6-Dinitro-2-methylphenol	198	8.348	8.347	0.001	86	1243451	240.0	253.7	
107 N-Nitrosodiphenylamine	169	8.406	8.406	0.000	61	2229988	120.0	120.7	
108 1,2-Diphenylhydrazine	77	8.448	8.447	0.001	98	3063102	121.3	124.4	
109 Azobenzene	77	8.448	8.447	0.001	97	3063102	120.0	123.0	
116 4-Bromophenyl phenyl ether	248	8.783	8.782	0.001	59	870003	120.0	121.6	
117 Hexachlorobenzene	284	8.865	8.864	0.001	92	959337	120.0	121.8	
120 Pentachlorophenol	266	9.065	9.064	0.001	91	1123608	240.0	236.5	
125 Phenanthrene	178	9.288	9.287	0.001	98	4320392	120.0	117.0	
126 Anthracene	178	9.341	9.340	0.001	98	4470017	120.0	119.6	
127 Carbazole	167	9.505	9.505	0.000	82	4012977	120.0	115.8	
129 Di-n-butyl phthalate	149	9.811	9.810	0.001	100	4650014	120.0	121.5	
134 Fluoranthene	202	10.763	10.762	0.001	98	4816522	120.0	117.0	
136 Pyrene	202	11.133	11.138	-0.005	94	4818131	120.0	111.8	
141 Butyl benzyl phthalate	149	12.278	12.284	-0.006	97	2089458	120.0	121.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.612	13.618	-0.006	66	1870249	120.0	122.5	
146 Benzo[a]anthracene	228	13.642	13.647	-0.005	99	4844550	120.0	119.4	
147 Bis(2-ethylhexyl) phthalat	149	13.647	13.653	-0.006	75	2821666	120.0	122.8	
148 Chrysene	228	13.741	13.747	-0.006	96	4407028	120.0	118.0	
149 Di-n-octyl phthalate	149	15.545	15.557	-0.012	99	4554399	120.0	126.7	
151 Benzo[b]fluoranthene	252	16.691	16.691	0.000	92	4514679	120.0	120.7	
152 Benzo[k]fluoranthene	252	16.773	16.779	-0.006	95	4695778	120.0	119.0	
153 Benzo[a]pyrene	252	17.684	17.684	0.000	78	4468652	120.0	121.3	
156 Indeno[1,2,3-cd]pyrene	276	21.080	21.074	0.006	94	3752487	120.0	123.6	M
157 Dibenz(a,h)anthracene	278	21.156	21.162	-0.006	92	4079505	120.0	127.8	
158 Benzo[g,h,i]perylene	276	21.855	21.855	0.000	90	4138999	120.0	121.7	
163 Famphur	218	12.179	12.178	0.001	97	1711280	120.0	121.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA120_00015 Amount Added: 200.00 Units: uL

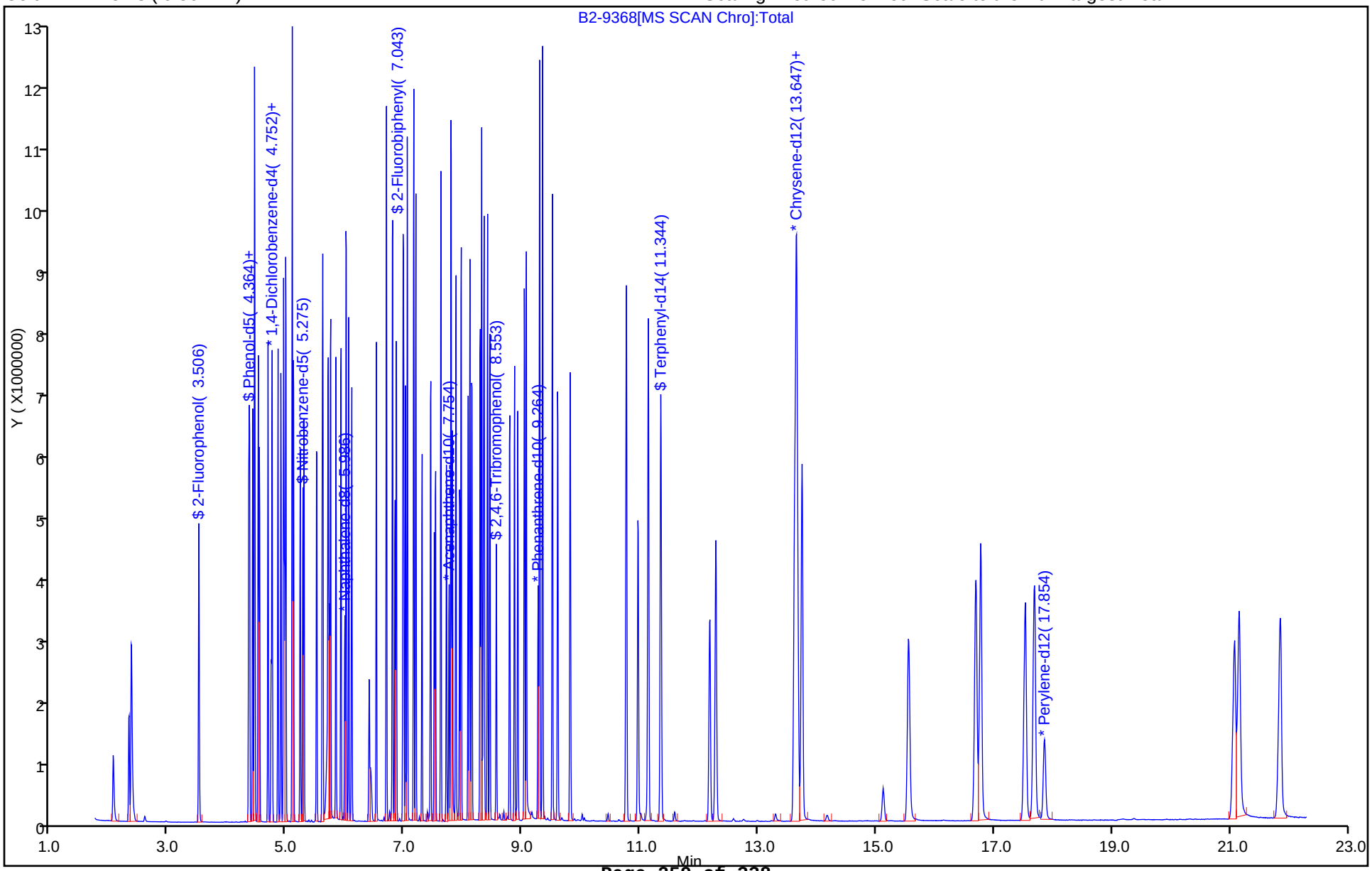
Report Date: 05-Mar-2015 13:29:20 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9368.D

Injection Date:	04-Mar-2015 12:54:30	Instrument ID:	SMS_B2	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_B2_8270D	Limit Group:	MSSV - 8270D		

Column: VF-5ms (0.50 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

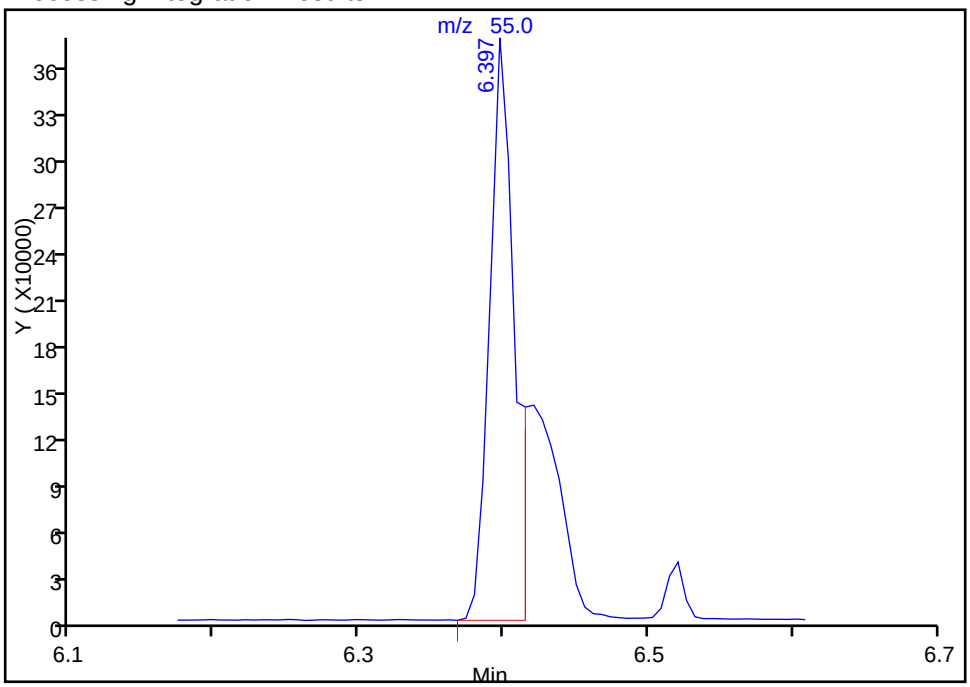
TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9368.D
Injection Date: 04-Mar-2015 12:54:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

67 Caprolactam, CAS: 105-60-2

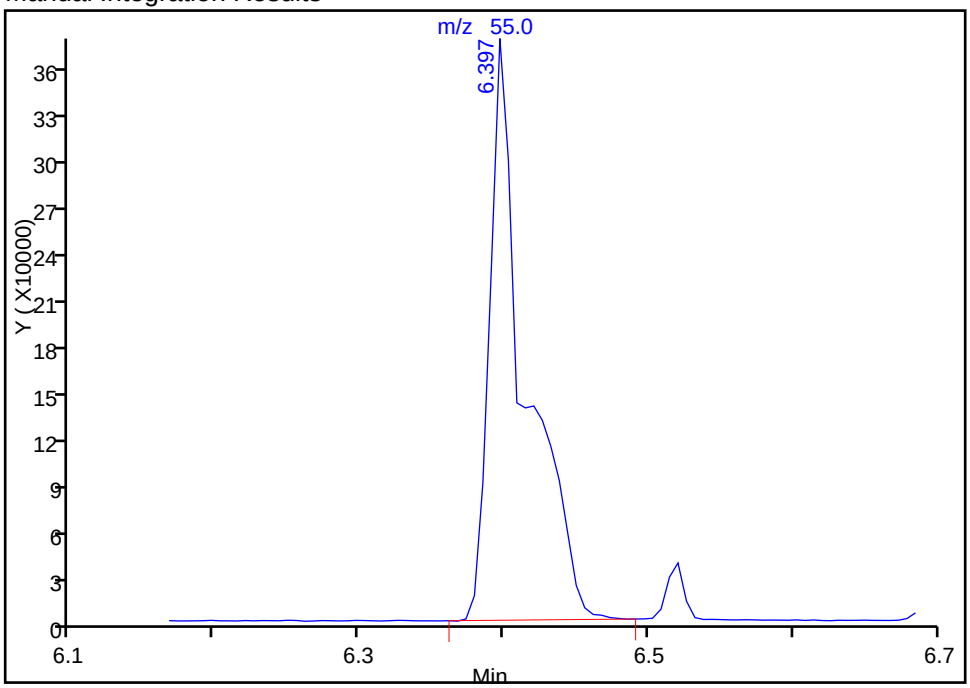
Processing Integration Results

RT: 6.40
Area: 447795
Amount: 100.6659
Amount Units: ug/ml



Manual Integration Results

RT: 6.40
Area: 641520
Amount: 125.4505
Amount Units: ug/ml



Reviewer: kiekeld, 05-Mar-2015 13:10:17
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

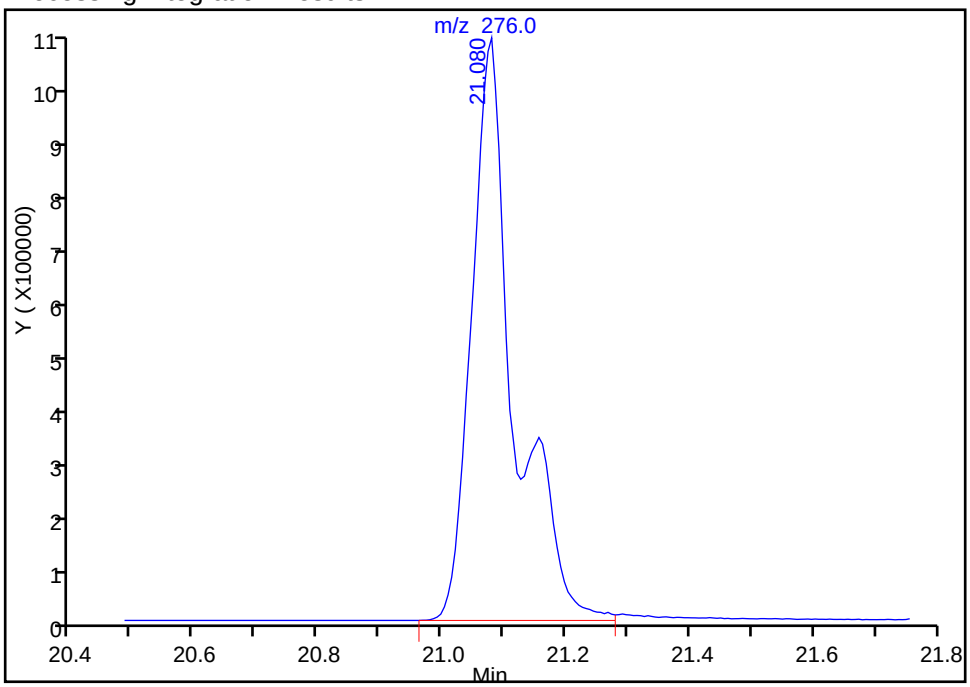
TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9368.D
Injection Date: 04-Mar-2015 12:54:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

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

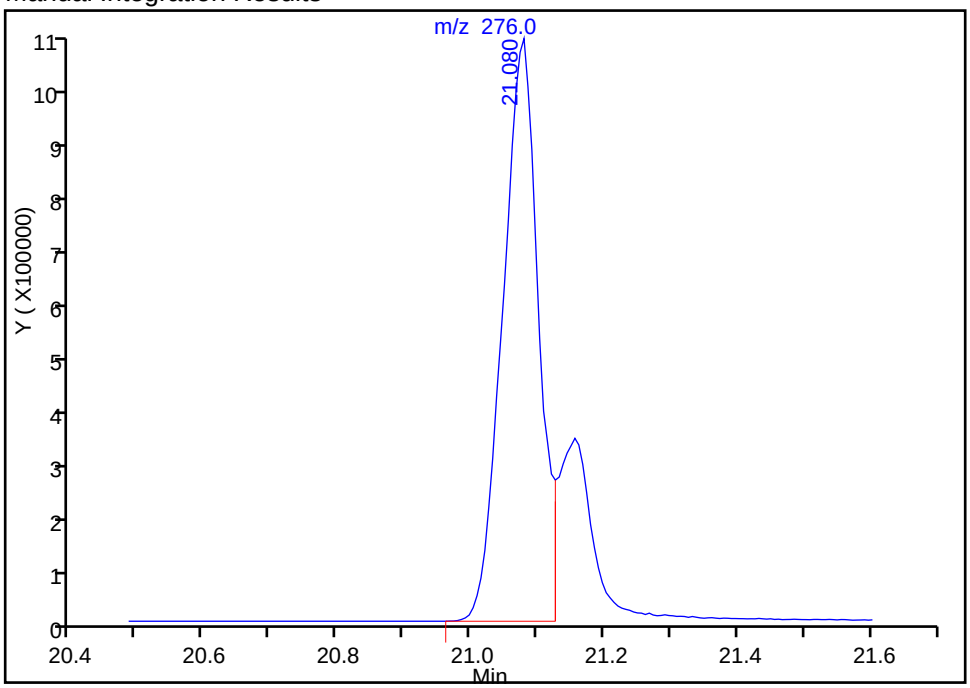
Processing Integration Results

RT: 21.08
Area: 4799189
Amount: 147.6619
Amount Units: ug/ml



Manual Integration Results

RT: 21.08
Area: 3752487
Amount: 123.6139
Amount Units: ug/ml



Reviewer: kiekeld, 05-Mar-2015 13:10:17
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

Report Date: 05-Mar-2015 13:29:21 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9369.D
Lims ID: STD160 HSL
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Mar-2015 13:23:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:21 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:12:33

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	4.736	4.734	0.002	94	335114	40.0	40.0	
* 2 Naphthalene-d8	136	5.982	5.985	-0.003	99	1256648	40.0	40.0	
* 3 Acenaphthene-d10	164	7.751	7.754	-0.003	93	785461	40.0	40.0	
* 4 Phenanthrene-d10	188	9.266	9.264	0.002	97	1347850	40.0	40.0	
* 5 Chrysene-d12	240	13.679	13.676	0.003	96	1492353	40.0	40.0	
* 6 Perylene-d12	264	17.856	17.860	-0.004	97	1310888	40.0	40.0	
$ 7 2-Fluorophenol	112	3.508	3.512	-0.004	91	1812469	160.0	151.6	
$ 8 Phenol-d5	99	4.355	4.358	-0.003	90	2400600	160.0	157.0	
$ 9 Nitrobenzene-d5	82	5.277	5.275	0.002	87	1954269	160.0	159.7	
$ 10 2-Fluorobiphenyl	172	7.046	7.049	-0.003	99	3932587	160.0	153.3	
$ 11 2,4,6-Tribromophenol	330	8.556	8.559	-0.003	93	624312	160.0	172.1	
$ 12 Terphenyl-d14	244	11.346	11.350	-0.004	98	4913876	160.0	159.3	
15 1,4-Dioxane	88	2.057	2.061	-0.004	92	772400	160.0	148.1	
16 N-Nitrosodimethylamine	74	2.322	2.325	-0.003	93	1241636	160.0	156.9	
17 Pyridine	79	2.363	2.366	-0.003	99	2182822	160.0	156.1	
25 Phenol	94	4.372	4.370	0.002	97	2399490	160.0	155.6	
26 Aniline	93	4.425	4.423	0.002	98	2892424	160.0	155.8	
27 Bis(2-chloroethyl)ether	93	4.460	4.458	0.002	94	1803043	160.0	156.2	
29 2-Chlorophenol	128	4.537	4.540	-0.003	96	1888037	160.0	157.9	
30 1,3-Dichlorobenzene	146	4.684	4.681	0.003	97	2017790	160.0	155.0	
31 1,4-Dichlorobenzene	146	4.754	4.752	0.002	94	1999895	160.0	151.2	
32 Benzyl alcohol	108	4.854	4.851	0.003	93	1295626	160.0	160.2	
33 1,2-Dichlorobenzene	146	4.901	4.904	-0.003	96	1966386	160.0	155.6	
34 2-Methylphenol	108	4.948	4.945	0.003	95	1801111	160.0	157.2	
36 2,2'-oxybis[1-chloropropan	45	4.960	4.963	-0.003	93	2165373	160.0	155.6	
38 4-Methylphenol	108	5.095	5.092	0.003	93	1843919	160.0	157.9	
39 3-Methylphenol	108	5.095	5.092	0.003	89	1843919	160.0	157.9	
40 3 & 4 Methylphenol	108	5.095	5.092	0.003	94	1843919	160.0	157.9	
41 N-Nitrosodi-n-propylamine	70	5.095	5.092	0.003	73	1282470	160.0	158.0	
43 Acetophenone	105	5.112	5.116	-0.004	97	2565889	160.0	159.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.230	5.228	0.002	88	777536	160.0	155.8	
48 Nitrobenzene	77	5.295	5.292	0.003	87	1985598	160.0	159.0	
51 Isophorone	82	5.512	5.510	0.002	97	3283916	160.0	159.1	
52 2,4-Dimethylphenol	107	5.612	5.615	-0.003	96	1778286	160.0	159.1	
53 2-Nitrophenol	139	5.600	5.604	-0.004	95	1001157	160.0	164.0	
56 Benzoic acid	105	5.741	5.715	0.026	69	2752973	320.0	329.7	
57 Bis(2-chloroethoxy)methane	93	5.700	5.703	-0.003	99	2138563	160.0	158.2	
59 2,4-Dichlorophenol	162	5.835	5.839	-0.004	93	1597358	160.0	162.0	
60 1,2,4-Trichlorobenzene	180	5.917	5.921	-0.004	89	1797707	160.0	163.7	
61 Naphthalene	128	6.006	6.009	-0.003	98	4809148	160.0	148.9	
62 4-Chloroaniline	127	6.053	6.056	-0.003	84	2323242	160.0	158.2	
65 Hexachlorobutadiene	225	6.100	6.103	-0.003	94	966837	160.0	157.9	
67 Caprolactam	55	6.405	6.391	0.014	81	788872	160.0	161.7	M
69 4-Chloro-3-methylphenol	107	6.523	6.520	0.003	95	1590399	160.0	165.9	
71 2-Methylnaphthalene	142	6.693	6.691	0.003	89	3392160	160.0	156.4	
72 1-Methylnaphthalene	142	6.793	6.796	-0.003	90	3285158	160.0	161.1	
73 Hexachlorocyclopentadiene	237	6.834	6.837	-0.003	86	1031760	160.0	170.2	
74 1,2,4,5-Tetrachlorobenzene	216	6.857	6.861	-0.004	95	1805178	160.0	167.4	
76 2,4,6-Trichlorophenol	196	6.975	6.973	0.002	87	1173522	160.0	161.8	
77 2,4,5-Trichlorophenol	196	7.016	7.014	0.002	94	1275441	160.0	165.4	
79 1,1'-Biphenyl	154	7.157	7.155	0.002	95	4279926	160.0	153.0	
80 2-Chloronaphthalene	162	7.192	7.190	0.002	95	3462117	160.0	155.1	
82 2-Nitroaniline	65	7.298	7.296	0.002	86	1049591	160.0	162.6	
85 Dimethyl phthalate	163	7.445	7.443	0.002	99	3612487	160.0	150.4	
86 1,3-Dinitrobenzene	168	7.504	7.507	-0.003	86	688118	160.0	166.2	
87 2,6-Dinitrotoluene	165	7.527	7.525	0.002	90	932633	160.0	159.5	
88 Acenaphthylene	152	7.615	7.619	-0.004	92	4986939	160.0	153.2	
89 3-Nitroaniline	138	7.709	7.713	-0.004	94	1125287	160.0	162.8	
90 Acenaphthene	153	7.786	7.789	-0.003	95	3456326	160.0	157.1	
91 2,4-Dinitrophenol	184	7.815	7.813	0.002	86	1249955	320.0	329.0	
92 4-Nitrophenol	109	7.874	7.871	0.003	88	1044003	320.0	346.0	
94 2,4-Dinitrotoluene	165	7.933	7.936	-0.003	91	1260837	160.0	166.6	
95 Dibenzofuran	168	7.956	7.960	-0.004	90	4722114	160.0	154.8	
97 2,3,4,6-Tetrachlorophenol	232	8.080	8.077	0.003	68	1083668	160.0	177.6	
99 Diethyl phthalate	149	8.138	8.142	-0.004	98	3582386	160.0	155.6	
101 4-Chlorophenyl phenyl ethe	204	8.279	8.283	-0.004	90	2016663	160.0	158.8	
102 Fluorene	166	8.309	8.306	0.003	83	3974455	160.0	157.4	
104 4-Nitroaniline	138	8.344	8.336	0.008	79	1106002	160.0	167.3	
105 4,6-Dinitro-2-methylphenol	198	8.350	8.347	0.003	83	1646936	320.0	333.3	
107 N-Nitrosodiphenylamine	169	8.409	8.406	0.003	62	2930972	160.0	158.1	
108 1,2-Diphenylhydrazine	77	8.444	8.447	-0.003	97	3973217	161.8	164.2	
109 Azobenzene	77	8.444	8.447	-0.003	99	3973217	160.0	162.4	
116 4-Bromophenyl phenyl ether	248	8.779	8.782	-0.003	62	1153451	160.0	160.6	
117 Hexachlorobenzene	284	8.867	8.864	0.003	92	1267566	160.0	160.4	
120 Pentachlorophenol	266	9.067	9.064	0.003	91	1567591	320.0	325.7	
125 Phenanthrene	178	9.290	9.287	0.003	98	5552408	160.0	149.8	
126 Anthracene	178	9.343	9.340	0.003	98	5731134	160.0	152.8	
127 Carbazole	167	9.507	9.505	0.002	82	5388304	160.0	154.9	
129 Di-n-butyl phthalate	149	9.807	9.810	-0.003	100	5997760	160.0	156.1	
134 Fluoranthene	202	10.765	10.762	0.003	98	6504098	160.0	157.5	
136 Pyrene	202	11.135	11.138	-0.003	94	6742536	160.0	157.7	
141 Butyl benzyl phthalate	149	12.281	12.284	-0.003	97	2797880	160.0	164.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.620	13.618	0.002	71	2438843	160.0	161.0	
146 Benzo[a]anthracene	228	13.650	13.647	0.003	99	6345465	160.0	157.6	
147 Bis(2-ethylhexyl) phthalat	149	13.650	13.653	-0.003	75	3695228	160.0	162.1	
148 Chrysene	228	13.744	13.747	-0.003	96	5919508	160.0	159.7	
149 Di-n-octyl phthalate	149	15.553	15.557	-0.004	99	6133648	160.0	172.0	
151 Benzo[b]fluoranthene	252	16.699	16.691	0.008	92	5881236	160.0	163.1	
152 Benzo[k]fluoranthene	252	16.781	16.779	0.002	95	6310769	160.0	165.8	
153 Benzo[a]pyrene	252	17.692	17.684	0.008	78	5947890	160.0	167.5	
156 Indeno[1,2,3-cd]pyrene	276	21.082	21.074	0.008	94	5244572	160.0	174.1	
157 Dibenz(a,h)anthracene	278	21.170	21.162	0.008	95	5234609	160.0	170.1	
158 Benzo[g,h,i]perylene	276	21.863	21.855	0.008	93	5462823	160.0	166.6	
163 Famphur	218	12.181	12.178	0.003	97	2115921	160.0	151.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA160_00015 Amount Added: 200.00 Units: uL

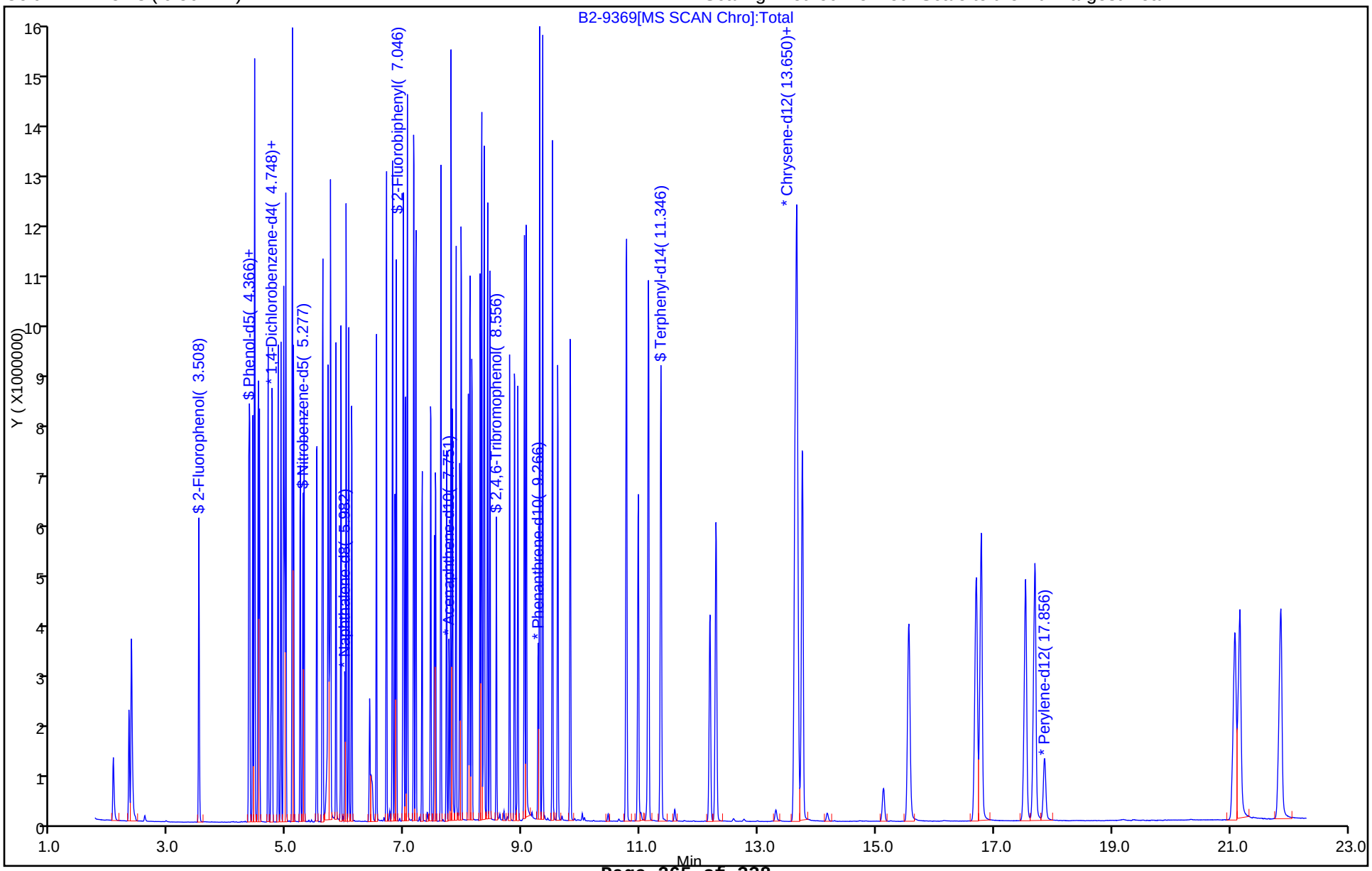
Report Date: 05-Mar-2015 13:29:21 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9369.D

Injection Date:	04-Mar-2015 13:23:30	Instrument ID:	SMS_B2	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_B2_8270D	Limit Group:	MSSV - 8270D		

Column: VF-5ms (0.50 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

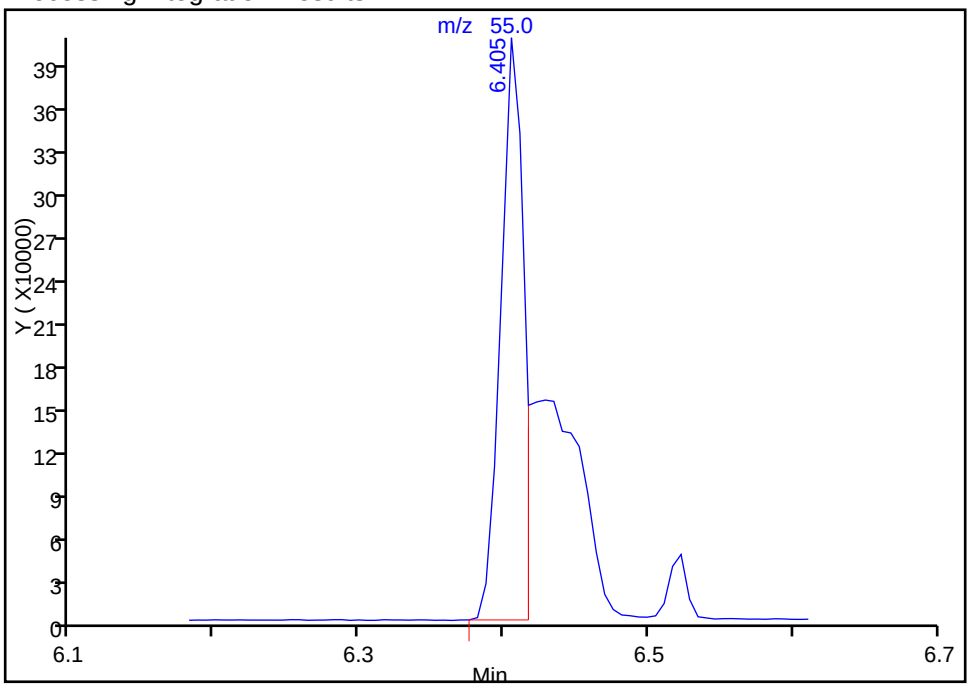
TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9369.D
Injection Date: 04-Mar-2015 13:23:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

67 Caprolactam, CAS: 105-60-2

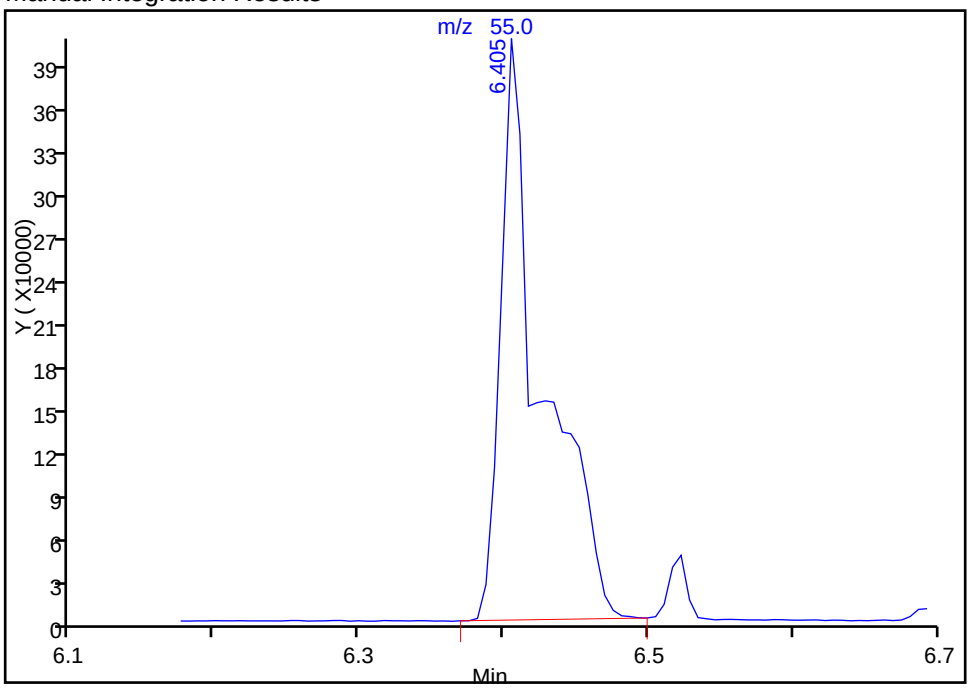
Processing Integration Results

RT: 6.41
Area: 445475
Amount: 100.3940
Amount Units: ug/ml



Manual Integration Results

RT: 6.41
Area: 788872
Amount: 161.6656
Amount Units: ug/ml



Reviewer: kiekeld, 05-Mar-2015 13:12:33
Audit Action: Manually Integrated
Audit Reason: Split Peak

Report Date: 05-Mar-2015 13:29:23 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D
Lims ID: STD200 HSL
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Mar-2015 13:51:30 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_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:22 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:14:26

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	4.733	4.734	-0.001	95	319267	40.0	40.0	
* 2 Naphthalene-d8	136	5.985	5.985	0.000	99	1279597	40.0	40.0	
* 3 Acenaphthene-d10	164	7.753	7.754	-0.001	93	687746	40.0	40.0	
* 4 Phenanthrene-d10	188	9.263	9.264	-0.001	96	1132603	40.0	40.0	
* 5 Chrysene-d12	240	13.676	13.676	0.000	96	1160400	40.0	40.0	
* 6 Perylene-d12	264	17.859	17.860	-0.001	98	1044807	40.0	40.0	
$ 7 2-Fluorophenol	112	3.511	3.512	-0.001	91	2257908	200.0	198.3	
$ 8 Phenol-d5	99	4.357	4.358	-0.001	91	2809080	200.0	192.8	
$ 9 Nitrobenzene-d5	82	5.274	5.275	-0.001	87	2446679	200.0	196.4	
$ 10 2-Fluorobiphenyl	172	7.048	7.049	-0.001	99	4372248	200.0	194.7	
$ 11 2,4,6-Tribromophenol	330	8.558	8.559	-0.001	92	655632	200.0	206.4	
$ 12 Terphenyl-d14	244	11.349	11.350	-0.001	98	4683771	200.0	195.3	
15 1,4-Dioxane	88	2.054	2.061	-0.007	93	1018679	200.0	205.0	
16 N-Nitrosodimethylamine	74	2.324	2.325	-0.001	92	1531212	200.0	203.1	
17 Pyridine	79	2.365	2.366	-0.001	97	2652428	200.0	199.0	
25 Phenol	94	4.369	4.370	-0.001	98	2770724	200.0	188.6	
26 Aniline	93	4.428	4.423	0.005	98	3486857	200.0	197.2	
27 Bis(2-chloroethyl)ether	93	4.457	4.458	-0.001	92	2078614	200.0	189.0	
29 2-Chlorophenol	128	4.539	4.540	-0.001	96	2181459	200.0	191.5	
30 1,3-Dichlorobenzene	146	4.680	4.681	-0.001	97	2421525	200.0	195.3	
31 1,4-Dichlorobenzene	146	4.751	4.752	-0.001	93	2473682	200.0	196.3	
32 Benzyl alcohol	108	4.857	4.851	0.006	93	1496405	200.0	194.2	
33 1,2-Dichlorobenzene	146	4.904	4.904	0.000	97	2307470	200.0	191.6	
34 2-Methylphenol	108	4.945	4.945	0.000	96	2070974	200.0	189.8	
36 2,2'-oxybis[1-chloropropan	45	4.962	4.963	-0.001	92	2413235	200.0	182.0	
38 4-Methylphenol	108	5.097	5.092	0.005	92	2173036	200.0	195.3	
39 3-Methylphenol	108	5.097	5.092	0.005	89	2173036	200.0	195.3	
40 3 & 4 Methylphenol	108	5.097	5.092	0.005	94	2173036	200.0	195.3	
41 N-Nitrosodi-n-propylamine	70	5.097	5.092	0.005	71	1497392	200.0	193.7	
43 Acetophenone	105	5.115	5.116	-0.001	97	2927209	200.0	190.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.227	5.228	-0.001	91	983593	200.0	206.8	
48 Nitrobenzene	77	5.297	5.292	0.005	86	2427893	200.0	190.9	
51 Isophorone	82	5.509	5.510	-0.001	97	3719096	200.0	177.0	
52 2,4-Dimethylphenol	107	5.615	5.615	0.000	95	2056184	200.0	180.6	
53 2-Nitrophenol	139	5.603	5.604	-0.001	92	1207883	200.0	194.3	
56 Benzoic acid	105	5.756	5.715	0.041	89	3522423	400.0	412.6	
57 Bis(2-chloroethoxy)methane	93	5.703	5.703	0.000	99	2646629	200.0	192.2	
59 2,4-Dichlorophenol	162	5.838	5.839	-0.001	91	1968913	200.0	196.1	
60 1,2,4-Trichlorobenzene	180	5.920	5.921	-0.001	90	2187641	200.0	195.6	
61 Naphthalene	128	6.008	6.009	-0.001	98	5861505	200.0	178.2	
62 4-Chloroaniline	127	6.055	6.056	-0.001	85	2851224	200.0	190.7	
65 Hexachlorobutadiene	225	6.102	6.103	-0.001	93	1179779	200.0	189.2	
67 Caprolactam	55	6.414	6.391	0.023	81	927646	200.0	186.7	M
69 4-Chloro-3-methylphenol	107	6.525	6.520	0.005	94	1793270	200.0	183.7	
71 2-Methylnaphthalene	142	6.690	6.691	0.000	89	3971436	200.0	179.8	
72 1-Methylnaphthalene	142	6.796	6.796	0.000	90	3664946	200.0	176.5	
73 Hexachlorocyclopentadiene	237	6.837	6.837	0.000	83	1222753	200.0	230.3	
74 1,2,4,5-Tetrachlorobenzene	216	6.860	6.861	-0.001	94	2037186	200.0	185.5	
76 2,4,6-Trichlorophenol	196	6.972	6.973	-0.001	89	1323705	200.0	208.4	
77 2,4,5-Trichlorophenol	196	7.019	7.014	0.005	94	1428818	200.0	211.7	
79 1,1'-Biphenyl	154	7.154	7.155	-0.001	96	4775732	200.0	194.9	
80 2-Chloronaphthalene	162	7.189	7.190	-0.001	96	3881927	200.0	198.7	
82 2-Nitroaniline	65	7.295	7.296	-0.001	84	1132572	200.0	200.4	
85 Dimethyl phthalate	163	7.442	7.443	-0.001	98	4180811	200.0	198.8	
86 1,3-Dinitrobenzene	168	7.506	7.507	-0.001	88	803853	200.0	221.8	
87 2,6-Dinitrotoluene	165	7.524	7.525	-0.001	91	1039336	200.0	203.0	
88 Acenaphthylene	152	7.618	7.619	-0.001	92	5493852	200.0	192.8	
89 3-Nitroaniline	138	7.712	7.713	-0.001	95	1203408	200.0	198.8	
90 Acenaphthene	153	7.788	7.789	-0.001	94	3694962	200.0	191.8	
91 2,4-Dinitrophenol	184	7.812	7.813	-0.001	86	1421416	400.0	424.4	
92 4-Nitrophenol	109	7.877	7.871	0.006	86	1062827	400.0	402.3	
94 2,4-Dinitrotoluene	165	7.935	7.936	-0.001	92	1339202	200.0	202.1	
95 Dibenzofuran	168	7.959	7.960	-0.001	90	4907640	200.0	183.7	
97 2,3,4,6-Tetrachlorophenol	232	8.082	8.077	0.005	66	1115399	200.0	208.8	
99 Diethyl phthalate	149	8.141	8.142	-0.001	98	3775849	200.0	187.3	
101 4-Chlorophenyl phenyl ethe	204	8.282	8.283	-0.001	88	2108610	200.0	189.7	
102 Fluorene	166	8.306	8.306	0.000	82	4180018	200.0	189.0	
104 4-Nitroaniline	138	8.347	8.336	0.011	80	1122290	200.0	193.9	
105 4,6-Dinitro-2-methylphenol	198	8.358	8.347	0.011	96	1737547	400.0	417.3	
107 N-Nitrosodiphenylamine	169	8.411	8.406	0.005	61	3011253	200.0	193.3	
108 1,2-Diphenylhydrazine	77	8.447	8.447	-0.001	97	3902900	202.2	184.2	
109 Azobenzene	77	8.447	8.447	-0.001	98	3902900	200.0	182.2	
116 4-Bromophenyl phenyl ether	248	8.781	8.782	-0.001	60	1188389	200.0	196.9	
117 Hexachlorobenzene	284	8.864	8.864	0.000	91	1333275	200.0	200.8	
120 Pentachlorophenol	266	9.063	9.064	-0.001	90	1689606	400.0	415.5	
125 Phenanthrene	178	9.293	9.287	0.006	97	5709097	200.0	183.3	
126 Anthracene	178	9.345	9.340	0.005	97	5888370	200.0	186.9	
127 Carbazole	167	9.510	9.505	0.005	82	5507251	200.0	188.4	
129 Di-n-butyl phthalate	149	9.810	9.810	0.000	100	6105329	200.0	189.2	
134 Fluoranthene	202	10.761	10.762	-0.001	98	6281057	200.0	181.0	
136 Pyrene	202	11.137	11.138	-0.001	94	6333320	200.0	190.5	
141 Butyl benzyl phthalate	149	12.283	12.284	-0.001	96	2632802	200.0	198.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
145 3,3'-Dichlorobenzidine	252	13.623	13.618	0.005	68	2381051	200.0	202.1	
146 Benzo[a]anthracene	228	13.652	13.647	0.005	99	6154853	200.0	196.6	
147 Bis(2-ethylhexyl) phthalat	149	13.652	13.653	-0.001	74	3591612	200.0	202.6	
148 Chrysene	228	13.752	13.747	0.005	95	5694945	200.0	197.6	
149 Di-n-octyl phthalate	149	15.556	15.557	-0.001	98	6033531	200.0	217.6	
151 Benzo[b]fluoranthene	252	16.702	16.691	0.011	92	5873680	200.0	204.4	
152 Benzo[k]fluoranthene	252	16.790	16.779	0.011	95	6002905	200.0	197.9	
153 Benzo[a]pyrene	252	17.700	17.684	0.016	78	5797832	200.0	204.9	
156 Indeno[1,2,3-cd]pyrene	276	21.091	21.074	0.017	90	5095318	200.0	217.5	M
157 Dibenz(a,h)anthracene	278	21.173	21.162	0.011	92	5260536	200.0	214.5	
158 Benzo[g,h,i]perylene	276	21.872	21.855	0.017	92	5320382	200.0	203.6	
163 Famphur	218	12.177	12.178	-0.001	97	1920233	200.0	176.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-HSLA200_00015 Amount Added: 200.00 Units: uL

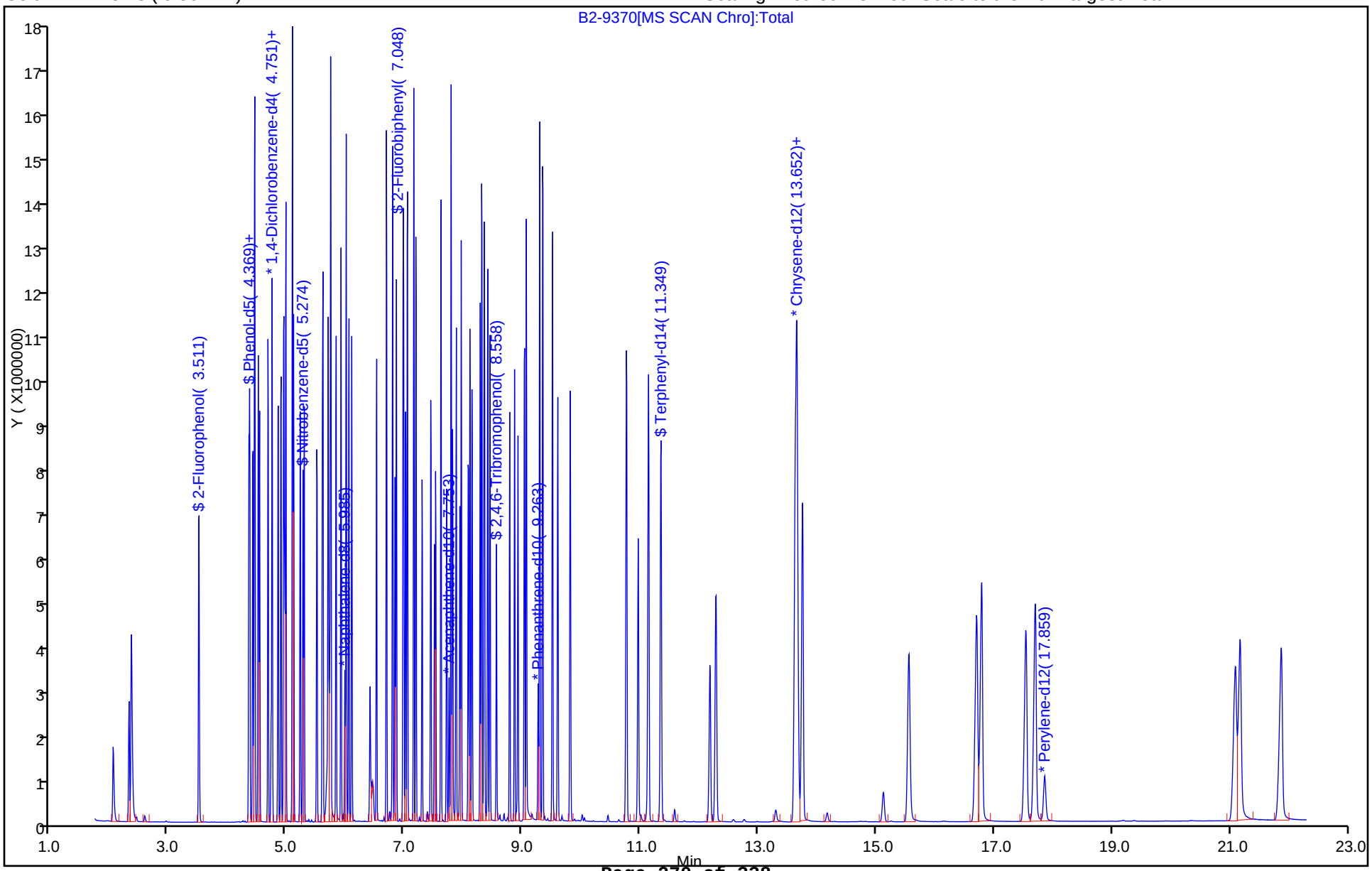
Report Date: 05-Mar-2015 13:29:23 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Injection Date:	04-Mar-2015 13:51:30	Instrument ID:	SMS_B2	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_B2_8270D	Limit Group:	MSSV - 8270D		

Column: VF-5ms (0.50 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

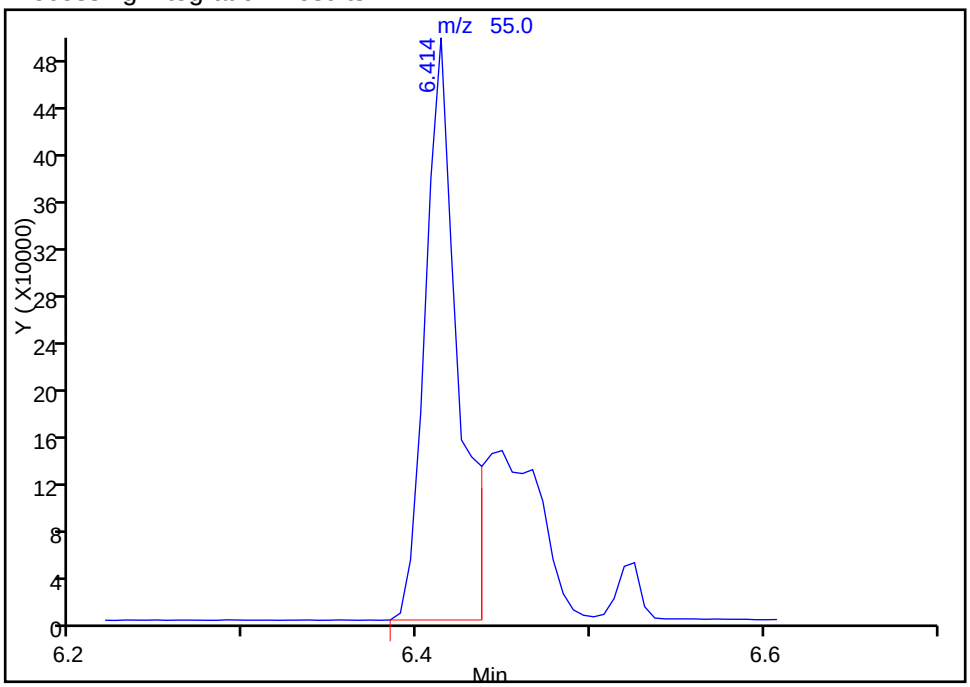
TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D
Injection Date: 04-Mar-2015 13:51:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

67 Caprolactam, CAS: 105-60-2

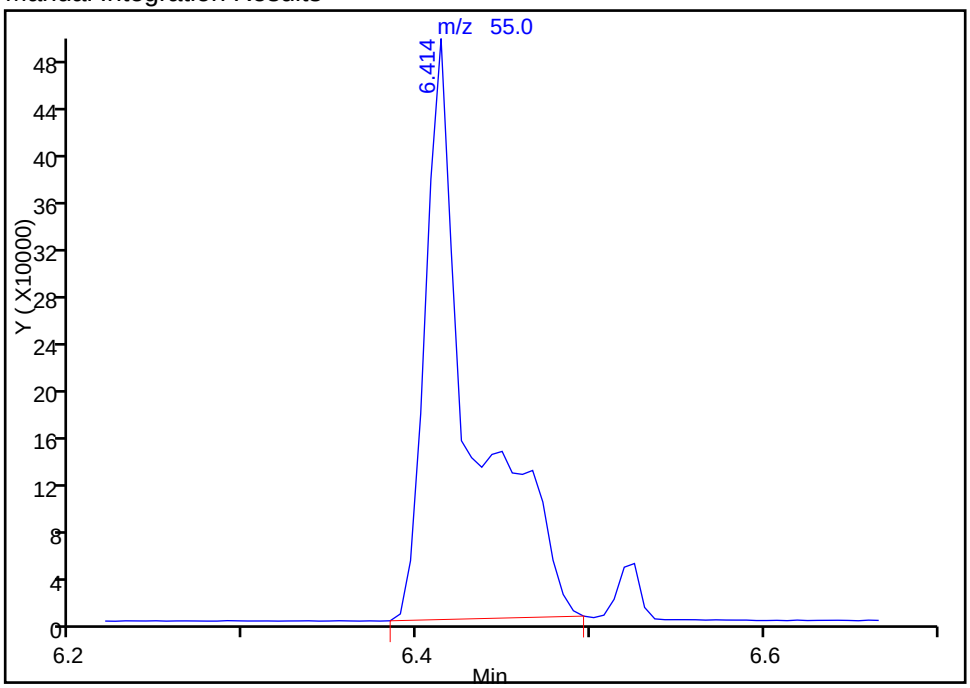
Processing Integration Results

RT: 6.41
Area: 643991
Amount: 134.4034
Amount Units: ug/ml



Manual Integration Results

RT: 6.41
Area: 927646
Amount: 186.6955
Amount Units: ug/ml



Reviewer: kiekeld, 05-Mar-2015 13:14:26
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

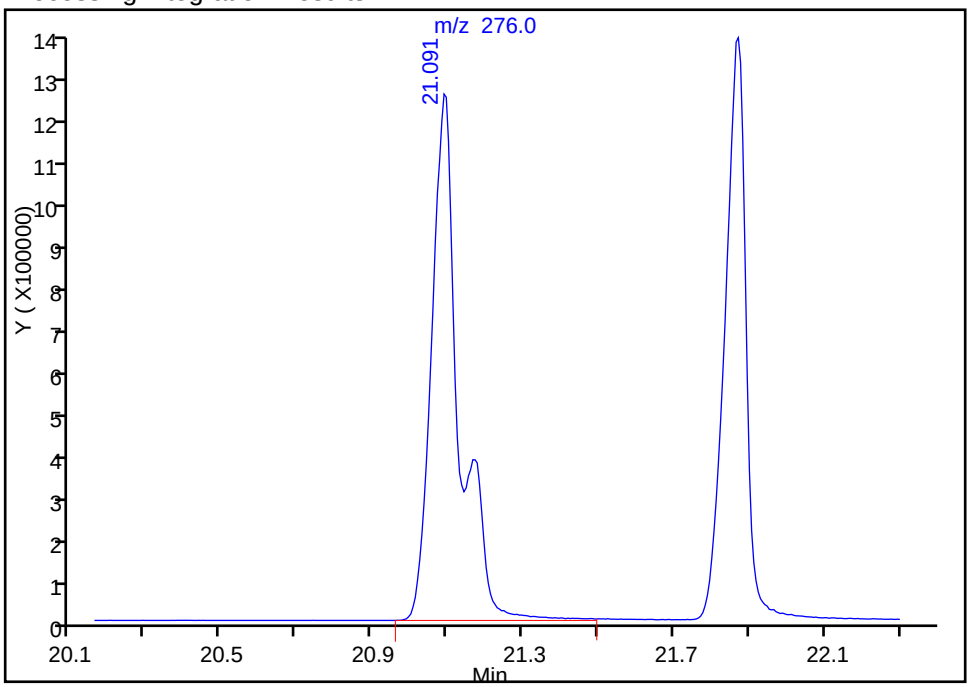
TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D
Injection Date: 04-Mar-2015 13:51:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Column: VF-5ms (0.50 mm) Detector MS SCAN

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

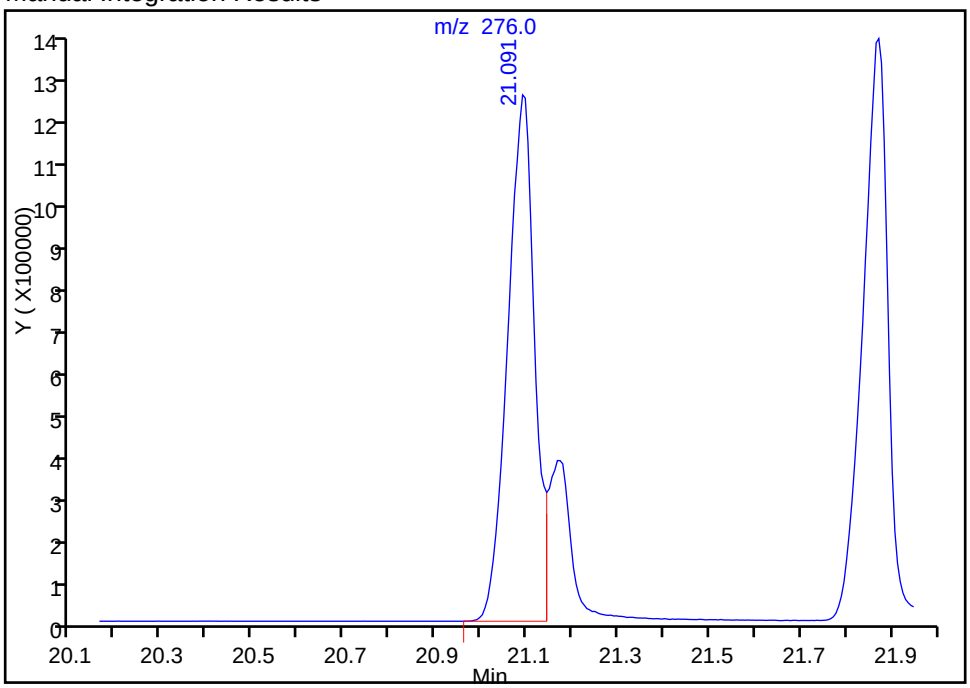
Processing Integration Results

RT: 21.09
Area: 6397202
Amount: 263.9088
Amount Units: ug/ml



Manual Integration Results

RT: 21.09
Area: 5095318
Amount: 217.5021
Amount Units: ug/ml



Reviewer: kiekeld, 05-Mar-2015 13:14:26
Audit Action: Split an Integrated Peak
Audit Reason: Shouldering

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Lab Sample ID: ICV 280-266830/11 Calibration Date: 03/04/2015 14:20

Instrument ID: SMS_B2 Calib Start Date: 03/04/2015 10:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 03/04/2015 13:51

Lab File ID: B2-9371.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6224	0.6332		102	100	1.7	30.0
N-Nitrosodimethylamine	Ave	0.9444	0.9894		105	100	4.8	30.0
Pyridine	Ave	1.670	1.724		103	100	3.2	30.0
Phenol	Ave	1.840	1.703	0.8000	92.5	100	-7.5	30.0
Aniline	Ave	2.216	1.907		86.1	100	-13.9	30.0
Bis(2-chloroethyl)ether	Ave	1.378	1.280	0.7000	92.9	100	-7.1	30.0
2-Chlorophenol	Ave	1.427	1.349	0.8000	94.5	100	-5.5	30.0
1,3-Dichlorobenzene	Ave	1.553	1.484		95.5	100	-4.5	30.0
1,4-Dichlorobenzene	Ave	1.579	1.543		97.8	100	-2.2	30.0
Benzyl alcohol	Ave	0.9656	0.9133		94.6	100	-5.4	30.0
1,2-Dichlorobenzene	Ave	1.509	1.420		94.1	100	-5.9	30.0
2-Methylphenol	Ave	1.367	1.256	0.7000	91.9	100	-8.1	30.0
bis (2-chloroisopropyl) ether	Ave	1.661	1.762	0.0100	76.4	72.0	6.1	30.0
3 & 4 Methylphenol	Ave	1.394	1.226		88.0	100	-12.0	30.0
3-Methylphenol	Ave	1.394	1.226		88.0	100	-12.0	30.0
4-Methylphenol	Ave	1.394	1.226	0.6000	88.0	100	-12.0	30.0
N-Nitrosodi-n-propylamine	Ave	0.9687	0.8554	0.5000	88.3	100	-11.7	30.0
Acetophenone	Ave	1.922	1.692	0.0100	88.0	100	-12.0	30.0
Hexachloroethane	Ave	0.5958	0.4995	0.3000	83.8	100	-16.2	30.0
Nitrobenzene	Ave	0.3975	0.3593		90.4	100	-9.6	30.0
Isophorone	Ave	0.6569	0.6419	0.4000	97.7	100	-2.3	30.0
2-Nitrophenol	Ave	0.1943	0.1939	0.1000	99.8	100	-0.2	30.0
2,4-Dimethylphenol	Ave	0.3559	0.2971	0.2000	83.5	100	-16.5	30.0
Bis(2-chloroethoxy)methane	Ave	0.4304	0.3822	0.3000	88.8	100	-11.2	30.0
Benzoic acid	Lin1		0.2481		190	200	-5.2	30.0
2,4-Dichlorophenol	Ave	0.3138	0.3027	0.2000	96.5	100	-3.5	30.0
1,2,4-Trichlorobenzene	Ave	0.3496	0.3442		98.5	100	-1.5	30.0
Naphthalene	Ave	1.028	0.9939	0.7000	96.7	100	-3.3	30.0
4-Chloroaniline	Ave	0.4674	0.4162	0.0100	89.0	100	-11.0	30.0
Hexachlorobutadiene	Ave	0.1949	0.1906	0.0100	97.8	100	-2.2	30.0
4-Chloro-3-methylphenol	Ave	0.3051	0.2898	0.2000	95.0	100	-5.0	30.0
2-Methylnaphthalene	Ave	0.6904	0.6680	0.4000	96.7	100	-3.3	30.0
1-Methylnaphthalene	Ave	0.6490	0.6289		96.9	100	-3.1	30.0
Hexachlorocyclopentadiene	Ave	0.3088	0.3702	0.0500	120	100	19.9	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.3432	0.3449	0.0100	100	100	0.5	30.0
2,4,6-Trichlorophenol	Ave	0.3694	0.3760	0.2000	102	100	1.8	30.0
2,4,5-Trichlorophenol	Ave	0.3926	0.3910	0.2000	99.6	100	-0.4	30.0
1,1'-Biphenyl	Ave	1.425	1.391		97.6	100	-2.4	30.0
2-Chloronaphthalene	Ave	1.136	1.102	0.8000	97.0	100	-3.0	30.0
2-Nitroaniline	Ave	0.3287	0.3126	0.0100	95.1	100	-4.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Lab Sample ID: ICV 280-266830/11 Calibration Date: 03/04/2015 14:20

Instrument ID: SMS_B2 Calib Start Date: 03/04/2015 10:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 03/04/2015 13:51

Lab File ID: B2-9371.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.223	1.200	0.0100	98.1	100	-1.9	30.0
1,3-Dinitrobenzene	Ave	0.2108	0.2161		103	100	2.5	30.0
2,6-Dinitrotoluene	Ave	0.2977	0.2996	0.2000	101	100	0.6	30.0
Acenaphthylene	Ave	1.657	1.690	0.9000	102	100	2.0	30.0
3-Nitroaniline	Ave	0.3520	0.3290	0.0100	93.5	100	-6.5	30.0
Acenaphthene	Ave	1.120	1.118	0.9000	99.8	100	-0.2	30.0
2,4-Dinitrophenol	Lin1		0.1850	0.0100	195	200	-2.4	30.0
4-Nitrophenol	Ave	0.1536	0.1539	0.0100	200	200	0.1	30.0
2,4-Dinitrotoluene	Ave	0.3855	0.3922	0.2000	102	100	1.8	30.0
Dibenzofuran	Ave	1.553	1.522	0.8000	98.0	100	-2.0	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3107	0.3243	0.0100	104	100	4.4	30.0
Diethyl phthalate	Ave	1.173	1.130	0.0100	96.3	100	-3.7	30.0
4-Chlorophenyl phenyl ether	Ave	0.6465	0.6327	0.4000	97.9	100	-2.1	30.0
Fluorene	Ave	1.286	1.283	0.9000	99.8	100	-0.2	30.0
4-Nitroaniline	Ave	0.3367	0.3274	0.0100	97.2	100	-2.8	30.0
4,6-Dinitro-2-methylphenol	Lin2		0.1511	0.0100	208	200	3.9	30.0
N-Nitrosodiphenylamine	Ave	0.5501	0.5290	0.0100	96.2	100	-3.8	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.232	1.171		96.1	101	-5.0	30.0
Azobenzene	Ave	1.246	1.184		95.0	100	-5.0	30.0
4-Bromophenyl phenyl ether	Ave	0.2132	0.2115	0.1000	99.2	100	-0.8	30.0
Hexachlorobenzene	Ave	0.2345	0.2333	0.1000	99.5	100	-0.5	30.0
Pentachlorophenol	Lin1		0.1417	0.0500	201	200	0.7	30.0
Phenanthrene	Ave	1.100	1.059	0.7000	96.3	100	-3.7	30.0
Anthracene	Ave	1.113	1.077	0.7000	96.8	100	-3.2	30.0
Carbazole	Ave	1.032	0.995	0.0100	96.4	100	-3.6	30.0
Di-n-butyl phthalate	Ave	1.140	1.119	0.0100	98.1	100	-1.9	30.0
Fluoranthene	Ave	1.226	1.192	0.6000	97.3	100	-2.7	30.0
Pyrene	Ave	1.146	1.105	0.6000	96.5	100	-3.5	30.0
Butyl benzyl phthalate	Ave	0.4573	0.4539	0.0100	99.3	100	-0.7	30.0
Benzo[a]anthracene	Ave	1.079	1.045	0.8000	96.9	100	-3.1	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.6111	0.6082	0.0100	99.5	100	-0.5	30.0
Chrysene	Ave	0.9933	1.012	0.7000	102	100	1.9	30.0
Di-n-octyl phthalate	Ave	0.9559	1.037	0.0100	108	100	8.5	30.0
Benzo[b]fluoranthene	Ave	1.100	1.086	0.7000	98.7	100	-1.3	30.0
Benzo[k]fluoranthene	Ave	1.161	1.133	0.7000	97.6	100	-2.4	30.0
Benzo[a]pyrene	Ave	1.083	1.069	0.7000	98.7	100	-1.3	30.0
Indeno[1,2,3-cd]pyrene	Ave	0.8075	0.8291	0.5000	103	100	2.7	30.0
Dibenz(a,h)anthracene	Ave	0.9389	0.9848	0.4000	105	100	4.9	30.0
Benzo[g,h,i]perylene	Ave	1.000	0.999	0.5000	99.9	100	-0.0	30.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9371.D
Lims ID: ICV HSL 1
Client ID:
Sample Type: ICV
Inject. Date: 04-Mar-2015 14:20:30 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_B2
Sublist:

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:22 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:16:32

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	4.736	4.734	0.002	94	298236	40.0	40.0	
* 2 Naphthalene-d8	136	5.982	5.985	-0.003	99	1003822	40.0	40.0	
* 3 Acenaphthene-d10	164	7.750	7.754	-0.004	92	607665	40.0	40.0	
* 4 Phenanthrene-d10	188	9.260	9.264	-0.004	96	1045266	40.0	40.0	
* 5 Chrysene-d12	240	13.667	13.676	-0.009	96	1161849	40.0	40.0	
* 6 Perylene-d12	264	17.850	17.860	-0.010	97	1051770	40.0	40.0	
15 1,4-Dioxane	88	2.057	2.061	-0.004	92	472095	100.0	101.7	
16 N-Nitrosodimethylamine	74	2.321	2.325	-0.004	93	737719	100.0	104.8	
17 Pyridine	79	2.362	2.366	-0.004	99	1285225	100.0	103.2	
25 Phenol	94	4.366	4.370	-0.004	97	1269601	100.0	92.5	
26 Aniline	93	4.419	4.423	-0.004	98	1422079	100.0	86.1	
27 Bis(2-chloroethyl)ether	93	4.454	4.458	-0.004	91	954722	100.0	92.9	
29 2-Chlorophenol	128	4.536	4.540	-0.004	96	1005811	100.0	94.5	
30 1,3-Dichlorobenzene	146	4.683	4.681	0.002	98	1106600	100.0	95.5	
31 1,4-Dichlorobenzene	146	4.748	4.752	-0.004	93	1150794	100.0	97.8	
32 Benzyl alcohol	108	4.848	4.851	-0.003	92	680942	100.0	94.6	
33 1,2-Dichlorobenzene	146	4.901	4.904	-0.003	97	1058617	100.0	94.1	
34 2-Methylphenol	108	4.948	4.945	0.003	94	936372	100.0	91.9	
36 2,2'-oxybis[1-chloropropan	45	4.959	4.963	-0.004	92	945663	72.0	76.4	
38 4-Methylphenol	108	5.089	5.092	-0.003	95	914303	100.0	88.0	
39 3-Methylphenol	108	5.089	5.092	-0.003	88	914303	100.0	88.0	
40 3 & 4 Methylphenol	108	5.089	5.092	-0.003	93	914303	100.0	88.0	
41 N-Nitrosodi-n-propylamine	70	5.095	5.092	0.003	79	637794	100.0	88.3	
43 Acetophenone	105	5.112	5.116	-0.004	98	1261323	100.0	88.0	
47 Hexachloroethane	117	5.230	5.228	0.002	87	372396	100.0	83.8	
48 Nitrobenzene	77	5.294	5.292	0.002	84	901655	100.0	90.4	
51 Isophorone	82	5.506	5.510	-0.004	97	1610859	100.0	97.7	
52 2,4-Dimethylphenol	107	5.612	5.615	-0.003	95	745533	100.0	83.5	
53 2-Nitrophenol	139	5.600	5.604	-0.004	92	486585	100.0	99.8	
56 Benzoic acid	105	5.723	5.715	0.008	85	1244985	200.0	189.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
57 Bis(2-chloroethoxy)methane	93	5.700	5.703	-0.003	99	959133	100.0	88.8	
59 2,4-Dichlorophenol	162	5.835	5.839	-0.004	91	759725	100.0	96.5	
60 1,2,4-Trichlorobenzene	180	5.917	5.921	-0.004	92	863840	100.0	98.5	
61 Naphthalene	128	6.005	6.009	-0.004	97	2494322	100.0	96.7	
62 4-Chloroaniline	127	6.052	6.056	-0.004	85	1044431	100.0	89.0	
65 Hexachlorobutadiene	225	6.099	6.103	-0.004	94	478419	100.0	97.8	
69 4-Chloro-3-methylphenol	107	6.516	6.520	-0.004	94	727249	100.0	95.0	
71 2-Methylnaphthalene	142	6.693	6.691	0.003	89	1676295	100.0	96.7	
72 1-Methylnaphthalene	142	6.793	6.796	-0.003	83	1578194	100.0	96.9	
73 Hexachlorocyclopentadiene	237	6.834	6.837	-0.003	85	562355	100.0	119.9	
74 1,2,4,5-Tetrachlorobenzene	216	6.857	6.861	-0.004	94	865582	100.0	100.5	
76 2,4,6-Trichlorophenol	196	6.969	6.973	-0.004	90	571165	100.0	101.8	
77 2,4,5-Trichlorophenol	196	7.010	7.014	-0.004	95	593963	100.0	99.6	
79 1,1'-Biphenyl	154	7.151	7.155	-0.004	95	2113569	100.0	97.6	
80 2-Chloronaphthalene	162	7.186	7.190	-0.004	96	1674841	100.0	97.0	
82 2-Nitroaniline	65	7.292	7.296	-0.004	87	474834	100.0	95.1	
85 Dimethyl phthalate	163	7.439	7.443	-0.004	99	1823395	100.0	98.1	
86 1,3-Dinitrobenzene	168	7.503	7.507	-0.004	91	328346	100.0	102.5	
87 2,6-Dinitrotoluene	165	7.521	7.525	-0.004	90	455096	100.0	100.6	
88 Acenaphthylene	152	7.615	7.619	-0.004	92	2567053	100.0	102.0	
89 3-Nitroaniline	138	7.709	7.713	-0.004	97	499845	100.0	93.5	
90 Acenaphthene	153	7.785	7.789	-0.004	94	1698001	100.0	99.8	
91 2,4-Dinitrophenol	184	7.809	7.813	-0.004	85	561996	200.0	195.2	
92 4-Nitrophenol	109	7.868	7.871	-0.003	84	467494	200.0	200.3	
94 2,4-Dinitrotoluene	165	7.932	7.936	-0.004	93	595883	100.0	101.8	
95 Dibenzofuran	168	7.956	7.960	-0.004	91	2312826	100.0	98.0	
97 2,3,4,6-Tetrachlorophenol	232	8.079	8.077	0.002	67	492654	100.0	104.4	
99 Diethyl phthalate	149	8.138	8.142	-0.004	98	1716426	100.0	96.3	
101 4-Chlorophenyl phenyl ethe	204	8.279	8.283	-0.004	89	961203	100.0	97.9	
102 Fluorene	166	8.308	8.306	0.002	82	1949517	100.0	99.8	
104 4-Nitroaniline	138	8.338	8.336	0.002	85	497365	100.0	97.2	
105 4,6-Dinitro-2-methylphenol	198	8.350	8.347	0.003	96	789929	200.0	207.9	
107 N-Nitrosodiphenylamine	169	8.402	8.406	-0.004	61	1382241	100.0	96.2	
108 1,2-Diphenylhydrazine	77	8.444	8.447	-0.003	97	1798790	101.1	96.1	
109 Azobenzene	77	8.444	8.447	-0.003	97	1798790	100.0	95.0	
116 4-Bromophenyl phenyl ether	248	8.778	8.782	-0.004	60	552690	100.0	99.2	
117 Hexachlorobenzene	284	8.861	8.864	-0.003	92	609708	100.0	99.5	
120 Pentachlorophenol	266	9.060	9.064	-0.004	90	740339	200.0	201.4	
125 Phenanthrene	178	9.290	9.287	0.003	97	2767003	100.0	96.3	
126 Anthracene	178	9.337	9.340	-0.003	98	2815189	100.0	96.8	
127 Carbazole	167	9.507	9.505	0.002	82	2600715	100.0	96.4	
129 Di-n-butyl phthalate	149	9.807	9.810	-0.003	100	2923241	100.0	98.1	
134 Fluoranthene	202	10.758	10.762	-0.004	98	3115146	100.0	97.3	
136 Pyrene	202	11.129	11.138	-0.009	94	3210499	100.0	96.5	
141 Butyl benzyl phthalate	149	12.274	12.284	-0.010	96	1318369	100.0	99.3	
146 Benzo[a]anthracene	228	13.643	13.647	-0.004	99	3036571	100.0	96.9	
147 Bis(2-ethylhexyl) phthalat	149	13.643	13.653	-0.010	72	1766495	100.0	99.5	
148 Chrysene	228	13.737	13.747	-0.010	95	2939195	100.0	101.9	
149 Di-n-octyl phthalate	149	15.547	15.557	-0.010	99	3011880	100.0	108.5	
151 Benzo[b]fluoranthene	252	16.687	16.691	-0.004	92	2855344	100.0	98.7	
152 Benzo[k]fluoranthene	252	16.769	16.779	-0.010	95	2978820	100.0	97.6	
153 Benzo[a]pyrene	252	17.680	17.684	-0.004	78	2810835	100.0	98.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
156 Indeno[1,2,3-cd]pyrene	276	21.070	21.074	-0.004	98	2408087	100.0	102.7	
157 Dibenz(a,h)anthracene	278	21.152	21.162	-0.010	95	2589370	100.0	104.9	
158 Benzo[g,h,i]perylene	276	21.851	21.855	-0.004	92	2627926	100.0	99.9	

Reagents:

MS-HSLB1B3SSV_00018 Amount Added: 200.00 Units: uL

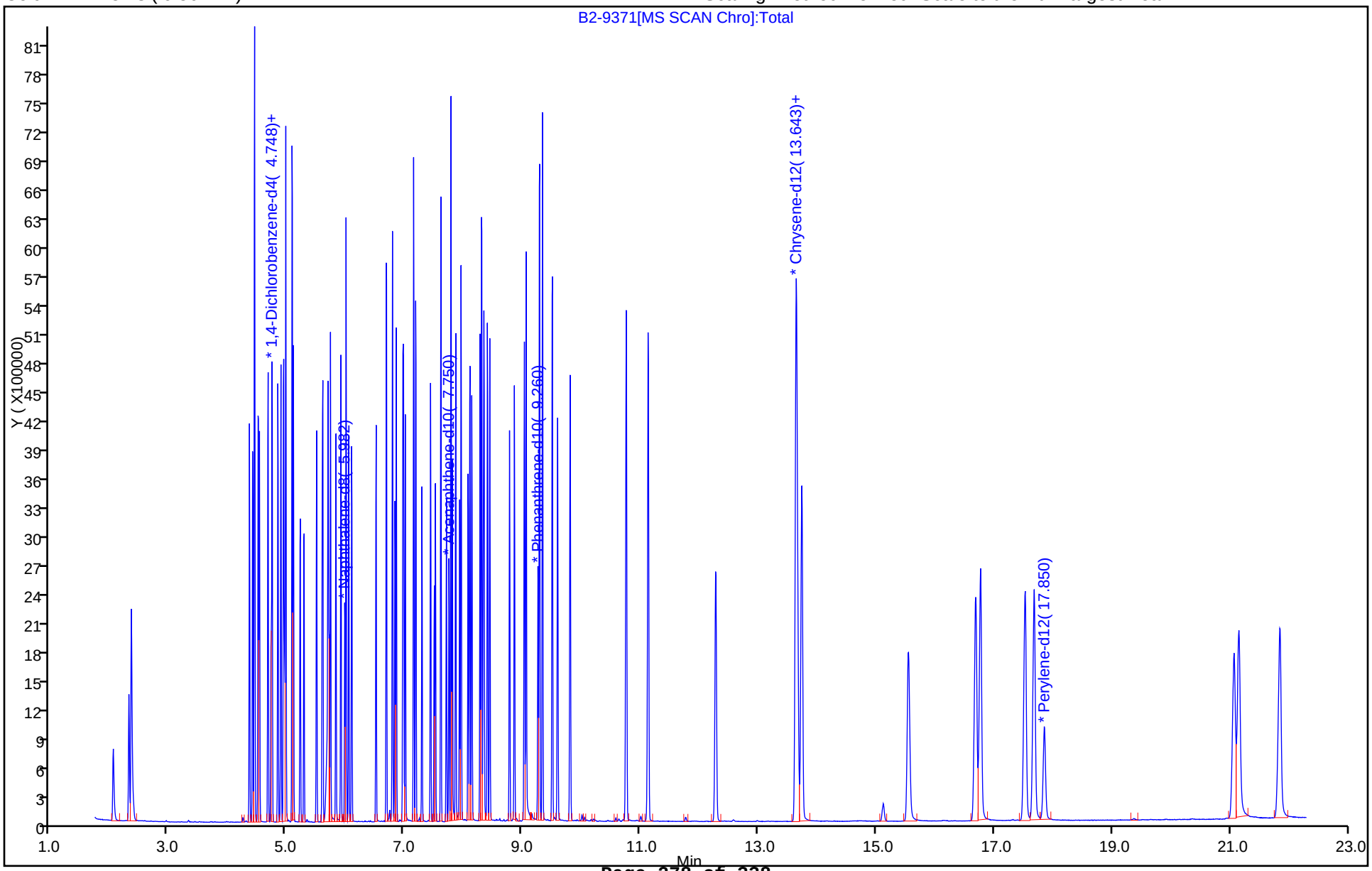
Report Date: 05-Mar-2015 13:29:24 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9371.D

Injection Date:	04-Mar-2015 14:20:30	Instrument ID:	SMS_B2	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_B2_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.: 280-67561-2

SDG No.:

Lab Sample ID: ICV 280-266830/12 Calibration Date: 03/04/2015 14:49

Instrument ID: SMS_B2 Calib Start Date: 08/28/2014 08:29

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 08/28/2014 11:03

Lab File ID: B2-9372.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzidine	Ave	0.7912			50.0	100		30.0

Report Date: 05-Mar-2015 13:29:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9372.D
Lims ID: ICV HSL 2
Client ID:
Sample Type: ICV
Inject. Date: 04-Mar-2015 14:49:30 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_B2
Sublist:

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:22 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:18:44

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	4.735	4.734	0.001	95	302000	40.0	40.0	
* 2 Naphthalene-d8	136	5.980	5.985	-0.005	99	1170527	40.0	40.0	
* 3 Acenaphthene-d10	164	7.749	7.754	-0.005	92	747292	40.0	40.0	
* 4 Phenanthrene-d10	188	9.259	9.264	-0.005	97	1222750	40.0	40.0	
* 5 Chrysene-d12	240	13.665	13.676	-0.011	97	1359402	40.0	40.0	
* 6 Perylene-d12	264	17.843	17.860	-0.017	97	1206297	40.0	40.0	
67 Caprolactam	55	6.380	6.391	-0.011	83	464724	100.0	102.2	
135 Benzidine	184		10.660				ND	ND	
145 3,3'-Dichlorobenzidine	252	13.607	13.618	-0.011	73	1499909	100.0	108.7	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MS-HSLB2SSV_00019 Amount Added: 200.00 Units: uL

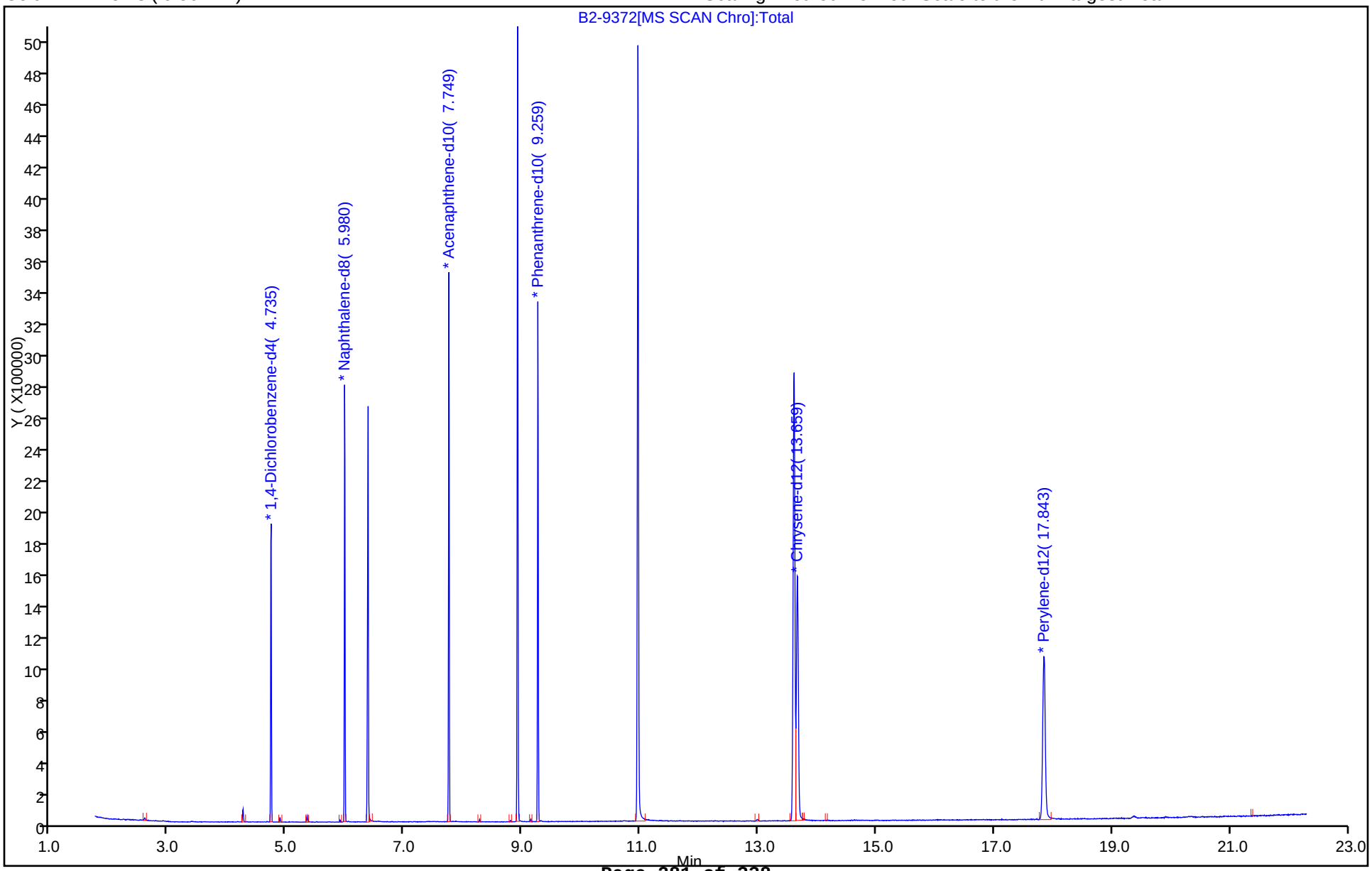
Report Date: 05-Mar-2015 13:29:26 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9372.D

Injection Date:	04-Mar-2015 14:49:30	Instrument ID:	SMS_B2	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_B2_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.: 280-67561-2

SDG No.:

Lab Sample ID: ICV 280-266830/12 Calibration Date: 03/04/2015 14:49

Instrument ID: SMS_B2 Calib Start Date: 03/04/2015 10:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 03/04/2015 13:51

Lab File ID: B2-9372.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Caprolactam	Ave	0.1553	0.1588		102	100	2.2	30.0
3,3'-Dichlorobenzidine	Ave	0.4061	0.4413	0.0100	109	100	8.7	30.0

Report Date: 05-Mar-2015 13:29:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9372.D
Lims ID: ICV HSL 2
Client ID:
Sample Type: ICV
Inject. Date: 04-Mar-2015 14:49:30 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_B2
Sublist:

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:22 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 13:18:44

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	4.735	4.734	0.001	95	302000	40.0	40.0	
* 2 Naphthalene-d8	136	5.980	5.985	-0.005	99	1170527	40.0	40.0	
* 3 Acenaphthene-d10	164	7.749	7.754	-0.005	92	747292	40.0	40.0	
* 4 Phenanthrene-d10	188	9.259	9.264	-0.005	97	1222750	40.0	40.0	
* 5 Chrysene-d12	240	13.665	13.676	-0.011	97	1359402	40.0	40.0	
* 6 Perylene-d12	264	17.843	17.860	-0.017	97	1206297	40.0	40.0	
67 Caprolactam	55	6.380	6.391	-0.011	83	464724	100.0	102.2	
135 Benzidine	184		10.660				ND	ND	
145 3,3'-Dichlorobenzidine	252	13.607	13.618	-0.011	73	1499909	100.0	108.7	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MS-HSLB2SSV_00019 Amount Added: 200.00 Units: uL

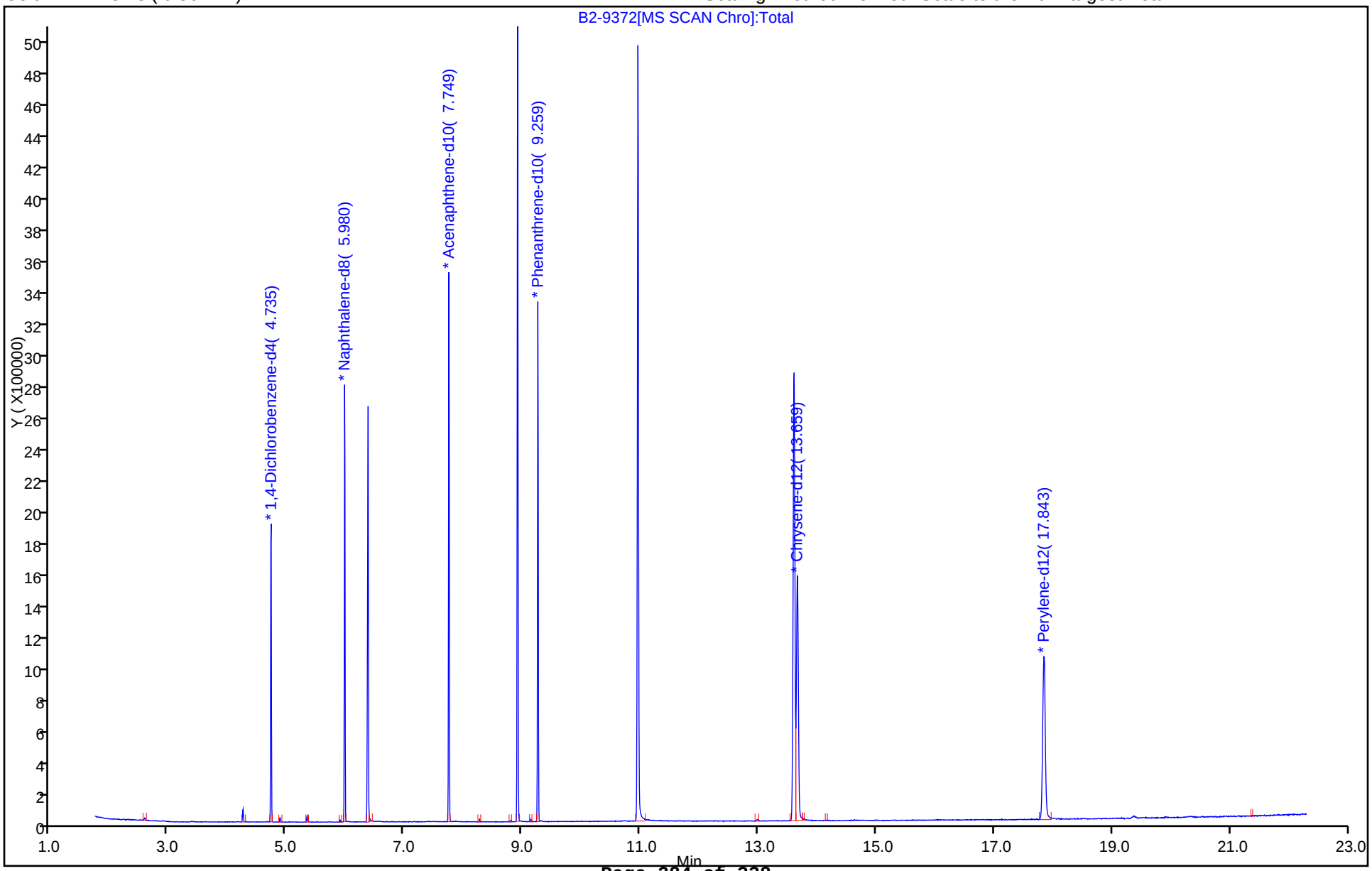
Report Date: 05-Mar-2015 13:29:26 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9372.D

Injection Date:	04-Mar-2015 14:49:30	Instrument ID:	SMS_B2	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_B2_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.: 280-67561-2

SDG No.:

Lab Sample ID: CCV 280-272601/3 Calibration Date: 04/14/2015 11:27

Instrument ID: SMS_B2 Calib Start Date: 08/28/2014 08:29

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 08/28/2014 11:03

Lab File ID: B2-9958.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzidine	Ave	0.7912	0.5437			80.0	-31.3*	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9958.D
Lims ID: CCV HSL
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2015 11:27:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: CCV HSL
Operator ID: KIEKELD Instrument ID: SMS_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 14-Apr-2015 14:19:36

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	4.737	4.737	0.000	96	386881	40.0	40.0	
* 2 Naphthalene-d8	136	5.988	5.988	0.000	99	1546422	40.0	40.0	
* 3 Acenaphthene-d10	164	7.751	7.751	0.000	92	933451	40.0	40.0	
* 4 Phenanthrene-d10	188	9.261	9.261	0.000	97	1585264	40.0	40.0	
* 5 Chrysene-d12	240	13.668	13.668	0.000	96	1723095	40.0	40.0	
* 6 Perylene-d12	264	17.857	17.857	0.000	98	1577146	40.0	40.0	
$ 7 2-Fluorophenol	112	3.532	3.532	0.000	91	1071679	80.0	77.7	
$ 8 Phenol-d5	99	4.384	4.384	0.000	91	1381608	80.0	78.3	
$ 9 Nitrobenzene-d5	82	5.277	5.277	0.000	88	1183291	80.0	78.6	
$ 10 2-Fluorobiphenyl	172	7.046	7.046	0.000	99	2490703	80.0	81.7	
$ 11 2,4,6-Tribromophenol	330	8.556	8.556	0.000	93	340095	80.0	78.9	
$ 12 Terphenyl-d14	244	11.341	11.341	0.000	99	2955433	80.0	83.0	
15 1,4-Dioxane	88	2.046	2.046	0.000	95	479511	80.0	79.7	
16 N-Nitrosodimethylamine	74	2.316	2.316	0.000	94	732998	80.0	80.2	
17 Pyridine	79	2.363	2.363	0.000	97	1210295	80.0	74.9	
25 Phenol	94	4.396	4.396	0.000	98	1395397	80.0	78.4	
26 Aniline	93	4.431	4.431	0.000	98	1678817	80.0	78.3	
27 Bis(2-chloroethyl)ether	93	4.461	4.461	0.000	93	1073832	80.0	80.6	
29 2-Chlorophenol	128	4.549	4.549	0.000	97	1113853	80.0	80.7	
30 1,3-Dichlorobenzene	146	4.684	4.684	0.000	97	1219969	80.0	81.2	
31 1,4-Dichlorobenzene	146	4.754	4.754	0.000	93	1241653	80.0	81.3	
32 Benzyl alcohol	108	4.860	4.860	0.000	91	749444	80.0	80.2	
33 1,2-Dichlorobenzene	146	4.907	4.907	0.000	97	1187010	80.0	81.4	
34 2-Methylphenol	108	4.966	4.966	0.000	95	1047621	80.0	79.2	
36 2,2'-oxybis[1-chloropropan	45	4.966	4.966	0.000	77	1438950	80.0	89.6	
38 4-Methylphenol	108	5.113	5.113	0.000	82	1084634	80.0	80.4	
39 3-Methylphenol	108	5.113	5.113	0.000	79	1084634	80.0	80.4	
40 3 & 4 Methylphenol	108	5.113	5.113	0.000	85	1084634	80.0	80.4	
41 N-Nitrosodi-n-propylamine	70	5.095	5.095	0.000	87	798217	80.0	85.2	
43 Acetophenone	105	5.119	5.119	0.000	94	1533201	80.0	82.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.230	5.230	0.000	90	457031	80.0	79.3	
48 Nitrobenzene	77	5.301	5.301	0.000	85	1197937	80.0	78.0	
51 Isophorone	82	5.512	5.512	0.000	97	1984659	80.0	78.1	
52 2,4-Dimethylphenol	107	5.624	5.624	0.000	96	1061427	80.0	77.2	
53 2-Nitrophenol	139	5.606	5.606	0.000	92	625676	80.0	83.3	
56 Benzoic acid	105	5.742	5.742	0.000	86	1581402	160.0	157.4	
57 Bis(2-chloroethoxy)methane	93	5.706	5.706	0.000	99	1276102	80.0	76.7	
59 2,4-Dichlorophenol	162	5.847	5.847	0.000	93	955954	80.0	78.8	
60 1,2,4-Trichlorobenzene	180	5.924	5.924	0.000	90	1061448	80.0	78.5	
61 Naphthalene	128	6.012	6.012	0.000	97	3185616	80.0	80.2	
62 4-Chloroaniline	127	6.059	6.059	0.000	84	1389824	80.0	76.9	
65 Hexachlorobutadiene	225	6.106	6.106	0.000	90	596249	80.0	79.1	
67 Caprolactam	55	6.405	6.405	0.000	79	501249	80.0	83.5	
69 4-Chloro-3-methylphenol	107	6.535	6.535	0.000	97	961586	80.0	81.5	
71 2-Methylnaphthalene	142	6.693	6.693	0.000	89	2219656	80.0	83.2	
72 1-Methylnaphthalene	142	6.799	6.799	0.000	91	2076141	80.0	82.7	
73 Hexachlorocyclopentadiene	237	6.840	6.840	0.000	85	533037	80.0	74.0	
74 1,2,4,5-Tetrachlorobenzene	216	6.864	6.864	0.000	94	1039689	80.0	78.4	
76 2,4,6-Trichlorophenol	196	6.981	6.981	0.000	88	681680	80.0	79.1	
77 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	95	726781	80.0	79.3	
79 1,1'-Biphenyl	154	7.158	7.158	0.000	95	2709461	80.0	81.5	
80 2-Chloronaphthalene	162	7.193	7.193	0.000	95	2132202	80.0	80.4	
82 2-Nitroaniline	65	7.299	7.299	0.000	83	646211	80.0	84.3	
85 Dimethyl phthalate	163	7.440	7.440	0.000	98	2388226	80.0	83.7	
86 1,3-Dinitrobenzene	168	7.510	7.510	0.000	94	430973	80.0	87.6	
87 2,6-Dinitrotoluene	165	7.528	7.528	0.000	94	584982	80.0	84.2	
88 Acenaphthylene	152	7.616	7.616	0.000	92	3154575	80.0	81.6	
89 3-Nitroaniline	138	7.716	7.716	0.000	95	665635	80.0	81.0	
90 Acenaphthene	153	7.786	7.786	0.000	94	2145915	80.0	82.1	
91 2,4-Dinitrophenol	184	7.816	7.816	0.000	84	659419	160.0	151.4	
92 4-Nitrophenol	109	7.898	7.898	0.000	85	610783	160.0	170.4	
94 2,4-Dinitrotoluene	165	7.933	7.933	0.000	91	770173	80.0	85.6	
95 Dibenzofuran	168	7.957	7.957	0.000	91	2973709	80.0	82.0	
97 2,3,4,6-Tetrachlorophenol	232	8.086	8.086	0.000	69	565413	80.0	78.0	
99 Diethyl phthalate	149	8.139	8.139	0.000	98	2265875	80.0	82.8	
101 4-Chlorophenyl phenyl ethe	204	8.280	8.280	0.000	90	1217720	80.0	80.7	
102 Fluorene	166	8.303	8.303	0.000	83	2445152	80.0	81.5	
104 4-Nitroaniline	138	8.344	8.344	0.000	79	643469	80.0	81.9	
105 4,6-Dinitro-2-methylphenol	198	8.350	8.350	0.000	84	942230	160.0	164.5	
107 N-Nitrosodiphenylamine	169	8.409	8.409	0.000	60	1782792	80.0	81.8	
108 1,2-Diphenylhydrazine	77	8.444	8.444	0.000	97	2422137	80.9	84.2	
109 Azobenzene	77	8.444	8.444	0.000	97	2422137	80.0	83.3	
116 4-Bromophenyl phenyl ether	248	8.779	8.779	0.000	59	681513	80.0	80.7	
117 Hexachlorobenzene	284	8.861	8.861	0.000	91	738732	80.0	79.5	
120 Pentachlorophenol	266	9.067	9.067	0.000	92	773603	160.0	141.2	
125 Phenanthrene	178	9.284	9.284	0.000	98	3491308	80.0	80.1	
126 Anthracene	178	9.337	9.337	0.000	98	3588593	80.0	81.4	
127 Carbazole	167	9.508	9.508	0.000	82	3405929	80.0	83.2	
129 Di-n-butyl phthalate	149	9.801	9.801	0.000	100	3836051	80.0	84.9	
134 Fluoranthene	202	10.759	10.759	0.000	98	3928963	80.0	80.9	
135 Benzidine	184	10.959	10.959	0.000	99	1873758	NC	NC	
136 Pyrene	202	11.129	11.129	0.000	96	4042644	80.0	81.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
141 Butyl benzyl phthalate	149	12.269	12.269	0.000	97	1746028	80.0	88.6	
145 3,3'-Dichlorobenzidine	252	13.609	13.609	0.000	70	1491822	80.0	85.3	
146 Benzo[a]anthracene	228	13.644	13.644	0.000	99	3838473	80.0	82.6	
147 Bis(2-ethylhexyl) phthalat	149	13.632	13.632	0.000	84	2342831	80.0	89.0	
148 Chrysene	228	13.738	13.738	0.000	95	3567663	80.0	83.4	
149 Di-n-octyl phthalate	149	15.530	15.530	0.000	99	3888730	80.0	94.4	
151 Benzo[b]fluoranthene	252	16.688	16.688	0.000	92	3607456	80.0	83.2	
152 Benzo[k]fluoranthene	252	16.776	16.776	0.000	99	3762692	80.0	82.2	
153 Benzo[a]pyrene	252	17.680	17.680	0.000	75	3610049	80.0	84.5	
156 Indeno[1,2,3-cd]pyrene	276	21.077	21.077	0.000	94	3158540	80.0	90.8	
157 Dibenz(a,h)anthracene	278	21.159	21.159	0.000	94	3325013	80.0	89.8	
158 Benzo[g,h,i]perylene	276	21.852	21.852	0.000	90	3318337	80.0	84.1	
163 Famphur	218	12.175	12.175	0.000	97	1402670	80.0	86.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MS-HSLACCV080_00038 Amount Added: 200.00 Units: uL

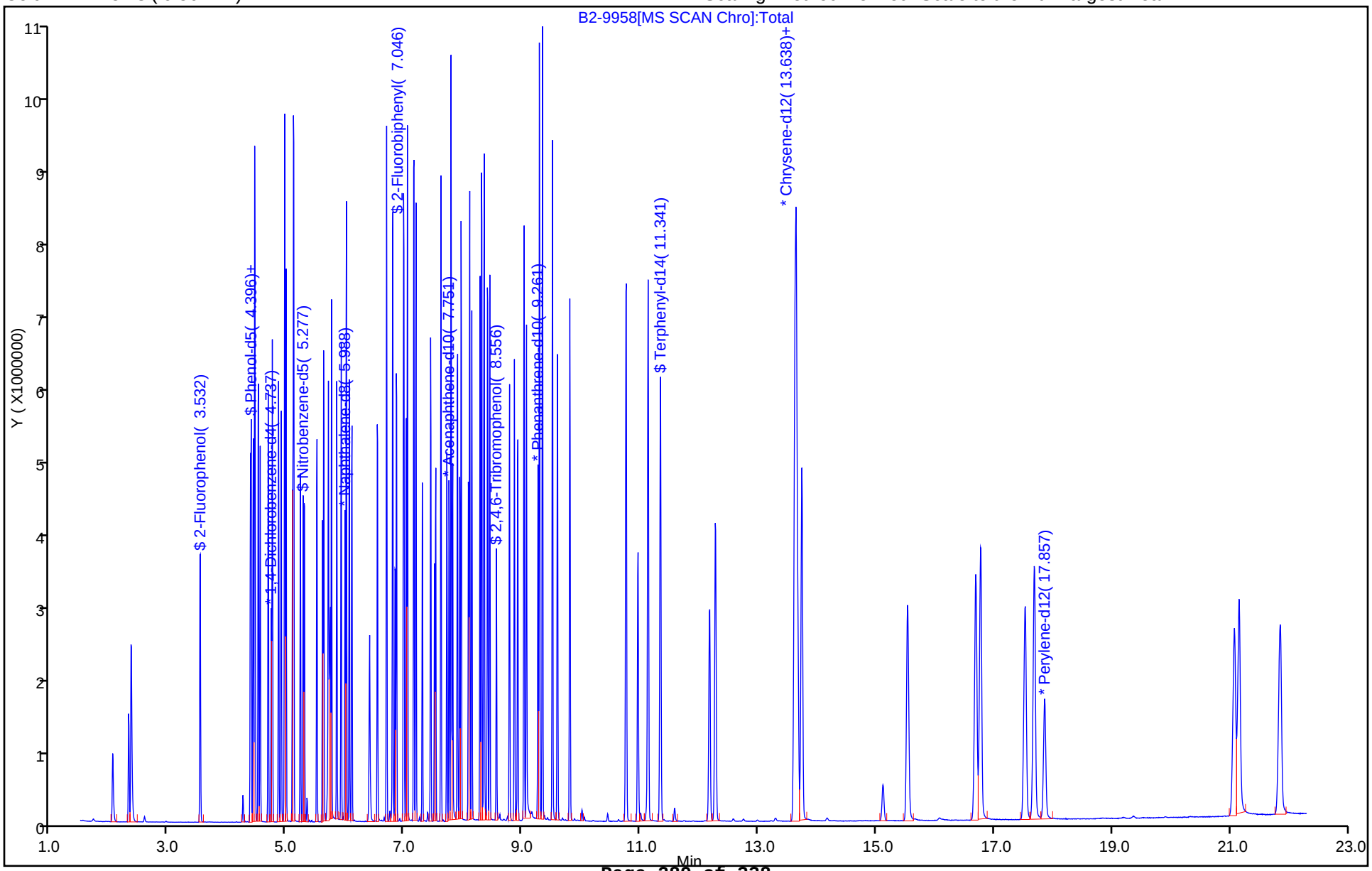
Report Date: 15-Apr-2015 10:10:36 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9958.D

Injection Date:	14-Apr-2015 11:27:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	CCV HSL			Worklist Smp#:	3
Client ID:					
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMS_B2_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.: 280-67561-2

SDG No.:

Lab Sample ID: CCV 280-272601/3 Calibration Date: 04/14/2015 11:27

Instrument ID: SMS_B2 Calib Start Date: 03/04/2015 10:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 03/04/2015 13:51

Lab File ID: B2-9958.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6224	0.6197		79.7	80.0	-0.4	20.0
N-Nitrosodimethylamine	Ave	0.9444	0.9473		80.2	80.0	0.3	20.0
Pyridine	Ave	1.670	1.564		74.9	80.0	-6.3	20.0
Phenol	Ave	1.840	1.803	0.8000	78.4	80.0	-2.0	20.0
Aniline	Ave	2.216	2.170		78.3	80.0	-2.1	20.0
Bis(2-chloroethyl)ether	Ave	1.378	1.388	0.7000	80.6	80.0	0.7	20.0
2-Chlorophenol	Ave	1.427	1.440	0.8000	80.7	80.0	0.9	20.0
1,3-Dichlorobenzene	Ave	1.553	1.577		81.2	80.0	1.5	20.0
1,4-Dichlorobenzene	Ave	1.579	1.605		81.3	80.0	1.7	20.0
Benzyl alcohol	Ave	0.9656	0.9686		80.2	80.0	0.3	20.0
1,2-Dichlorobenzene	Ave	1.509	1.534		81.4	80.0	1.7	20.0
2-Methylphenol	Ave	1.367	1.354	0.7000	79.2	80.0	-1.0	20.0
bis (2-chloroisopropyl) ether	Ave	1.661	1.860	0.0100	89.6	80.0	12.0	20.0
N-Nitrosodi-n-propylamine	Ave	0.9687	1.032	0.5000	85.2	80.0	6.5	20.0
3 & 4 Methylphenol	Ave	1.394	1.402		80.4	80.0	0.6	20.0
3-Methylphenol	Ave	1.394	1.402		80.4	80.0	0.6	20.0
4-Methylphenol	Ave	1.394	1.402	0.6000	80.4	80.0	0.6	20.0
Acetophenone	Ave	1.922	1.981	0.0100	82.5	80.0	3.1	20.0
Hexachloroethane	Ave	0.5958	0.5907	0.3000	79.3	80.0	-0.9	20.0
Nitrobenzene	Ave	0.3975	0.3873		78.0	80.0	-2.6	20.0
Isophorone	Ave	0.6569	0.6417	0.4000	78.1	80.0	-2.3	20.0
2-Nitrophenol	Ave	0.1943	0.2023	0.1000	83.3	80.0	4.1	20.0
2,4-Dimethylphenol	Ave	0.3559	0.3432	0.2000	77.2	80.0	-3.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.4304	0.4126	0.3000	76.7	80.0	-4.1	20.0
Benzoic acid	Lin1		0.2557		157	160	-1.6	20.0
2,4-Dichlorophenol	Ave	0.3138	0.3091	0.2000	78.8	80.0	-1.5	20.0
1,2,4-Trichlorobenzene	Ave	0.3496	0.3432		78.5	80.0	-1.8	20.0
Naphthalene	Ave	1.028	1.030	0.7000	80.2	80.0	0.2	20.0
4-Chloroaniline	Ave	0.4674	0.4494	0.0100	76.9	80.0	-3.8	20.0
Hexachlorobutadiene	Ave	0.1949	0.1928	0.0100	79.1	80.0	-1.1	20.0
Caprolactam	Ave	0.1553	0.1621		83.5	80.0	4.3	20.0
4-Chloro-3-methylphenol	Ave	0.3051	0.3109	0.2000	81.5	80.0	1.9	20.0
2-Methylnaphthalene	Ave	0.6904	0.7177	0.4000	83.2	80.0	3.9	20.0
1-Methylnaphthalene	Ave	0.6490	0.6713		82.7	80.0	3.4	20.0
Hexachlorocyclopentadiene	Ave	0.3088	0.2855	0.0500	74.0	80.0	-7.5	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.3432	0.3362	0.0100	78.4	80.0	-2.1	20.0
2,4,6-Trichlorophenol	Ave	0.3694	0.3651	0.2000	79.1	80.0	-1.2	20.0
2,4,5-Trichlorophenol	Ave	0.3926	0.3893	0.2000	79.3	80.0	-0.8	20.0
1,1'-Biphenyl	Ave	1.425	1.451		81.5	80.0	1.8	20.0
2-Chloronaphthalene	Ave	1.136	1.142	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.: 280-67561-2

SDG No.:

Lab Sample ID: CCV 280-272601/3 Calibration Date: 04/14/2015 11:27

Instrument ID: SMS_B2 Calib Start Date: 03/04/2015 10:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 03/04/2015 13:51

Lab File ID: B2-9958.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Ave	0.3287	0.3461	0.0100	84.3	80.0	5.3	20.0
Dimethyl phthalate	Ave	1.223	1.279	0.0100	83.7	80.0	4.6	20.0
1,3-Dinitrobenzene	Ave	0.2108	0.2309		87.6	80.0	9.5	20.0
2,6-Dinitrotoluene	Ave	0.2977	0.3133	0.2000	84.2	80.0	5.2	20.0
Acenaphthylene	Ave	1.657	1.690	0.9000	81.6	80.0	2.0	20.0
3-Nitroaniline	Ave	0.3520	0.3566	0.0100	81.0	80.0	1.3	20.0
Acenaphthene	Ave	1.120	1.149	0.9000	82.1	80.0	2.6	20.0
2,4-Dinitrophenol	Lin1		0.1766	0.0100	151	160	-5.4	20.0
4-Nitrophenol	Ave	0.1536	0.1636	0.0100	170	160	6.5	20.0
2,4-Dinitrotoluene	Ave	0.3855	0.4125	0.2000	85.6	80.0	7.0	20.0
Dibenzofuran	Ave	1.553	1.593	0.8000	82.0	80.0	2.5	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3107	0.3029	0.0100	78.0	80.0	-2.5	20.0
Diethyl phthalate	Ave	1.173	1.214	0.0100	82.8	80.0	3.5	20.0
4-Chlorophenyl phenyl ether	Ave	0.6465	0.6523	0.4000	80.7	80.0	0.9	20.0
Fluorene	Ave	1.286	1.310	0.9000	81.5	80.0	1.8	20.0
4-Nitroaniline	Ave	0.3367	0.3447	0.0100	81.9	80.0	2.4	20.0
4,6-Dinitro-2-methylphenol	Lin2		0.1486	0.0100	164	160	2.8	20.0
N-Nitrosodiphenylamine	Ave	0.5501	0.5623	0.0100	81.8	80.0	2.2	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.232	1.283		84.2	80.9	4.1	20.0
Azobenzene	Ave	1.246	1.297		83.3	80.0	4.1	20.0
4-Bromophenyl phenyl ether	Ave	0.2132	0.2150	0.1000	80.7	80.0	0.8	20.0
Hexachlorobenzene	Ave	0.2345	0.2330	0.1000	79.5	80.0	-0.7	20.0
Pentachlorophenol	Lin1		0.1220	0.0500	141	160	-11.7	20.0
Phenanthrene	Ave	1.100	1.101	0.7000	80.1	80.0	0.1	20.0
Anthracene	Ave	1.113	1.132	0.7000	81.4	80.0	1.7	20.0
Carbazole	Ave	1.032	1.074	0.0100	83.2	80.0	4.0	20.0
Di-n-butyl phthalate	Ave	1.140	1.210	0.0100	84.9	80.0	6.1	20.0
Fluoranthene	Ave	1.226	1.239	0.6000	80.9	80.0	1.1	20.0
Pyrene	Ave	1.146	1.173	0.6000	81.9	80.0	2.4	20.0
Famphur	Ave	0.3757	0.4070		86.7	80.0	8.3	20.0
Butyl benzyl phthalate	Ave	0.4573	0.5067	0.0100	88.6	80.0	10.8	20.0
3,3'-Dichlorobenzidine	Ave	0.4061	0.4329	0.0100	85.3	80.0	6.6	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6111	0.6798	0.0100	89.0	80.0	11.2	20.0
Benzo[a]anthracene	Ave	1.079	1.114	0.8000	82.6	80.0	3.2	20.0
Chrysene	Ave	0.9933	1.035	0.7000	83.4	80.0	4.2	20.0
Di-n-octyl phthalate	Ave	0.9559	1.128	0.0100	94.4	80.0	18.0	20.0
Benzo[b]fluoranthene	Ave	1.100	1.144	0.7000	83.2	80.0	4.0	20.0
Benzo[k]fluoranthene	Ave	1.161	1.193	0.7000	82.2	80.0	2.7	20.0
Benzo[a]pyrene	Ave	1.083	1.144	0.7000	84.5	80.0	5.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.8075	0.9165	0.5000	90.8	80.0	13.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Lab Sample ID: CCV 280-272601/3 Calibration Date: 04/14/2015 11:27

Instrument ID: SMS_B2 Calib Start Date: 03/04/2015 10:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 03/04/2015 13:51

Lab File ID: B2-9958.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	0.9389	1.054	0.4000	89.8	80.0	12.3	20.0
Benzo[g,h,i]perylene	Ave	1.000	1.052	0.5000	84.1	80.0	5.2	20.0
2-Fluorophenol (Surr)	Ave	1.427	1.385		77.7	80.0	-2.9	20.0
Phenol-d5 (Surr)	Ave	1.825	1.786		78.3	80.0	-2.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3895	0.3826		78.6	80.0	-1.8	20.0
2-Fluorobiphenyl	Ave	1.306	1.334		81.7	80.0	2.1	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1847	0.1822		78.9	80.0	-1.4	20.0
Terphenyl-d14 (Surr)	Ave	0.8268	0.8576		83.0	80.0	3.7	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9958.D
Lims ID: CCV HSL
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2015 11:27:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: CCV HSL
Operator ID: KIEKELD Instrument ID: SMS_B2
Sublist: chrom-SMS_B2_8270D*sub5

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 14-Apr-2015 14:19:36

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	4.737	4.737	0.000	96	386881	40.0	40.0	
* 2 Naphthalene-d8	136	5.988	5.988	0.000	99	1546422	40.0	40.0	
* 3 Acenaphthene-d10	164	7.751	7.751	0.000	92	933451	40.0	40.0	
* 4 Phenanthrene-d10	188	9.261	9.261	0.000	97	1585264	40.0	40.0	
* 5 Chrysene-d12	240	13.668	13.668	0.000	96	1723095	40.0	40.0	
* 6 Perylene-d12	264	17.857	17.857	0.000	98	1577146	40.0	40.0	
$ 7 2-Fluorophenol	112	3.532	3.532	0.000	91	1071679	80.0	77.7	
$ 8 Phenol-d5	99	4.384	4.384	0.000	91	1381608	80.0	78.3	
$ 9 Nitrobenzene-d5	82	5.277	5.277	0.000	88	1183291	80.0	78.6	
$ 10 2-Fluorobiphenyl	172	7.046	7.046	0.000	99	2490703	80.0	81.7	
$ 11 2,4,6-Tribromophenol	330	8.556	8.556	0.000	93	340095	80.0	78.9	
$ 12 Terphenyl-d14	244	11.341	11.341	0.000	99	2955433	80.0	83.0	
15 1,4-Dioxane	88	2.046	2.046	0.000	95	479511	80.0	79.7	
16 N-Nitrosodimethylamine	74	2.316	2.316	0.000	94	732998	80.0	80.2	
17 Pyridine	79	2.363	2.363	0.000	97	1210295	80.0	74.9	
25 Phenol	94	4.396	4.396	0.000	98	1395397	80.0	78.4	
26 Aniline	93	4.431	4.431	0.000	98	1678817	80.0	78.3	
27 Bis(2-chloroethyl)ether	93	4.461	4.461	0.000	93	1073832	80.0	80.6	
29 2-Chlorophenol	128	4.549	4.549	0.000	97	1113853	80.0	80.7	
30 1,3-Dichlorobenzene	146	4.684	4.684	0.000	97	1219969	80.0	81.2	
31 1,4-Dichlorobenzene	146	4.754	4.754	0.000	93	1241653	80.0	81.3	
32 Benzyl alcohol	108	4.860	4.860	0.000	91	749444	80.0	80.2	
33 1,2-Dichlorobenzene	146	4.907	4.907	0.000	97	1187010	80.0	81.4	
34 2-Methylphenol	108	4.966	4.966	0.000	95	1047621	80.0	79.2	
36 2,2'-oxybis[1-chloropropan	45	4.966	4.966	0.000	77	1438950	80.0	89.6	
38 4-Methylphenol	108	5.113	5.113	0.000	82	1084634	80.0	80.4	
39 3-Methylphenol	108	5.113	5.113	0.000	79	1084634	80.0	80.4	
40 3 & 4 Methylphenol	108	5.113	5.113	0.000	85	1084634	80.0	80.4	
41 N-Nitrosodi-n-propylamine	70	5.095	5.095	0.000	87	798217	80.0	85.2	
43 Acetophenone	105	5.119	5.119	0.000	94	1533201	80.0	82.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.230	5.230	0.000	90	457031	80.0	79.3	
48 Nitrobenzene	77	5.301	5.301	0.000	85	1197937	80.0	78.0	
51 Isophorone	82	5.512	5.512	0.000	97	1984659	80.0	78.1	
52 2,4-Dimethylphenol	107	5.624	5.624	0.000	96	1061427	80.0	77.2	
53 2-Nitrophenol	139	5.606	5.606	0.000	92	625676	80.0	83.3	
56 Benzoic acid	105	5.742	5.742	0.000	86	1581402	160.0	157.4	
57 Bis(2-chloroethoxy)methane	93	5.706	5.706	0.000	99	1276102	80.0	76.7	
59 2,4-Dichlorophenol	162	5.847	5.847	0.000	93	955954	80.0	78.8	
60 1,2,4-Trichlorobenzene	180	5.924	5.924	0.000	90	1061448	80.0	78.5	
61 Naphthalene	128	6.012	6.012	0.000	97	3185616	80.0	80.2	
62 4-Chloroaniline	127	6.059	6.059	0.000	84	1389824	80.0	76.9	
65 Hexachlorobutadiene	225	6.106	6.106	0.000	90	596249	80.0	79.1	
67 Caprolactam	55	6.405	6.405	0.000	79	501249	80.0	83.5	
69 4-Chloro-3-methylphenol	107	6.535	6.535	0.000	97	961586	80.0	81.5	
71 2-Methylnaphthalene	142	6.693	6.693	0.000	89	2219656	80.0	83.2	
72 1-Methylnaphthalene	142	6.799	6.799	0.000	91	2076141	80.0	82.7	
73 Hexachlorocyclopentadiene	237	6.840	6.840	0.000	85	533037	80.0	74.0	
74 1,2,4,5-Tetrachlorobenzene	216	6.864	6.864	0.000	94	1039689	80.0	78.4	
76 2,4,6-Trichlorophenol	196	6.981	6.981	0.000	88	681680	80.0	79.1	
77 2,4,5-Trichlorophenol	196	7.028	7.028	0.000	95	726781	80.0	79.3	
79 1,1'-Biphenyl	154	7.158	7.158	0.000	95	2709461	80.0	81.5	
80 2-Chloronaphthalene	162	7.193	7.193	0.000	95	2132202	80.0	80.4	
82 2-Nitroaniline	65	7.299	7.299	0.000	83	646211	80.0	84.3	
85 Dimethyl phthalate	163	7.440	7.440	0.000	98	2388226	80.0	83.7	
86 1,3-Dinitrobenzene	168	7.510	7.510	0.000	94	430973	80.0	87.6	
87 2,6-Dinitrotoluene	165	7.528	7.528	0.000	94	584982	80.0	84.2	
88 Acenaphthylene	152	7.616	7.616	0.000	92	3154575	80.0	81.6	
89 3-Nitroaniline	138	7.716	7.716	0.000	95	665635	80.0	81.0	
90 Acenaphthene	153	7.786	7.786	0.000	94	2145915	80.0	82.1	
91 2,4-Dinitrophenol	184	7.816	7.816	0.000	84	659419	160.0	151.4	
92 4-Nitrophenol	109	7.898	7.898	0.000	85	610783	160.0	170.4	
94 2,4-Dinitrotoluene	165	7.933	7.933	0.000	91	770173	80.0	85.6	
95 Dibenzofuran	168	7.957	7.957	0.000	91	2973709	80.0	82.0	
97 2,3,4,6-Tetrachlorophenol	232	8.086	8.086	0.000	69	565413	80.0	78.0	
99 Diethyl phthalate	149	8.139	8.139	0.000	98	2265875	80.0	82.8	
101 4-Chlorophenyl phenyl ethe	204	8.280	8.280	0.000	90	1217720	80.0	80.7	
102 Fluorene	166	8.303	8.303	0.000	83	2445152	80.0	81.5	
104 4-Nitroaniline	138	8.344	8.344	0.000	79	643469	80.0	81.9	
105 4,6-Dinitro-2-methylphenol	198	8.350	8.350	0.000	84	942230	160.0	164.5	
107 N-Nitrosodiphenylamine	169	8.409	8.409	0.000	60	1782792	80.0	81.8	
108 1,2-Diphenylhydrazine	77	8.444	8.444	0.000	97	2422137	80.9	84.2	
109 Azobenzene	77	8.444	8.444	0.000	97	2422137	80.0	83.3	
116 4-Bromophenyl phenyl ether	248	8.779	8.779	0.000	59	681513	80.0	80.7	
117 Hexachlorobenzene	284	8.861	8.861	0.000	91	738732	80.0	79.5	
120 Pentachlorophenol	266	9.067	9.067	0.000	92	773603	160.0	141.2	
125 Phenanthrene	178	9.284	9.284	0.000	98	3491308	80.0	80.1	
126 Anthracene	178	9.337	9.337	0.000	98	3588593	80.0	81.4	
127 Carbazole	167	9.508	9.508	0.000	82	3405929	80.0	83.2	
129 Di-n-butyl phthalate	149	9.801	9.801	0.000	100	3836051	80.0	84.9	
134 Fluoranthene	202	10.759	10.759	0.000	98	3928963	80.0	80.9	
135 Benzidine	184	10.959	10.959	0.000	99	1873758	NC	NC	
136 Pyrene	202	11.129	11.129	0.000	96	4042644	80.0	81.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
141 Butyl benzyl phthalate	149	12.269	12.269	0.000	97	1746028	80.0	88.6	
145 3,3'-Dichlorobenzidine	252	13.609	13.609	0.000	70	1491822	80.0	85.3	
146 Benzo[a]anthracene	228	13.644	13.644	0.000	99	3838473	80.0	82.6	
147 Bis(2-ethylhexyl) phthalat	149	13.632	13.632	0.000	84	2342831	80.0	89.0	
148 Chrysene	228	13.738	13.738	0.000	95	3567663	80.0	83.4	
149 Di-n-octyl phthalate	149	15.530	15.530	0.000	99	3888730	80.0	94.4	
151 Benzo[b]fluoranthene	252	16.688	16.688	0.000	92	3607456	80.0	83.2	
152 Benzo[k]fluoranthene	252	16.776	16.776	0.000	99	3762692	80.0	82.2	
153 Benzo[a]pyrene	252	17.680	17.680	0.000	75	3610049	80.0	84.5	
156 Indeno[1,2,3-cd]pyrene	276	21.077	21.077	0.000	94	3158540	80.0	90.8	
157 Dibenz(a,h)anthracene	278	21.159	21.159	0.000	94	3325013	80.0	89.8	
158 Benzo[g,h,i]perylene	276	21.852	21.852	0.000	90	3318337	80.0	84.1	
163 Famphur	218	12.175	12.175	0.000	97	1402670	80.0	86.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MS-HSLACCV080_00038 Amount Added: 200.00 Units: uL

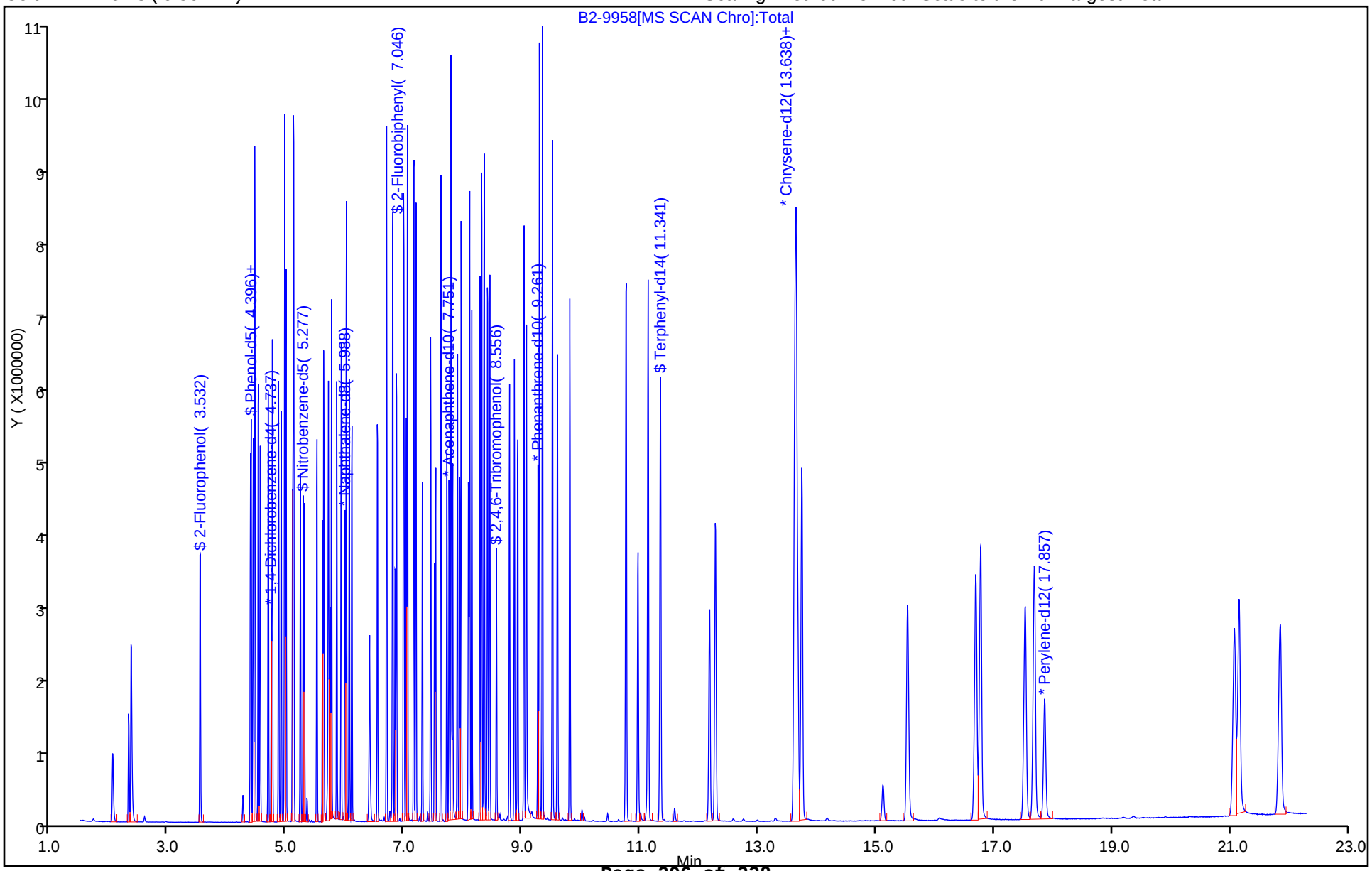
Report Date: 15-Apr-2015 10:10:36 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9958.D

Injection Date:	14-Apr-2015 11:27:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	CCV HSL			Worklist Smp#:	3
Client ID:					
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMS_B2_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_B2\20150305-32595.b\B2-9362.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 04-Mar-2015 10:19:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150305-32595.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 05-Mar-2015 13:29:10 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: kiekeld Date: 05-Mar-2015 12:07:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
22 Pentachlorophenol_T	266	3.856	3.856	0.000	94	221402	NR	NR	7
35 Benzidine_T	184	4.966	4.966	0.000	100	1771452	NR	NR	7
24 DFTPP									
44 4,4'-DDE	246	5.078	5.078	0.000	87	1265	NR	NR	7
49 4,4'-DDD	235	5.383	5.383	0.000	95	15515	NR	NR	7
54 4,4'-DDT	235	5.618	5.618	0.000	99	761486	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

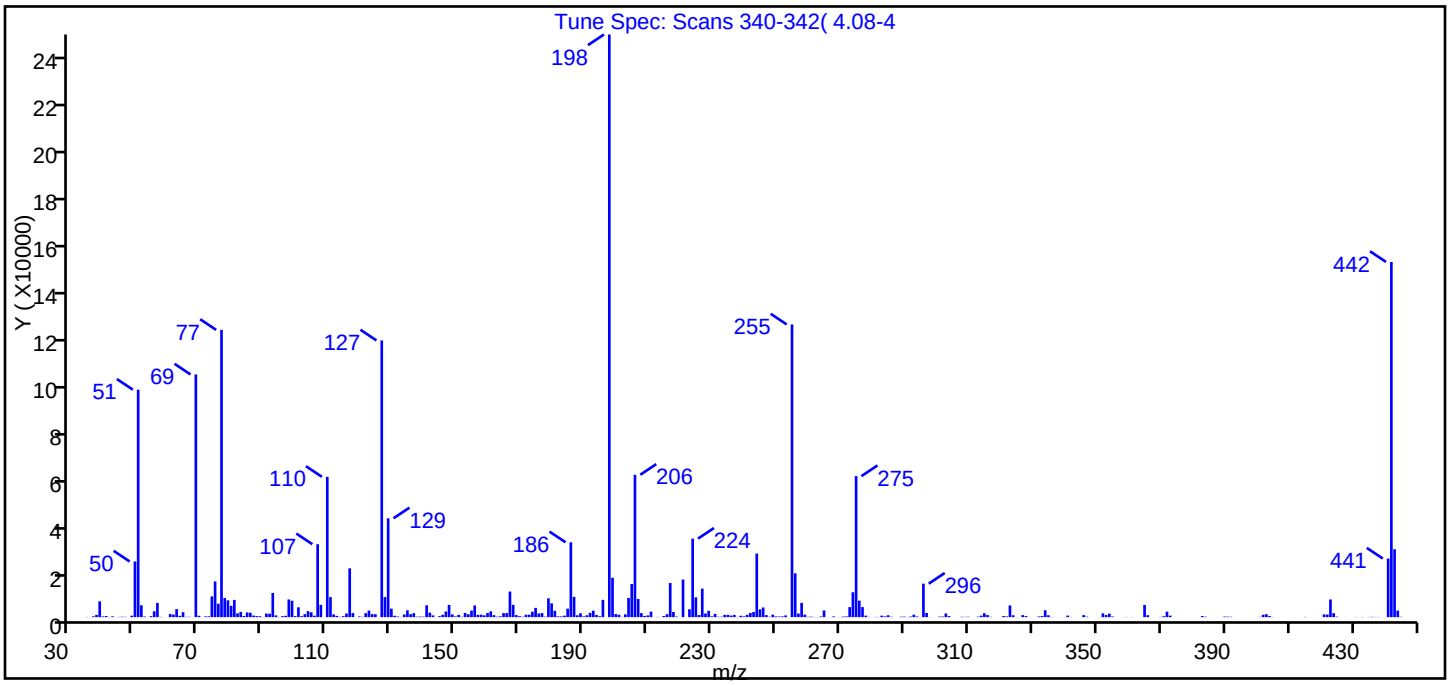
MS-DFTPP_00038 Amount Added: 200.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9362.D
Injection Date: 04-Mar-2015 10:19:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Tune Method: DFTPP Method 8270

24 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	39.0
68	<2% of mass 69	0.0 (0.0)
69	Present	41.7
70	<2% of mass 69	0.2 (0.6)
127	40-60% of mass 198	47.5
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.8
275	10-30% of mass 198	24.2
365	>1% of mass 198	2.1
441	Present but less than mass 443	10.1 (86.3)
442	>40% of mass 198	61.0
443	17-23% of mass 442	11.7 (19.1)

Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9362.D\SMS_B2_8270D.rslt\spectra.d
Injection Date: 04-Mar-2015 10:19:30
Spectrum: Tune Spec: Scans 340-342(4.08-4
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	77	120.00	279	201.00	1011	289.00	182
36.00	30	121.00	143	202.00	115	290.00	220
37.00	344	122.00	1646	203.00	1139	291.00	74
38.00	944	123.00	2725	204.00	7945	292.00	252
39.00	6539	124.00	1259	205.00	13724	293.00	1013
40.00	293	125.00	1199	206.00	58928	294.00	272
41.00	482	127.00	114528	207.00	7527	295.00	60
42.00	63	128.00	8300	208.00	1659	296.00	13859
43.00	325	129.00	40912	209.00	492	297.00	1737
44.00	24	130.00	3508	210.00	713	298.00	53
45.00	91	131.00	581	211.00	2303	301.00	228
46.00	175	132.00	267	213.00	93	302.00	259
47.00	131	133.00	85	215.00	490	303.00	1512
49.00	604	134.00	1107	216.00	1205	304.00	460
50.00	23032	135.00	2832	217.00	14127	308.00	163
51.00	94144	136.00	1243	218.00	2141	309.00	128
52.00	4899	137.00	1645	219.00	229	310.00	158
53.00	247	138.00	190	221.00	15570	313.00	190
55.00	406	139.00	251	223.00	3263	314.00	605
56.00	2422	140.00	206	224.00	32488	315.00	1617
57.00	5892	141.00	4884	225.00	8191	316.00	868
58.00	114	142.00	1862	226.00	875	317.00	136
59.00	13	143.00	719	227.00	11819	321.00	457
61.00	1306	144.00	3	228.00	1512	322.00	303
62.00	1058	145.00	406	229.00	2607	323.00	4821
63.00	3325	146.00	962	230.00	356	324.00	786
64.00	556	147.00	2330	231.00	1338	325.00	56
65.00	2061	148.00	5063	232.00	161	327.00	842
66.00	124	149.00	1139	233.00	183	328.00	452
67.00	139	150.00	299	234.00	941	332.00	289
69.00	100440	151.00	924	235.00	970	333.00	451
70.00	573	152.00	176	236.00	650	334.00	2841
72.00	289	153.00	1707	237.00	928	335.00	783

Report Date: 05-Mar-2015 13:29:10 Chrom Revision: 2.2 15-Jan-2015 13:05:58
Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9362.D\SMS_B2_8270D.rslt\spectra.d
Injection Date: 04-Mar-2015 10:19:30
Spectrum: Tune Spec: Scans 340-342(4.08-4
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	328	154.00	1170	238.00	79	336.00	80
74.00	8587	155.00	2735	239.00	574	340.00	52
75.00	14779	156.00	4827	240.00	321	341.00	638
76.00	5569	157.00	951	241.00	949	342.00	85
77.00	118880	158.00	1039	242.00	1707	346.00	828
78.00	7912	159.00	742	243.00	2132	347.00	207
79.00	6952	160.00	1701	244.00	26320	351.00	63
80.00	4694	161.00	2401	245.00	3224	352.00	1563
81.00	7138	162.00	815	246.00	3993	353.00	871
82.00	1550	163.00	201	247.00	834	354.00	1442
83.00	2152	164.00	341	248.00	153	355.00	270
84.00	459	165.00	1664	249.00	1029	359.00	61
85.00	1927	166.00	1682	250.00	298	361.00	53
86.00	1810	167.00	10603	251.00	254	365.00	5043
87.00	644	168.00	5097	252.00	310	366.00	789
88.00	436	169.00	831	253.00	722	370.00	108
89.00	382	170.00	398	255.00	121144	371.00	410
90.00	66	171.00	182	256.00	18152	372.00	2274
91.00	1485	172.00	1000	257.00	1475	373.00	618
92.00	1413	173.00	1013	258.00	5909	383.00	479
93.00	10006	174.00	2238	259.00	1043	384.00	186
94.00	731	175.00	3828	260.00	149	390.00	231
95.00	69	176.00	1515	261.00	209	391.00	211
96.00	396	177.00	1678	262.00	72	392.00	153
97.00	561	178.00	205	263.00	65	401.00	119
98.00	7306	179.00	7803	264.00	275	402.00	977
99.00	6790	180.00	5705	265.00	2759	403.00	1218
100.00	425	181.00	2634	266.00	43	404.00	464
101.00	4068	182.00	330	267.00	47	405.00	73
102.00	399	183.00	311	268.00	310	415.00	106
103.00	1200	184.00	617	270.00	59	421.00	1140
104.00	2465	185.00	3502	271.00	259	422.00	1077
105.00	2013	186.00	30984	272.00	291	423.00	7303
106.00	588	187.00	8400	273.00	4143	424.00	1632

Report Date: 05-Mar-2015 13:29:10 Chrom Revision: 2.2 15-Jan-2015 13:05:58
Data File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9362.D\SMS_B2_8270D.rslt\spectra.d
Injection Date: 04-Mar-2015 10:19:30
Spectrum: Tune Spec: Scans 340-342(4.08-4
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
107.00	30184	188.00	784	274.00	10304	425.00	205
108.00	5081	189.00	1615	275.00	58360	431.00	63
110.00	58064	190.00	314	276.00	6831	433.00	89
111.00	8296	191.00	779	277.00	4152	435.00	88
112.00	1128	192.00	1796	278.00	622	436.00	130
113.00	516	193.00	2672	279.00	109	437.00	71
114.00	117	194.00	880	281.00	86	438.00	86
115.00	390	195.00	366	282.00	70	441.00	24248
116.00	1488	196.00	7154	283.00	610	442.00	147008
117.00	20208	198.00	241152	284.00	312	443.00	28096
118.00	1683	199.00	16303	285.00	788	444.00	2716
119.00	28	200.00	1279	286.00	163	445.00	144

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9957.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 14-Apr-2015 11:14:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:34 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 14-Apr-2015 14:18:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
22 Pentachlorophenol_T	266	3.855	3.855	0.000	94	164796	NR	NR	7
35 Benzidine_T	184	4.960	4.960	0.000	100	1735719	NR	NR	7
24 DFTPP									
44 4,4'-DDE	246	5.066	5.066	0.000	85	1207	NR	NR	7
49 4,4'-DDD	235	5.371	5.371	0.000	96	14332	NR	NR	7
54 4,4'-DDT	235	5.606	5.606	0.000	98	746805	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

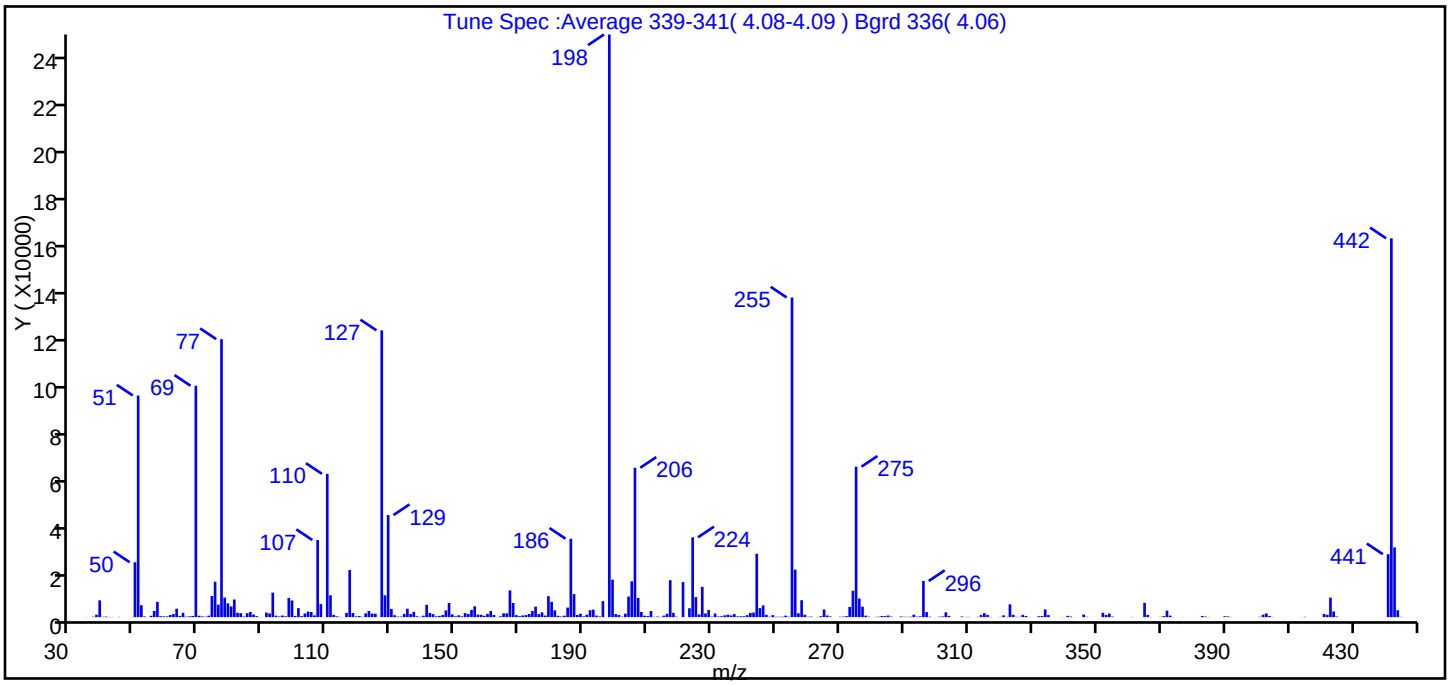
MS-DFTPP_00038 Amount Added: 200.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9957.D
Injection Date: 14-Apr-2015 11:14:30 Instrument ID: SMS_B2
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_B2_8270D Limit Group: MSSV - 8270D
Tune Method: DFTPP Method 8270

24 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	38.0
68	<2% of mass 69	0.2 (0.5)
69	Present	39.7
70	<2% of mass 69	0.2 (0.6)
127	40-60% of mass 198	49.2
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.4
275	10-30% of mass 198	25.8
365	>1% of mass 198	2.5
441	Present but less than mass 443	10.8 (90.3)
442	>40% of mass 198	65.0
443	17-23% of mass 442	12.0 (18.4)

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9957.D\SMS_B2_8270D.rslt\spectra.d
Injection Date: 14-Apr-2015 11:14:30
Spectrum: Tune Spec :Average 339-341(4.08-4.09) Bgrd 336(4.06)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	55	122.00	1620	203.00	1485	290.00	175
37.00	183	123.00	2606	204.00	8759	291.00	132
38.00	1040	124.00	1530	205.00	15257	292.00	184
39.00	7162	125.00	1475	206.00	63624	293.00	1069
40.00	155	127.00	122128	207.00	8208	294.00	219
41.00	256	128.00	9293	208.00	2206	295.00	348
42.00	96	129.00	43472	209.00	615	296.00	15399
43.00	78	130.00	3516	210.00	454	297.00	2145
45.00	121	131.00	817	211.00	2626	298.00	211
49.00	74	132.00	237	212.00	132	301.00	210
50.00	23384	133.00	258	213.00	240	302.00	296
51.00	94376	134.00	1402	214.00	110	303.00	2050
52.00	5088	135.00	3590	215.00	650	304.00	545
53.00	299	136.00	1317	216.00	1437	308.00	280
55.00	557	137.00	2265	217.00	15729	309.00	88
56.00	2665	138.00	359	218.00	1822	310.00	125
57.00	6483	139.00	165	219.00	219	313.00	128
58.00	413	140.00	618	221.00	14931	314.00	889
59.00	330	141.00	5251	223.00	3797	315.00	1710
60.00	326	142.00	1758	224.00	33992	316.00	962
61.00	926	143.00	1309	225.00	8548	317.00	106
62.00	1298	144.00	348	226.00	1125	320.00	119
63.00	3614	145.00	543	227.00	12902	321.00	763
64.00	534	146.00	894	228.00	1579	322.00	120
65.00	1849	147.00	2866	229.00	3042	323.00	5447
66.00	204	148.00	6025	230.00	240	324.00	995
67.00	343	149.00	1166	231.00	1550	325.00	138
68.00	500	150.00	350	232.00	288	326.00	130
69.00	98536	151.00	784	233.00	369	327.00	957
70.00	609	152.00	365	234.00	784	328.00	493
71.00	311	153.00	1751	235.00	1079	329.00	75
72.00	180	154.00	1305	236.00	750	332.00	397
73.00	630	155.00	3101	237.00	1312	333.00	456

Report Date: 15-Apr-2015 10:10:34 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9957.D\SMS_B2_8270D.rslt\spectra.d
Injection Date: 14-Apr-2015 11:14:30
Spectrum: Tune Spec :Average 339-341(4.08-4.09) Bgrd 336(4.06)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	8986	156.00	4618	238.00	321	334.00	3268
75.00	15096	157.00	1074	239.00	371	335.00	875
76.00	5324	158.00	1005	240.00	393	339.00	63
77.00	118400	159.00	577	241.00	844	340.00	51
78.00	8327	160.00	1405	242.00	1823	341.00	563
79.00	5864	161.00	2644	243.00	1953	342.00	272
80.00	4561	162.00	915	244.00	26992	346.00	1121
81.00	7506	163.00	45	245.00	3850	347.00	161
82.00	1860	164.00	350	246.00	5006	352.00	1846
83.00	1703	165.00	1621	247.00	973	353.00	939
84.00	263	166.00	1625	248.00	177	354.00	1523
85.00	1678	167.00	11407	249.00	866	355.00	243
86.00	2207	168.00	6035	250.00	173	361.00	92
87.00	1111	169.00	840	251.00	166	365.00	6082
88.00	409	170.00	420	252.00	188	366.00	969
89.00	48	171.00	724	253.00	635	367.00	76
91.00	1964	172.00	881	254.00	195	370.00	132
92.00	1603	173.00	1336	255.00	136128	371.00	453
93.00	10451	174.00	2606	256.00	20240	372.00	2803
94.00	635	175.00	4479	257.00	1647	373.00	637
95.00	299	176.00	1276	258.00	7207	374.00	66
96.00	698	177.00	2059	259.00	1029	377.00	63
97.00	359	178.00	681	260.00	173	383.00	511
98.00	8198	179.00	8941	261.00	248	384.00	234
99.00	7105	180.00	6524	263.00	101	385.00	79
100.00	525	181.00	2878	264.00	421	390.00	386
101.00	3847	182.00	570	265.00	3251	391.00	325
102.00	418	183.00	277	266.00	690	392.00	61
103.00	1539	184.00	629	267.00	286	401.00	178
104.00	2353	185.00	4068	270.00	153	402.00	1059
105.00	2179	186.00	33400	271.00	225	403.00	1581
106.00	743	187.00	9790	272.00	438	404.00	470
107.00	32840	188.00	974	273.00	4368	405.00	82
108.00	5545	189.00	1461	274.00	11247	415.00	148

Report Date: 15-Apr-2015 10:10:34 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9957.D\SMS_B2_8270D.rslt\spectra.d
Injection Date: 14-Apr-2015 11:14:30
Spectrum: Tune Spec :Average 339-341(4.08-4.09) Bgrd 336(4.06)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.00	61024	190.00	325	275.00	64072	421.00	1385
111.00	9314	191.00	1062	276.00	7904	422.00	1000
112.00	967	192.00	2952	277.00	4444	423.00	8289
113.00	347	193.00	3194	278.00	634	424.00	2419
114.00	131	194.00	674	279.00	200	425.00	273
115.00	43	195.00	304	281.00	88	441.00	26800
116.00	1824	196.00	6809	282.00	183	442.00	161344
117.00	20056	198.00	248128	283.00	471	443.00	29688
118.00	1760	199.00	15948	284.00	448	444.00	2936
119.00	343	200.00	1301	285.00	696	445.00	125
120.00	476	201.00	974	286.00	221		
121.00	148	202.00	207	289.00	280		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-67561-2

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-272540/1-A

Matrix: Water | Lab File ID: B2-9962.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/10/2015 10:15

Sample wt/vol: 1000(mL) | Date Analyzed: 04/14/2015 13:11

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.: 272601 | 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)	77		48-135
321-60-8	2-Fluorobiphenyl	82		48-135
367-12-4	2-Fluorophenol (Surr)	82		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	83		42-135
4165-62-2	Phenol-d5 (Surr)	84		46-135
1718-51-0	Terphenyl-d14 (Surr)	87		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9962.D
Lims ID: MB 280-272540/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-Apr-2015 13:11:30 ALS Bottle#: 6 Worklist Smp#: 22
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: MB280-272095_1-A
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 15-Apr-2015 10:08:45

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	4.738	4.737	0.001	96	279647	40.0	40.0	
* 2 Naphthalene-d8	136	5.983	5.988	-0.005	99	1096229	40.0	40.0	
* 3 Acenaphthene-d10	164	7.752	7.751	0.001	92	666149	40.0	40.0	
* 4 Phenanthrene-d10	188	9.262	9.261	0.001	97	1158704	40.0	40.0	
* 5 Chrysene-d12	240	13.657	13.668	-0.011	97	1264596	40.0	40.0	
* 6 Perylene-d12	264	17.846	17.857	-0.011	97	1153748	40.0	40.0	
$ 7 2-Fluorophenol	112	3.527	3.532	-0.005	93	820111	100.0	82.2	
$ 8 Phenol-d5	99	4.379	4.384	-0.005	94	1072792	100.0	84.1	
$ 9 Nitrobenzene-d5	82	5.272	5.277	-0.005	88	886423	100.0	83.0	
$ 10 2-Fluorobiphenyl	172	7.047	7.046	0.001	99	1793626	100.0	82.4	
$ 11 2,4,6-Tribromophenol	330	8.557	8.556	0.001	93	236103	100.0	76.8	
$ 12 Terphenyl-d14	244	11.336	11.341	-0.005	99	2270773	100.0	86.9	
15 1,4-Dioxane	88		2.046					ND	
16 N-Nitrosodimethylamine	74		2.316					ND	
17 Pyridine	79		2.363					ND	
18 2-Picoline	93		2.930					ND	
19 N-Nitrosomethylethylamine	88		3.018					ND	
20 Methyl methanesulfonate	80		3.283					ND	
21 N-Nitrosodiethylamine	102		3.635					ND	
22 Pentachlorophenol_T	266		3.855					ND	
23 Ethyl methanesulfonate	79		3.894					ND	
25 Phenol	94	4.391	4.396	-0.005	95	6123		0.4759	
26 Aniline	93		4.431					ND	
27 Bis(2-chloroethyl)ether	93		4.461					ND	
28 Pentachloroethane	117		4.370					ND	
29 2-Chlorophenol	128		4.549					ND	
30 1,3-Dichlorobenzene	146		4.684					ND	
31 1,4-Dichlorobenzene	146		4.754					ND	
32 Benzyl alcohol	108		4.860					ND	
33 1,2-Dichlorobenzene	146		4.907					ND	
34 2-Methylphenol	108		4.966					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
35 Benzidine_T	184		4.960					ND	
36 2,2'-oxybis[1-chloropropan	45		4.966					ND	
37 Benzaldehyde	106		5.015					ND	
38 4-Methylphenol	108		5.113					ND	
39 3-Methylphenol	108		5.113					ND	
40 3 & 4 Methylphenol	108		5.113					ND	
41 N-Nitrosodi-n-propylamine	70		5.095					ND	
42 N-Nitrosopyrrolidine	100		4.992					ND	
43 Acetophenone	105		5.119					ND	
45 N-Nitrosomorpholine	116		5.028					ND	
46 2-Toluidine	106		5.045					ND	
47 Hexachloroethane	117		5.230					ND	
48 Nitrobenzene	77		5.301					ND	
50 N-Nitrosopiperidine	114		5.327					ND	
51 Isophorone	82		5.512					ND	
52 2,4-Dimethylphenol	107		5.624					ND	
53 2-Nitrophenol	139		5.606					ND	
55 o,o',o''-Triethylphosphoro	198		5.545					ND	
56 Benzoic acid	105		5.742					ND	
57 Bis(2-chloroethoxy)methane	93		5.706					ND	
58 alpha,alpha-Dimethyl phene	58		5.674					ND	
59 2,4-Dichlorophenol	162		5.847					ND	
60 1,2,4-Trichlorobenzene	180		5.924					ND	
61 Naphthalene	128		6.012					ND	
62 4-Chloroaniline	127		6.059					ND	
63 2,6-Dichlorophenol	162		5.944					ND	
64 Hexachloropropene	213		5.968					ND	
65 Hexachlorobutadiene	225		6.106					ND	
66 N-Nitrosodi-n-butylamine	84		6.238					ND	
67 Caprolactam	55		6.405					ND	
68 p-Phenylene diamine	108		6.291					ND	
69 4-Chloro-3-methylphenol	107		6.535					ND	
70 Safrole, Total	162		6.467					ND	
71 2-Methylnaphthalene	142		6.693					ND	
72 1-Methylnaphthalene	142		6.799					ND	
73 Hexachlorocyclopentadiene	237		6.840					ND	
74 1,2,4,5-Tetrachlorobenzene	216		6.864					ND	
75 Isosafrole Peak 1	162		6.761					ND	
76 2,4,6-Trichlorophenol	196		6.981					ND	
77 2,4,5-Trichlorophenol	196		7.028					ND	
78 Isosafrole Peak 2	104	7.041	6.990	0.051	48	1368			NC
79 1,1'-Biphenyl	154		7.158					ND	
80 2-Chloronaphthalene	162		7.193					ND	
81 1-Chloronaphthalene	162		7.096					ND	
82 2-Nitroaniline	65		7.299					ND	
83 1,4-Naphthoquinone	158		7.249					ND	
84 1,4-Dinitrobenzene	168		7.307					ND	
85 Dimethyl phthalate	163		7.440					ND	
86 1,3-Dinitrobenzene	168		7.510					ND	
87 2,6-Dinitrotoluene	165		7.528					ND	
88 Acenaphthylene	152		7.616					ND	
89 3-Nitroaniline	138		7.716					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
90 Acenaphthene	153		7.786					ND	
91 2,4-Dinitrophenol	184		7.816					ND	
92 4-Nitrophenol	109		7.898					ND	
93 Pentachlorobenzene	250		7.789					ND	
94 2,4-Dinitrotoluene	165		7.933					ND	
95 Dibenzofuran	168		7.957					ND	
96 1-Naphthylamine	143		7.924					ND	
97 2,3,4,6-Tetrachlorophenol	232		8.086					ND	
98 2-Naphthylamine	143		8.001					ND	
99 Diethyl phthalate	149		8.139					ND	
100 Thionazin	97		8.106					ND	
101 4-Chlorophenyl phenyl ethe	204		8.280					ND	
102 Fluorene	166		8.303					ND	
103 N-Nitro-o-toluidine	152		8.200					ND	
104 4-Nitroaniline	138		8.344					ND	
105 4,6-Dinitro-2-methylphenol	198		8.350					ND	
106 Diphenylamine	169		8.288					ND	
107 N-Nitrosodiphenylamine	169		8.409					ND	
108 1,2-Diphenylhydrazine	77		8.444					ND	
109 Azobenzene	77		8.444					ND	
110 Sulfotepp	97		8.394					ND	
111 Diallate Peak 1	86	8.551	8.547	0.004	44	3484			NC
112 1,3,5-Trinitrobenzene	213		8.553					ND	
113 Phorate	121		8.565					ND	
114 Phenacetin	108		8.588					ND	
115 Diallate Peak 2	86	8.551	8.641	-0.090	44	3484			NC
116 4-Bromophenyl phenyl ether	248		8.779					ND	
117 Hexachlorobenzene	284		8.861					ND	
118 Dimethoate	87		8.759					ND	
119 4-Aminobiphenyl	169		8.935					ND	
120 Pentachlorophenol	266		9.067					ND	
121 Pronamide	173		8.958					ND	
122 Pentachloronitrobenzene	237		8.947					ND	
123 Disulfoton	88		9.088					ND	
124 Dinoseb	211		9.093					ND	
125 Phenanthrene	178		9.284					ND	
126 Anthracene	178		9.337					ND	
127 Carbazole	167		9.508					ND	
128 Methyl parathion	109		9.487					ND	
129 Di-n-butyl phthalate	149		9.801					ND	
130 Ethyl Parathion	109		9.916					ND	
131 4-Nitroquinoline-1-oxide	190		10.028					ND	
132 Methapyrilene	97		10.057					ND	
133 Isodrin	193		10.351					ND	
134 Fluoranthene	202		10.759					ND	
135 Benzidine	184		10.959					ND	
136 Pyrene	202		11.129					ND	
137 Aramite Peak 1	185		11.062					ND	
138 Aramite Peak 2	185	11.342	11.197	0.145	52	5087			NC
139 p-Dimethylamino azobenzene	120	11.336	11.397	-0.061	42	28047			NC
140 Chlorobenzilate	251		11.455					ND	
141 Butyl benzyl phthalate	149		12.269					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
142 3,3'-Dimethylbenzidine	212		12.078					ND	
143 2-Acetylaminofluorene	181		12.630					ND	
144 4,4'-Methylene bis(2-chlor	231		13.347					ND	
145 3,3'-Dichlorobenzidine	252		13.609					ND	
146 Benzo[a]anthracene	228		13.644					ND	
147 Bis(2-ethylhexyl) phthalat	149		13.632					ND	
148 Chrysene	228		13.738					ND	
149 Di-n-octyl phthalate	149		15.530					ND	
150 7,12-Dimethylbenz(a)anthra	256		16.326					ND	
151 Benzo[b]fluoranthene	252		16.688					ND	
152 Benzo[k]fluoranthene	252		16.776					ND	
153 Benzo[a]pyrene	252		17.680					ND	
154 3-Methylcholanthrene	268		18.377					ND	
155 Dibenz[a,j]acridine	279		20.175					ND	
156 Indeno[1,2,3-cd]pyrene	276		21.077					ND	
157 Dibenz(a,h)anthracene	278		21.159					ND	
158 Benzo[g,h,i]perylene	276		21.852					ND	
S 160 Aramite, Total	185		15.047					ND	
S 161 Isosafrole	162		15.047					ND	
S 162 Diallate	86		15.047					ND	
163 Famphur	218		12.175					ND	
13 Tetraethyl Pyrophosphate (	1		0.000					ND	
14 Total Cresols	1		0.000					ND	
44 4,4'-DDE	246		5.066					ND	
49 4,4'-DDD	235		5.371					ND	
54 4,4'-DDT	235		5.606					ND	
S 159 Methyl Phenols,Total	1		0.000					ND	
164 Hexachlorophene	196		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MS-IS_00007 Amount Added: 20.00 Units: uL Run Reagent

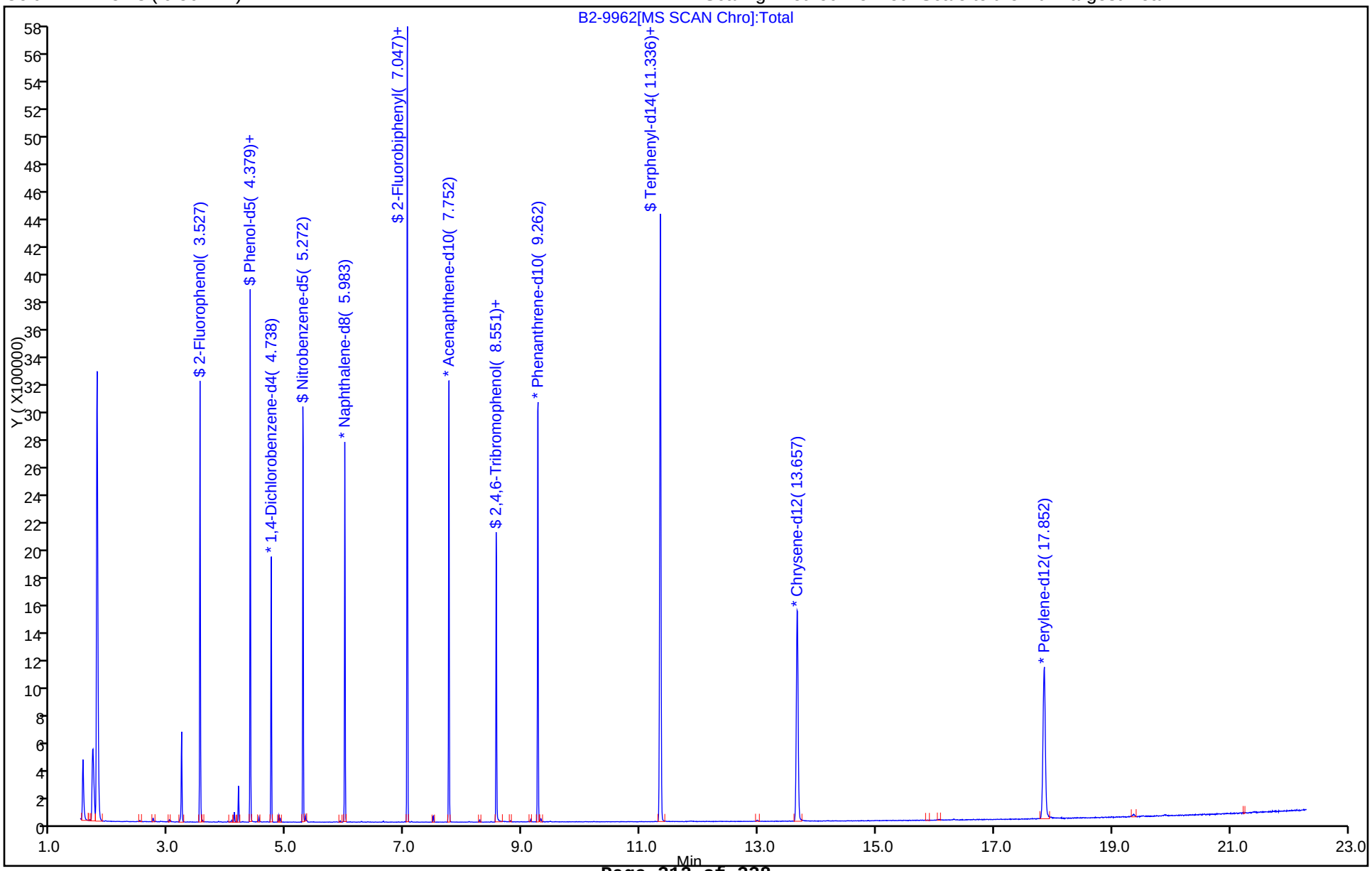
Report Date: 15-Apr-2015 10:10:37 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9962.D

Injection Date:	14-Apr-2015 13:11:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	MB 280-272540/1-A			Worklist Smp#:	22
Client ID:					
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	SMS_B2_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.: 280-67561-2

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-272540/2-A

Matrix: Water | Lab File ID: B2-9963.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/10/2015 10:15

Sample wt/vol: 1000(mL) | Date Analyzed: 04/14/2015 13:40

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.: 272601 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
105-60-2	Caprolactam	69.8		5.0	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	77		48-135
321-60-8	2-Fluorobiphenyl	78		48-135
367-12-4	2-Fluorophenol (Surr)	74		41-135
4165-60-0	Nitrobenzene-d5 (Surr)	76		42-135
4165-62-2	Phenol-d5 (Surr)	77		46-135
1718-51-0	Terphenyl-d14 (Surr)	80		20-135

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9963.D
Lims ID: LCS 280-272540/2-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Apr-2015 13:40:30 ALS Bottle#: 7 Worklist Smp#: 23
Injection Vol: 0.5 ul Dil. Factor: 1.0000
Sample Info: LCS280-272095_2-A
Operator ID: KIEKELD Instrument ID: SMS_B2

Method: \\denchrom\chromdata\SMS_B2\20150414-33886.b\SMS_B2_8270D.m
Limit Group: MSSV - 8270D
Method Label: 8270D
Last Update: 15-Apr-2015 10:10:35 Calib Date: 04-Mar-2015 13:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\denchrom\chromdata\SMS_B2\20150305-32595.b\B2-9370.D

Column 1 : VF-5ms (0.50 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: kiekeld Date: 15-Apr-2015 10:09:19

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	4.734	4.737	-0.003	95	288448	40.0	40.0	
* 2 Naphthalene-d8	136	5.985	5.988	-0.003	99	1161105	40.0	40.0	
* 3 Acenaphthene-d10	164	7.748	7.751	-0.003	92	704797	40.0	40.0	
* 4 Phenanthrene-d10	188	9.258	9.261	-0.003	97	1195366	40.0	40.0	
* 5 Chrysene-d12	240	13.665	13.668	-0.003	97	1311120	40.0	40.0	
* 6 Perylene-d12	264	17.848	17.857	-0.009	97	1190186	40.0	40.0	
$ 7 2-Fluorophenol	112	3.529	3.532	-0.003	92	759410	100.0	73.8	
$ 8 Phenol-d5	99	4.381	4.384	-0.003	94	1014153	100.0	77.0	
$ 9 Nitrobenzene-d5	82	5.274	5.277	-0.003	87	855862	100.0	75.7	
$ 10 2-Fluorobiphenyl	172	7.043	7.046	-0.003	99	1791728	100.0	77.8	
$ 11 2,4,6-Tribromophenol	330	8.559	8.556	0.003	94	249755	100.0	76.7	
$ 12 Terphenyl-d14	244	11.338	11.341	-0.003	99	2169355	100.0	80.0	
15 1,4-Dioxane	88	2.043	2.046	-0.003	95	249347	80.2	55.6	
16 N-Nitrosodimethylamine	74	2.313	2.316	-0.003	94	438344	80.0	64.4	
17 Pyridine	79	2.354	2.363	-0.009	97	651793	80.0	54.1	
25 Phenol	94	4.393	4.396	-0.003	98	869322	80.3	65.5	
26 Aniline	93	4.428	4.431	-0.003	98	845805	80.1	52.9	
27 Bis(2-chloroethyl)ether	93	4.458	4.461	-0.003	96	672878	80.1	67.7	
29 2-Chlorophenol	128	4.546	4.549	-0.003	97	664902	80.0	64.6	
30 1,3-Dichlorobenzene	146	4.681	4.684	-0.003	98	674226	80.1	60.2	
31 1,4-Dichlorobenzene	146	4.752	4.754	-0.002	94	692320	80.2	60.8	
32 Benzyl alcohol	108	4.857	4.860	-0.003	94	472605	80.0	67.9	
33 1,2-Dichlorobenzene	146	4.904	4.907	-0.003	98	673764	80.3	61.9	
34 2-Methylphenol	108	4.963	4.966	-0.003	95	637429	80.1	64.7	
36 2,2'-oxybis[1-chloropropan	45	4.963	4.966	-0.003	81	874257	80.0	73.0	
37 Benzaldehyde	106		5.015				ND	ND	
38 4-Methylphenol	108	5.110	5.113	-0.003	97	680198	80.0	67.7	
39 3-Methylphenol	108	5.110	5.113	-0.003	91	680198	80.0	67.7	
40 3 & 4 Methylphenol	108	5.110	5.113	-0.003	94	680198	80.0	67.7	
41 N-Nitrosodi-n-propylamine	70	5.092	5.095	-0.003	85	497859	80.2	71.3	
43 Acetophenone	105	5.116	5.119	-0.003	99	934051	80.1	67.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Hexachloroethane	117	5.227	5.230	-0.003	94	246363	80.2	57.3	
48 Nitrobenzene	77	5.292	5.301	-0.009	87	722760	80.0	62.6	
51 Isophorone	82	5.504	5.512	-0.008	99	1264338	80.0	66.3	
52 2,4-Dimethylphenol	107	5.621	5.624	-0.003	96	591073	80.1	57.2	
53 2-Nitrophenol	139	5.604	5.606	-0.002	92	371772	80.0	65.9	
56 Benzoic acid	105	5.703	5.742	-0.039	54	412051	80.1	58.9	
57 Bis(2-chloroethoxy)methane	93	5.703	5.706	-0.003	99	787686	80.2	63.0	
59 2,4-Dichlorophenol	162	5.844	5.847	-0.003	93	592926	80.0	65.1	
60 1,2,4-Trichlorobenzene	180	5.921	5.924	-0.003	94	602697	80.0	59.4	
61 Naphthalene	128	6.009	6.012	-0.003	97	1894946	80.1	63.5	
62 4-Chloroaniline	127	6.056	6.059	-0.003	97	710192	80.0	52.3	
63 2,6-Dichlorophenol	162	6.062	5.944	0.118	96	584989	NC	NC	
65 Hexachlorobutadiene	225	6.103	6.106	-0.003	94	324366	80.0	57.3	
67 Caprolactam	55	6.385	6.405	-0.020	81	314618	80.0	69.8	
69 4-Chloro-3-methylphenol	107	6.532	6.535	-0.003	96	601672	80.1	67.9	
71 2-Methylnaphthalene	142	6.690	6.693	-0.003	92	1342870	79.9	67.0	
72 1-Methylnaphthalene	142	6.796	6.799	-0.003	93	1178444	80.0	62.6	
73 Hexachlorocyclopentadiene	237	6.837	6.840	-0.003	92	51407	80.1	9.45	
74 1,2,4,5-Tetrachlorobenzene	216	6.855	6.864	-0.009	97	612228	80.0	61.5	
76 2,4,6-Trichlorophenol	196	6.978	6.981	-0.003	91	415753	80.1	63.9	
77 2,4,5-Trichlorophenol	196	7.025	7.028	-0.003	95	458019	80.0	66.2	
79 1,1'-Biphenyl	154	7.149	7.158	-0.009	95	1678402	80.2	66.8	
80 2-Chloronaphthalene	162	7.190	7.193	-0.003	96	1277706	80.0	63.8	
82 2-Nitroaniline	65	7.296	7.299	-0.003	87	401442	80.2	69.3	
85 Dimethyl phthalate	163	7.437	7.440	-0.003	99	1526823	80.0	70.9	
86 1,3-Dinitrobenzene	168	7.501	7.510	-0.009	87	261679	80.3	70.4	
87 2,6-Dinitrotoluene	165	7.525	7.528	-0.003	94	361998	80.1	69.0	
88 Acenaphthylene	152	7.613	7.616	-0.003	98	2024516	80.0	69.3	
89 3-Nitroaniline	138	7.713	7.716	-0.003	96	349852	80.1	56.4	
90 Acenaphthene	153	7.783	7.786	-0.003	95	1321315	80.1	66.9	
91 2,4-Dinitrophenol	184	7.813	7.816	-0.003	87	384268	160.3	119.0	
92 4-Nitrophenol	109	7.889	7.898	-0.009	91	400253	160.0	147.9	
94 2,4-Dinitrotoluene	165	7.930	7.933	-0.003	95	488741	80.1	72.0	
95 Dibenzofuran	168	7.954	7.957	-0.003	97	1869940	80.1	68.3	
97 2,3,4,6-Tetrachlorophenol	232	8.083	8.086	-0.003	70	354571	80.1	64.8	
99 Diethyl phthalate	149	8.136	8.139	-0.003	99	1455324	80.0	70.4	
101 4-Chlorophenyl phenyl ethe	204	8.277	8.280	-0.003	90	753281	80.0	66.1	
102 Fluorene	166	8.300	8.303	-0.003	94	1548546	80.0	68.3	
104 4-Nitroaniline	138	8.336	8.344	-0.008	87	402109	80.1	67.8	
105 4,6-Dinitro-2-methylphenol	198	8.347	8.350	-0.003	90	583641	160.1	135.9	
106 Diphenylamine	169	8.277	8.288	-0.011	48	66722	NC	NC	
107 N-Nitrosodiphenylamine	169	8.406	8.409	-0.003	62	2198795	160.0	133.7	
109 Azobenzene	77	8.441	8.444	-0.003	97	1473269	80.1	67.1	
116 4-Bromophenyl phenyl ether	248	8.776	8.779	-0.003	65	423406	80.0	66.5	
117 Hexachlorobenzene	284	8.859	8.861	-0.003	95	473826	80.1	67.6	
120 Pentachlorophenol	266	9.064	9.067	-0.003	94	411148	160.0	101.9	
125 Phenanthrene	178	9.282	9.284	-0.002	98	2281114	80.0	69.4	
126 Anthracene	178	9.334	9.337	-0.003	98	2299007	80.0	69.1	
127 Carbazole	167	9.505	9.508	-0.003	96	2196140	80.0	71.2	
129 Di-n-butyl phthalate	149	9.799	9.801	-0.002	100	2425632	80.0	71.2	
134 Fluoranthene	202	10.756	10.759	-0.003	98	2514658	80.0	68.7	
135 Benzidine	184	10.956	10.959	-0.003	99	570258	NC	NC	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
136 Pyrene	202	11.126	11.129	-0.003	98	2641549	80.0	70.3	
141 Butyl benzyl phthalate	149	12.266	12.269	-0.003	97	1079687	80.0	72.0	
145 3,3'-Dichlorobenzidine	252	13.606	13.609	-0.003	73	715930	80.1	53.8	
146 Benzo[a]anthracene	228	13.635	13.644	-0.009	99	2453474	80.1	69.3	
147 Bis(2-ethylhexyl) phthalat	149	13.629	13.632	-0.003	96	1462222	80.0	73.0	
148 Chrysene	228	13.735	13.738	-0.003	97	2266377	80.3	69.6	
149 Di-n-octyl phthalate	149	15.527	15.530	-0.003	99	2396737	80.1	76.5	
151 Benzo[b]fluoranthene	252	16.679	16.688	-0.009	98	2283218	80.0	69.7	
152 Benzo[k]fluoranthene	252	16.761	16.776	-0.015	99	2380688	80.1	68.9	
153 Benzo[a]pyrene	252	17.672	17.680	-0.008	81	2171326	80.1	67.4	
156 Indeno[1,2,3-cd]pyrene	276	21.068	21.077	-0.008	98	1926134	80.0	72.8	
157 Dibenz(a,h)anthracene	278	21.144	21.159	-0.015	93	2081173	80.2	74.5	
158 Benzo[g,h,i]perylene	276	21.837	21.852	-0.015	97	2080196	80.0	69.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MS-IS_00007 Amount Added: 20.00 Units: uL Run Reagent

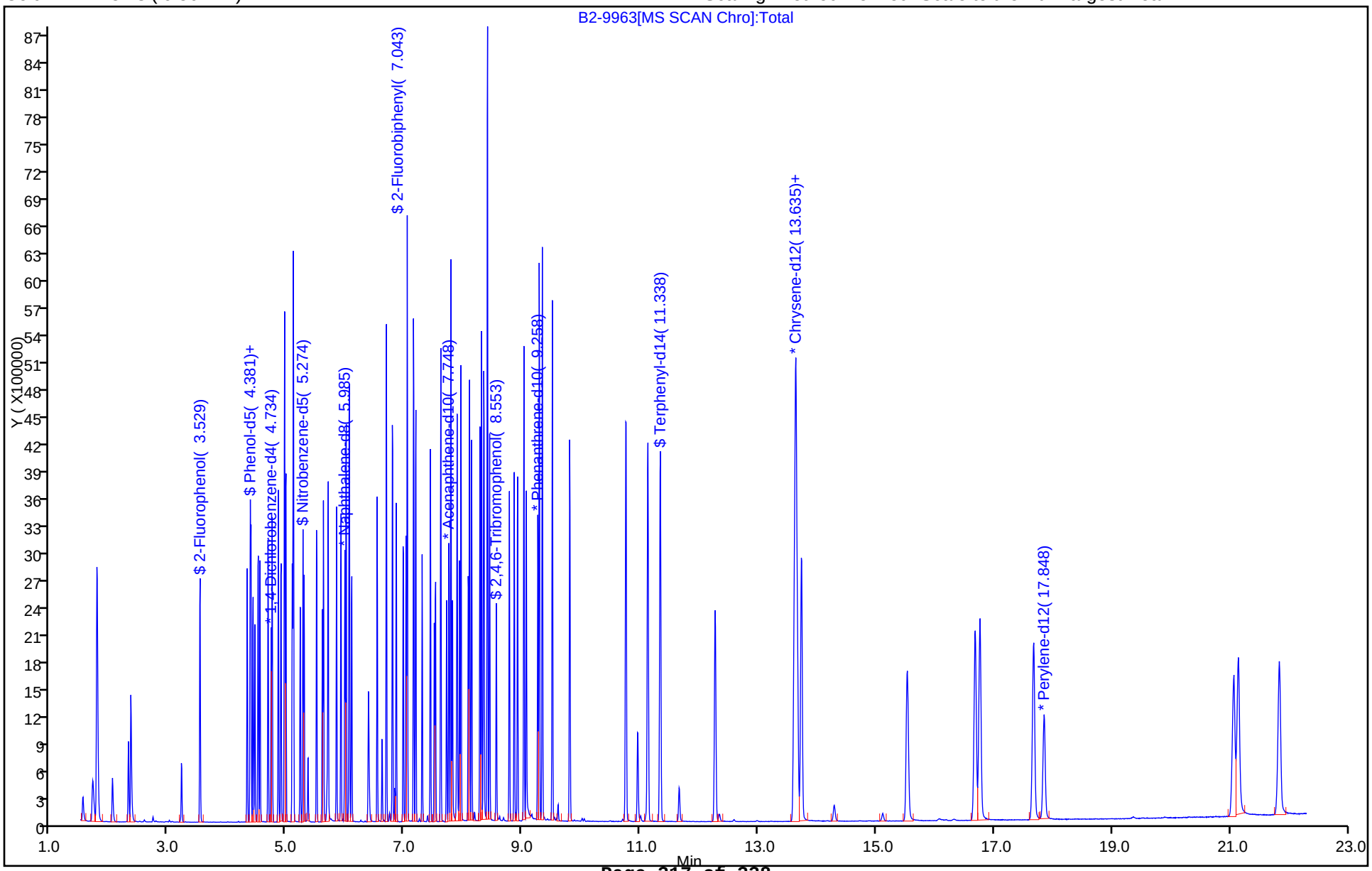
Report Date: 15-Apr-2015 10:10:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Denver

Data File: \\denchrom\chromdata\SMS_B2\20150414-33886.b\B2-9963.D

Injection Date:	14-Apr-2015 13:40:30	Instrument ID:	SMS_B2	Operator ID:	KIEKELD
Lims ID:	LCS 280-272540/2-A			Worklist Smp#:	23
Client ID:					
Injection Vol:	0.5 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMS_B2_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.: 280-67561-2

SDG No.:

Instrument ID: SMS_B2 Start Date: 03/04/2015 10:19

Analysis Batch Number: 266830 End Date: 03/04/2015 15:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-266830/2		03/04/2015 10:19	1	B2-9362.D	Vf-5MS (30.25) 0.25(mm)
ICIS 280-266830/3		03/04/2015 10:31	1	B2-9363.D	Vf-5MS (30.25) 0.25(mm)
STD004 280-266830/4 IC		03/04/2015 11:00	1	B2-9364.D	Vf-5MS (30.25) 0.25(mm)
STD010 280-266830/5 IC		03/04/2015 11:29	1	B2-9365.D	Vf-5MS (30.25) 0.25(mm)
STD020 280-266830/6 IC		03/04/2015 11:57	1	B2-9366.D	Vf-5MS (30.25) 0.25(mm)
STD050 280-266830/7 IC		03/04/2015 12:26	1	B2-9367.D	Vf-5MS (30.25) 0.25(mm)
STD120 280-266830/8 IC		03/04/2015 12:54	1	B2-9368.D	Vf-5MS (30.25) 0.25(mm)
STD160 280-266830/9 IC		03/04/2015 13:23	1	B2-9369.D	Vf-5MS (30.25) 0.25(mm)
STD200 280-266830/10 IC		03/04/2015 13:51	1	B2-9370.D	Vf-5MS (30.25) 0.25(mm)
ICV 280-266830/11		03/04/2015 14:20	1	B2-9371.D	Vf-5MS (30.25) 0.25(mm)
ICV 280-266830/12		03/04/2015 14:49	1	B2-9372.D	Vf-5MS (30.25) 0.25(mm)
ICV 280-266830/13		03/04/2015 15:17	1	B2-9373.D	Vf-5MS (30.25) 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Instrument ID: SMS_B2 Start Date: 04/14/2015 11:14

Analysis Batch Number: 272601 End Date: 04/14/2015 21:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-272601/2		04/14/2015 11:14	1	B2-9957.D	Vf-5MS (30.25) 0.25(mm)
CCV 280-272601/3		04/14/2015 11:27	1	B2-9958.D	Vf-5MS (30.25) 0.25(mm)
MB 280-272540/1-A		04/14/2015 13:11	1	B2-9962.D	Vf-5MS (30.25) 0.25(mm)
LCS 280-272540/2-A		04/14/2015 13:40	1	B2-9963.D	Vf-5MS (30.25) 0.25(mm)
280-67561-3	TMW14A042015	04/14/2015 19:52	1	B2-9976.D	Vf-5MS (30.25) 0.25(mm)
280-67561-7	TMW15042015	04/14/2015 20:20	1	B2-9977.D	Vf-5MS (30.25) 0.25(mm)
280-67561-8	DTW15042015	04/14/2015 20:49	1	B2-9978.D	Vf-5MS (30.25) 0.25(mm)
280-67561-9	TMW38042015	04/14/2015 21:17	1	B2-9979.D	Vf-5MS (30.25) 0.25(mm)
280-67561-10	SMW01042015	04/14/2015 21:46	1	B2-9980.D	Vf-5MS (30.25) 0.25(mm)

GC/MS SVOAContinuing Calibration Review Checklist
Denver

TestAmerica

Instrument ID and Date: B2 HSL/AFC/AP9/BZHD-8270D 041415 Work List 33884/33886

Check Method Used: Analysis ☐ 625 ☑ 8270 ☐ 8270_SIM ☐ Other SV __

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Continuing Calibration					
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: _____ Date: 041515

2nd Level Reviewer: _____ Date: 04/15/15

Directory: C:\HPCHEM\1\DATA\041415.B

Injection Log

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	B2-9956.D	1.	RINSE		14 Apr 2015 10:49
2	1	B2-9957.D	1.	DFTPP		14 Apr 2015 11:14
3	2	B2-9958.D	1.	CCV HSL		14 Apr 2015 11:27
4	3	B2-9959.D	1.	CCV AFC		14 Apr 2015 11:55
5	4	B2-9960.D	1.	CCV AP9		14 Apr 2015 12:19
6	5	B2-9961.D	1.	CCV BZHD		14 Apr 2015 12:47
7	6	B2-9962.D	1.	MB280-272095_1-A		14 Apr 2015 13:11
8	7	B2-9963.D	1.	LCS280-272095_2-A		14 Apr 2015 13:40
9	8	B2-9964.D	1.	280-67366-E-6-A		14 Apr 2015 14:09
10	9	B2-9965.D	1.	160-11152-M-14-A		14 Apr 2015 14:37
11	10	B2-9966.D	1.	160-11229-D-1-A		14 Apr 2015 15:06
12	11	B2-9967.D	1.	160-11229-C-2-A		14 Apr 2015 15:34
13	12	B2-9968.D	1.	160-11229-D-3-A		14 Apr 2015 16:03
14	13	B2-9969.D	1.	160-11229-D-4-A		14 Apr 2015 16:32
15	14	B2-9970.D	1.	160-11229-D-5-A		14 Apr 2015 17:00
16	15	B2-9971.D	1.	160-11229-B-5-AMS		14 Apr 2015 17:29
17	16	B2-9972.D	1.	160-11229-C-5-AMSD		14 Apr 2015 17:57
18	17	B2-9973.D	1.	160-11238-B-28-A		14 Apr 2015 18:26
19	18	B2-9974.D	1.	160-11238-C-29-A		14 Apr 2015 18:55
20	19	B2-9975.D	1.	280-67552-C-1-A		14 Apr 2015 19:23
21	20	B2-9976.D	1.	280-67561-A-3-A		14 Apr 2015 19:52
22	21	B2-9977.D	1.	280-67561-A-7-A		14 Apr 2015 20:20
23	22	B2-9978.D	1.	280-67561-B-8-A		14 Apr 2015 20:49
24	23	B2-9979.D	1.	280-67561-C-9-A		14 Apr 2015 21:17
25	24	B2-9980.D	1.	280-67561-A-10-A		14 Apr 2015 21:46
26	98	B2-9981.D	1.	RINSE		14 Apr 2015 22:14
27	99	B2-9982.D	1.	RINSE	re-analyses for ss low	
28	100	B2-9983.D	1.	RINSE		14 Apr 2015 22:43
29	98	B2-9984.D	1.	RINSE		14 Apr 2015 23:12
30	99	B2-9985.D	1.	RINSE		14 Apr 2015 23:40
31	100	B2-9986.D	1.	RINSE		15 Apr 2015 00:08
32		B2-9987.D	1.			15 Apr 2015 00:36

Dilution Solvent Lot #: N/A Pipette ID: SV-18/SV-23 Method(s) Performed: 8270_D-D/8270D

Daily Maintenance: Check box if maintenance was performed. No mark indicates the item was not changed.

Changed Septum [✓] **Changed Liner** [✓] **Changed Seal** [✓] **Changed Ferrule** [2] **Clipped Column** [✓] 0.6cm

TestAmerica Denver
GC/MS SVOA Initial Calibration Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Instrument ID and Date: **B2 HSL-8270D 030415**
Calibration Event 21518 Batch 266830

Check Method Used: Analysis ☐ 625 ☑ 8270 ☐ Other SV _____

Review Items	----- Level 1 ----- Yes	No	N/A	Level 2	Comments
Initial Calibration					
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 15% RSD?			X	NA	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. 2nd source ICV recovery 75-125% (±25%drift)for DoD projects, 65-135% (±35%,or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	X			✓	

1st Level Reviewer: _____ Date: 03/06/15

2nd Level Reviewer: _____ Date: 03/06/15

Injection Log

Directory: C:\HPCHEM\1\DATA\030415.B

0305-15

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	B2-9361.D	1.	RINSE		4 Mar 2015 09:54
2	1	B2-9362.D	1.	DFTPP		4 Mar 2015 10:19
3	2	B2-9363.D	1.	ICIS HSL		4 Mar 2015 10:31
4	3	B2-9364.D	1.	STD004 HSL		4 Mar 2015 11:00
5	4	B2-9365.D	1.	STD010 HSL		4 Mar 2015 11:29
6	5	B2-9366.D	1.	STD020 HSL		4 Mar 2015 11:57
7	6	B2-9367.D	1.	STD050 HSL		4 Mar 2015 12:26
8	7	B2-9368.D	1.	STD120 HSL	Good	4 Mar 2015 12:54
9	8	B2-9369.D	1.	STD160 HSL		4 Mar 2015 13:23
10	9	B2-9370.D	1.	STD200 HSL		4 Mar 2015 13:51
11	10	B2-9371.D	1.	ICV HSL 1		4 Mar 2015 14:20
12	11	B2-9372.D	1.	ICV HSL 2		4 Mar 2015 14:49
13	12	B2-9373.D	1.	ICV FAM		4 Mar 2015 15:17
14	13	B2-9374.D	1.	MB280-266047_1-A		4 Mar 2015 15:46
15	14	B2-9375.D	1.	LCS280-266047_2-A		4 Mar 2015 16:14
16	15	B2-9376.D	1.	LCSD280-266047_3-A		4 Mar 2015 16:43
17	16	B2-9377.D	1.	280-65786-B-1-A 20x		4 Mar 2015 17:11
18	17	B2-9378.D	1.	280-65786-B-1-A 50x	DNR	4 Mar 2015 17:40
19	18	B2-9379.D	1.	280-65786-B-1-A 100x		4 Mar 2015 18:08
20	98	B2-9380.D	1.	RINSE		4 Mar 2015 18:37
21	99	B2-9381.D	1.	RINSE		4 Mar 2015 19:05
22	100	B2-9382.D	1.	RINSE		4 Mar 2015 19:34
23	98	B2-9383.D	1.	RINSE		4 Mar 2015 20:03
24	99	B2-9384.D	1.	RINSE		4 Mar 2015 20:31
25	100	B2-9385.D	1.	RINSE		4 Mar 2015 21:00

Dilution Solvent Lot #: 87836 **Pipette ID:** SV-1/2/SV-23 **Method(s) Performed:** 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** [✓] 0.6m

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Batch Number: 272540 Batch Start Date: 04/14/15 08:35 Batch Analyst: Knauf, James R

Batch Method: 3520C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH
MB 280-272540/1		3520C, 8270D		7			1000 mL	1 mL	7
LCS 280-272540/2		3520C, 8270D		7			1000 mL	1 mL	7
280-67561-A-3	TMW14A042015	3520C, 8270D	T	7	1465.2 g	503.0 g	962.2 mL	1 mL	7
280-67561-A-7	TMW15042015	3520C, 8270D	T	7	1357.2 g	445.2 g	912 mL	1 mL	7
280-67561-B-8	DTW15042015	3520C, 8270D	T	7	1449.4 g	499.7 g	949.7 mL	1 mL	7
280-67561-C-9	TMW38042015	3520C, 8270D	T	7	1401.2 g	502.6 g	898.6 mL	1 mL	7
280-67561-A-10	SMW01042015	3520C, 8270D	T	7	1485.5 g	502.7 g	982.8 mL	1 mL	7

Lab Sample ID	Client Sample ID	Method Chain	Basis	FirstAdjustpH	SecondAdjustpH	8270_LCS_Main 00019	8270_LCS_Supp 00102	8270Surrogate 00078	AnalysisComment
MB 280-272540/1		3520C, 8270D		2	12			1 mL	same as extract in batch 272095
LCS 280-272540/2		3520C, 8270D		2	12	1 mL	1 mL	1 mL	same as extract in batch 272095
280-67561-A-3	TMW14A042015	3520C, 8270D	T	2	12			1 mL	same as extract in batch 272095
280-67561-A-7	TMW15042015	3520C, 8270D	T	2	12			1 mL	same as extract in batch 272095
280-67561-B-8	DTW15042015	3520C, 8270D	T	2	12			1 mL	same as extract in batch 272095
280-67561-C-9	TMW38042015	3520C, 8270D	T	2	12			1 mL	same as extract in batch 272095
280-67561-A-10	SMW01042015	3520C, 8270D	T	2	12			1 mL	same as extract in batch 272095

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.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-67561-2

SDG No.:

Batch Number: 272540 Batch Start Date: 04/14/15 08:35 Batch Analyst: Knauf, James R

Batch Method: 3520C Batch End Date:

Batch Notes	
Acid used for pH adjustment	1:1 H2S04
Acid used for pH adjust Lot #	1:1 H2S04_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	Max Mejia
Time the first extraction ended 24hr	4.11.15@0746
Time the first extraction started 24 hr	4.10.15@1030
Na2SO4 Lot Number	145224_00001
Oven, Bath or Block Temperature 1	see above Celsius
Prep Solvent Lot #	MeCl2_Cycl_00210
Prep Solvent Name	MeCl2
Prep Solvent Volume Used	300 mL
Person's name who did the prep	James Knauf /Alan Frey Pipette: K
Person's name who witnessed reagent drop	Reviewer: Alan Frey
Time the second extraction ended 24hr	4.12.15@0756
Time the second extraction started 24hr	4.11.15@1005
Sufficient volume for MS/MSD?	YES
Uncorrected Temperature	84 Celsius
Water Bath ID	B
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
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

280-67561 Chain of Custody

ain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-052
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Compounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
TB-06-042015	4/8/2015	0800	grab	GW	2	N							2												
TB-44-042015	4/8/2015	0800	grab	GW	2	N											2								
TMW14A042015	4/8/2015	1025	grab	GW	3	N							3												
TMW11042015	4/8/2015	0900	grab	GW	3	N							3												
MW18D042015	4/8/2015	1210	grab	GW	6	N							3				3								
MW22S042015	4/8/2015	1310	grab	GW	1	Y					1														
TMW15042015	4/8/2015	1250	grab	GW	3	N							3												
DTW15042015	4/8/2015	1250	grab	GW	3	N							3												
TMW38042015	4/8/2015	1032	grab	GW	3	N							3												
SMW01042015	4/8/2015	1045	grab	GW	3	N							3												
TMW08042015	4/8/2015	0920	grab	GW	6	N							3				3								
TMW24042015	4/8/2015	1345	grab	GW	3	N							3												

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*

Sample Disposal
☐ *Return To Client* ☑ *Disposal By Lab* ☑ *Archive For 60 days after invoice*

Special Instructions/QC Requirements & Comments:
1.1, 1.4.3, 3.3, 3.4, 1.2, 1.2, 1.4, 1.4.2, 1250.2
09Apr15 transferred by

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Arrowood	Sundance	4/8/15 1500		TAD	0900 9Apr15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-053
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Compounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
TMW14A042015	4/8/2015	1025	grab	GW	7	Y	2	1		1	1			2											
TMW11042015	4/8/2015	0900	grab	GW	6	Y	2	1	1	1	1														

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

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☑ Archive For 60 days after invoice

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Arrowood	Sundance	4/8/15 1500		TAD	8900 9 Apr 15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-056
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate 9056	Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Compounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
TMW15042015	4/8/2015	1250	grab	GW	6	Y			1	1	1	1			2											
DTW15042015	4/8/2015	1250	grab	GW	6	Y			1	1	1	1			2											

Page 329 of 338

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

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☑ Archive For 60 days after invoice

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Ackerson	Sundance	4/8/15 1500		TAO	0900 9 Apr 15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-055
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Compounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
TMW38042015	4/8/2015	1032	grab	GW	10	Y	2	1	1	1	1	2		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*

Sample Disposal
☐ *Return To Client* ☑ *Disposal By Lab* ☑ *Archive For 60 days after invoice*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Arrowood	Sundance	4/8/15 1500		TAD	0900 9Apr15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-057
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Comppounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
SMW01042015	4/8/2015	1045	grab	GW	8	Y	2	1	1	1	1			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*

Sample Disposal
☐ *Return To Client* ☑ *Disposal By Lab* ☑ *Archive For 60 days after invoice*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Arrowood	Sundance	4/8/15 1500		TAD	0900 4/9/15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-058
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Compounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
TMW08042015	4/8/2015	0920	grab	GW	8	Y		1	1	1	1	2				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*

Sample Disposal
☐ *Return To Client* ☑ *Disposal By Lab* ☑ *Archive For 60 days after invoice*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Arrowood	Sundance	4/9/15 1500			900 9Apr15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-059
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Compounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
TMW24042015	4/8/2015	1345	grab	GW	8	Y	2	1	1	1	1	2													

Page 333 of 338

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*

Sample Disposal
☐ *Return To Client* ☑ *Disposal By Lab* ☑ *Archive For 60 days after invoice*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Arrowood	Sundance	4/8/15 1500		TAD	900 9/9/15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303-736-0100 fax 303-431-7171

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: John Nance	Site Contact: John Nance 505 321 7260	Date: 4/8/15	COC No: FWDAAPR15-054
John Nance	Tel: 505 835 7660	Lab Contact: Michelle Johnston	Carrier: Federal Express	1 of 1 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 PHONE	TAT if different from Below 15			SDG No.
	☐ 2 weeks			
Project Name: Fort Wingate	☐ 1 week			
Site: Fort Wingate, New Mexico	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Explosives 8330B	Nitrate Nitrite 9056	Perchlorate 6860	TAL Metal6010C/6020A/7470A Total	TAL Metal6010C/6020A/7470A Diss.	Organochlorine Pesticides 8081A	Volatile Organic Compounds 8260C	Semivolatile Organics 8270D	ORO 8015C C24-C36	TPH-DRO 8015C C10-C28	TPH-GRO 8015C C6-C10	TCLP VOCs 1311/8260B	TCLP SVOCs 1311/8270D	Metals 6010C/6020A dissolved	TCLP Pesticides 1311/8081A	TCLP Herbicides 1311/8151A	pH 9045C	Ignitibility 1010	Sample Specific Notes:
TMW18D042015	4/8/2015	1210	grab	GW	8	Y	2	1	1	1	1					2									
TMW15042015	4/8/2015	1250	grab	GW	2	N	2																		
DTW15042015	4/8/2015	1250	grab	GW	2	N	2																		

Page 334 of 338

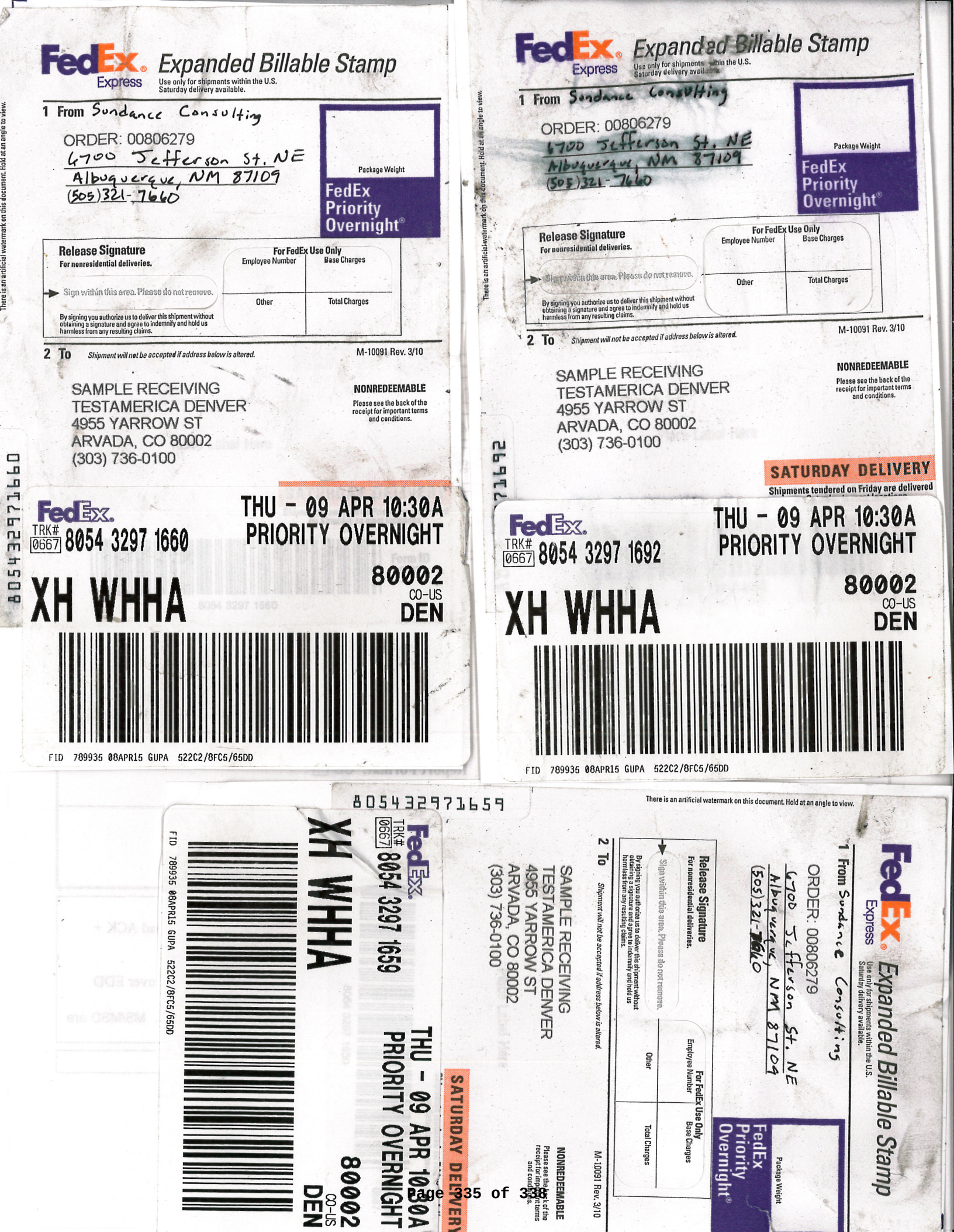
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown*

Sample Disposal
☐ *Return To Client* ☑ *Disposal By Lab* ☑ *Archive For 60 days after invoice*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Todd Ellwood	Sunstate	4/8/15 1500		TAT	0900 9 Apr 15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:



FedEx Express Expanded Billable Stamp
Use only for shipments within the U.S.
Saturday delivery available.

1 From Sundance Consulting
ORDER: 00806279
6700 Jefferson St. NE
Albuquerque, NM 87109
(505)321-7660

Package Weight
FedEx Priority Overnight®

Release Signature
For nonresidential deliveries.
Sign within this area. Please do not remove.
By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only
Employee Number | Base Charges
Other | Total Charges

2 To Shipment will not be accepted if address below is altered.
M-10091 Rev. 3/10

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

There is an artificial watermark on this document. Hold at an angle to view.

805432971660

FedEx
TRK# 0667 8054 3297 1660
THU - 09 APR 10:30A
PRIORITY OVERNIGHT
80002
CO-US
DEN
XH WHHA
FID 789935 08APR15 GUPA 522C2/8FC5/65DD

FedEx Express Expanded Billable Stamp
Use only for shipments within the U.S.
Saturday delivery available.

1 From Sundance Consulting
ORDER: 00806279
6700 Jefferson St. NE
Albuquerque, NM 87109
(505)321-7660

Package Weight
FedEx Priority Overnight®

Release Signature
For nonresidential deliveries.
Sign within this area. Please do not remove.
By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only
Employee Number | Base Charges
Other | Total Charges

2 To Shipment will not be accepted if address below is altered.
M-10091 Rev. 3/10

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

SATURDAY DELIVERY
Shipments tendered on Friday are delivered

There is an artificial watermark on this document. Hold at an angle to view.

FedEx
TRK# 0667 8054 3297 1692
THU - 09 APR 10:30A
PRIORITY OVERNIGHT
80002
CO-US
DEN
XH WHHA
FID 789935 08APR15 GUPA 522C2/8FC5/65DD

805432971659

FedEx
TRK# 0667 8054 3297 1659
THU - 09 APR 10:30A
PRIORITY OVERNIGHT
80002
CO-US
DEN
XH WHHA
FID 789935 08APR15 GUPA 522C2/8FC5/65DD

SATURDAY DELIVERY

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

2 To Shipment will not be accepted if address below is altered.
M-10091 Rev. 3/10

Release Signature
For nonresidential deliveries.
Sign within this area. Please do not remove.
By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only
Employee Number | Base Charges
Other | Total Charges

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

There is an artificial watermark on this document. Hold at an angle to view.

1 From Sundance Consulting
ORDER: 00806279
6700 Jefferson St. NE
Albuquerque, NM 87109
(505)321-7660

Package Weight
FedEx Priority Overnight®

FedEx Express Expanded Billable Stamp
Use only for shipments within the U.S.
Saturday delivery available.

FedEx Express **Expanded Billable Stamp**

Use only for shipments within the U.S.
Saturday delivery available.

1 From Sundance Consulting

ORDER: 00806279

6700 Jefferson St. NE
Albuquerque, NM 87109
(505) 321-7660

Package Weight

FedEx Priority Overnight®

Release Signature
For nonresidential deliveries.

→ Sign within this area. Please do not remove.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only

Employee Number	Base Charges
Other	Total Charges

2 To *Shipment will not be accepted if address below is altered.*

M-10091 Rev. 3/10

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

SATURDAY DELIVERY

FedEx
TRK# 0667 8054 3297 1648

THU - 09 APR 10:30A
PRIORITY OVERNIGHT

80002
CO-US
DEN

XH WHHA

FID 789935 08APR15 GUPA 522C2/8FC5/65DD

There is an artificial watermark on this document. Hold at an angle to view.

FedEx Express **Expanded Billable Stamp**

Use only for shipments within the U.S.
Saturday delivery available.

1 From Sundance Consulting

ORDER: 00806279

6700 Jefferson St. NE
Albuquerque, NM 87109
(505) 321-7660

Package Weight

FedEx Priority Overnight®

Release Signature
For nonresidential deliveries.

Place Label Here

2 To *Shipment will not be accepted if address below is altered.*

M-10091 Rev. 3/10

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

FedEx
TRK# 0667 8054 3297 1718

THU - 09 APR 10:30A
PRIORITY OVERNIGHT

80002
CO-US
DEN

XH WHHA

FID 789935 08APR15 GUPA 522C2/8FC5/65DD

There is an artificial watermark on this document. Hold at an angle to view.

FedEx Express **Expanded Billable Stamp**

Use only for shipments within the U.S.
Saturday delivery available.

1 From Sundance Consulting

ORDER: 00806279

6700 Jefferson St. NE
Albuquerque, NM 87109
(505) 321-7660

Package Weight

FedEx Priority Overnight®

Release Signature
For nonresidential deliveries.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only

Employee Number	Base Charges
Other	Total Charges

2 To *Shipment will not be accepted if address below is altered.*

M-10091 Rev. 3/10

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

SATURDAY DELIVERY

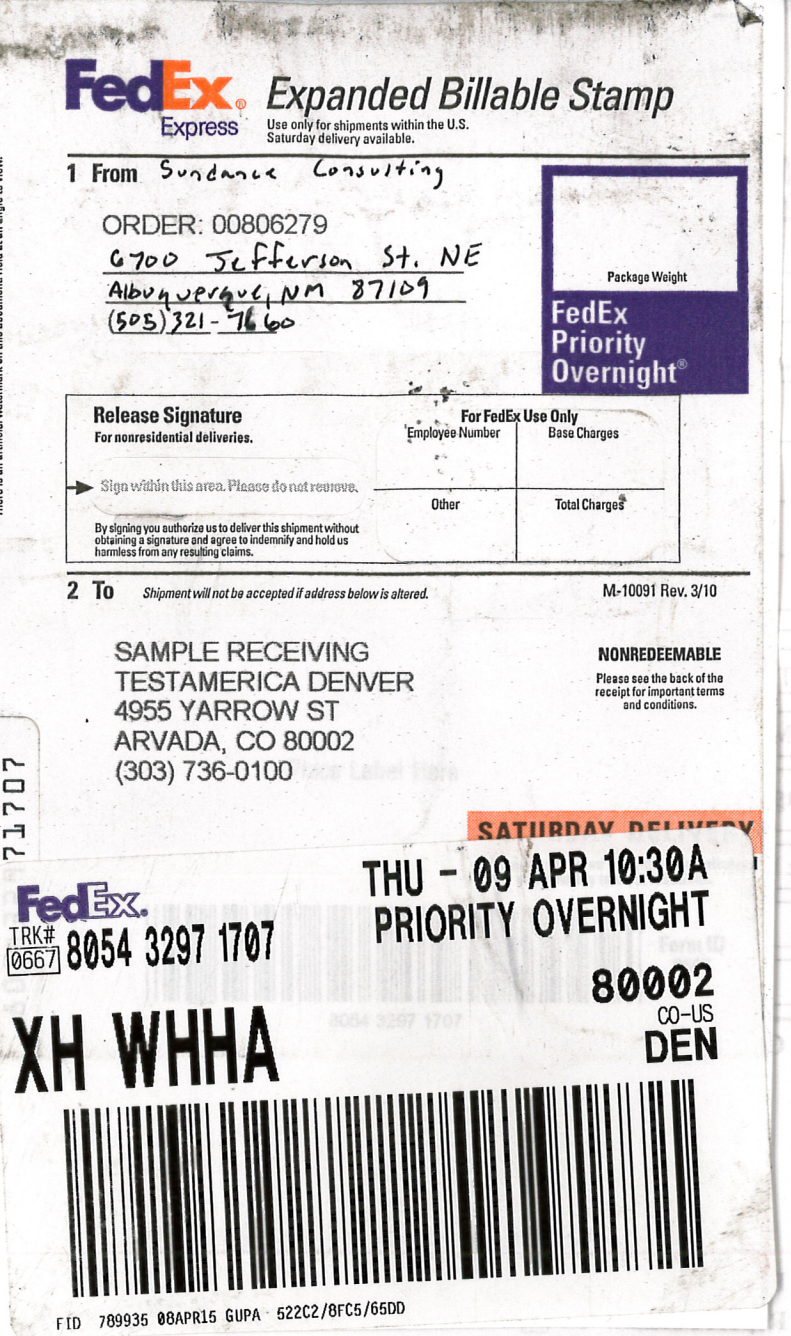
FedEx
TRK# 0667 8054 3297 1681

THU - 09 APR 10:30A
PRIORITY OVERNIGHT

80002
CO-US
DEN

XH WHHA

FID 789935 08APR15 GUPA 522C2/8FC5/65DD



FedEx Express **Expanded Billable Stamp**

Use only for shipments within the U.S.
Saturday delivery available.

1 From Sundance Consulting

ORDER: 00806279
6700 Jefferson St. NE
Albuquerque, NM 87109
(505) 321-7660

Package Weight

FedEx Priority Overnight®

Release Signature
For nonresidential deliveries.

Sign within this area. Please do not remove.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

For FedEx Use Only

Employee Number	Base Charges
Other	Total Charges

2 To *Shipment will not be accepted if address below is altered.*

M-10091 Rev. 3/10

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

SATURDAY DELIVERY

FedEx
TRK# 0667 8054 3297 1707

THU - 09 APR 10:30A
PRIORITY OVERNIGHT

80002
CO-US
DEN

XH WHHA

FID 789935 08APR15 GUPA 522C2/8FC5/65DD

FedEx Express **Expanded Billable Stamp**

Use only for shipments within the U.S.
Saturday delivery available.

1 From Sundance Consulting

ORDER: 00806279
6700 Jefferson St. NE
Albuquerque, NM 87109
(505) 321-7660

Package Weight

FedEx Priority Overnight®

Release Signature
For nonresidential deliveries.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

2 To *Shipment will not be accepted if address below is altered.*

M-10091 Rev. 3/10

SAMPLE RECEIVING
TESTAMERICA DENVER
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

NONREDEEMABLE
Please see the back of the receipt for important terms and conditions.

SATURDAY DELIVERY

FedEx
TRK# 0667 8054 3297 1670

THU - 09 APR 10:30A
PRIORITY OVERNIGHT

80002
CO-US
DEN

XH WHHA

FID 789935 08APR15 GUPA 522C2/8FC5/65DD

Login Sample Receipt Checklist

Client: Sundance Consulting, Inc

Job Number: 280-67561-2

Login Number: 67561

List Source: TestAmerica Denver

List Number: 1

Creator: Muniz, Ashley T

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	